Annual Status of Education Report (Rural) 2018

Provisional

January 15, 2019

Annual Status of Education Report

असर ASER 2018 RURAL

Facilitated by PRATHAM

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About ASER 2018

ASER 2018 is a nation-wide household survey that provides a snapshot of children's schooling and learning for a representative sample of children across rural India. Children in the age group 3 to 16 are surveyed to find out their enrollment status in school or pre-school. Children in the age group 5 to 16 are assessed one-on-one to understand their basic reading and arithmetic abilities. ASER continues to be the only national source of information about children's foundational skills across the country.

The methodology and content of ASER 2018 continues the pattern followed each year for the first decade of our existence (2005-2014), during which ASER reached almost all rural districts in India and generated district, state, and national estimates of foundational reading and arithmetic abilities of children in the age group 5 to 16 years.

A national survey was not conducted in 2015. Starting its second decade of existence in 2016, ASER surveys now use Census 2011 as the sampling frame. In addition, in 2016 ASER changed to an alternate-year cycle, conducting the 'basic' ASER in one year and using a different lens to examine new aspects of children's learning the following year. Thus, ASER 2016 followed the 'basic' model, sampling children age 3 to 16 and testing reading, arithmetic, and English for children age 5 to 16. In 2017 we conducted the first alternate-year design known as ASER 'Beyond Basics', focusing on youth in the 14 to 18 age group in 28 districts across India. ASER 2017 inquired about what youth are currently doing and aspiring to, in addition to assessing their foundational skills and their ability to apply these to everyday tasks.

In 2018, ASER returns once again to the 'basic' model. A total of 546,527 children in the age group 3 to 16 years were surveyed this year. ASER 2018 is the thirteenth ASER report.

Contents

They reached the remotest villages of India

Andhra Pradesh
District Institute of Education and Training, Anantapur
District Institute of Education and Training, Chittoor
District Institute of Education and Training, East Godavari
District Institute of Education and Training, Guntur
District Institute of Education and Training, Krishna
District Institute of Education and Training, Kurnool
District Institute of Education and Training, Prakasam
District Institute of Education and Training, Sri Potti Sriramulu, Nellore
District Institute of Education and Training, Srikakulam
District Institute of Education and Training, Visakhapatnam
District Institute of Education and Training, Vizianagaram
District Institute of Education and Training, West Godavari
District Institute of Education and Training, YSR District, Kadapa

Arunachal Pradesh
District Institute of Education and Training, Changlang
District Institute of Education and Training, Dirang, West Kameng
District Institute of Education and Training, Kamki, West Siang
District Institute of Education and Training, Khonsa, Tirap
District Institute of Education and Training, Pasighat, East Siang
District Institute of Education and Training, Roing, Lower Dibang Valley
District Institute of Education and Training, Seppa, East Kameng
District Institute of Education and Training, Yachuli, Lower Subansiri

Assam
Aaranyak, Guwahati, Kamrup
District Institute of Education and Training, Biswanath Chariali, Sonitpur
District Institute of Education and Training, Bongaigaon
District Institute of Education and Training, Chabua, Dibrugarh
District Institute of Education and Training, Dalgaon, Darrang
District Institute of Education and Training, Dergaon, Golaghat
District Institute of Education and Training, Dhemaji
District Institute of Education and Training, Dima Hasao
District Institute of Education and Training, Dudhnoi, Goalpara
District Institute of Education and Training, Golakganj, Dhubri
District Institute of Education and Training, Hailakandi
District Institute of Education and Training, Howly, Barpeta
District Institute of Education and Training, Kaliganj, Karimganj
District Institute of Education and Training, Kokrajhar
District Institute of Education and Training, Mirza, Kamrup
District Institute of Education and Training, Morigaon
District Institute of Education and Training, Nalbari
District Institute of Education and Training, North Lakhimpur
District Institute of Education and Training, Samaguri, Nagaon
District Institute of Education and Training, Sonari, Sivasagar
District Institute of Education and Training, Tinsukia
District Institute of Education and Training, Titabor, Jorhat
District Institute of Education and Training, Udharbond, Cachar
District Institute of Education and Training, Karbi Anglong
SPARSH-AXOM, Udalguri

Bihar
ABHIYAN, Jehanabad
College of Teacher Education, Saharsa
District Institute of Education and Training, Babutola, Banka
District Institute of Education and Training, Bikram, Patna
District Institute of Education and Training, Chhatauni, Purbi Champaran
District Institute of Education and Training, Dumra, Sitamarhi
District Institute of Education and Training, Dumraon, Buxar
District Institute of Education and Training, Forbesganj, Araria
District Institute of Education and Training, Fazalganj, Rohtas
District Institute of Education and Training, Khirnighat, Bhagalpur
District Institute of Education and Training, Kishanganj
District Institute of Education and Training, Kumarbagh, Pashchim Champaran

District Institute of Education and Training, Lakhisarai
District Institute of Education and Training, Madhepura
District Institute of Education and Training, Mohania, Kaimur
District Institute of Education and Training, Munger
District Institute of Education and Training, Narar, Madhubani
District Institute of Education and Training, Nawada
District Institute of Education and Training, Noorsarai, Nalanda
District Institute of Education and Training, Panchayati Akhara, Gaya
District Institute of Education and Training, Pirauta, Bhojpur
District Institute of Education and Training, Pusa, Samastipur
District Institute of Education and Training, Quilaghat, Darbhanga
District Institute of Education and Training, Rambagh, Muzaffarpur
District Institute of Education and Training, Sansarpur, Khagaria
District Institute of Education and Training, Shahpur, Begusarai
District Institute of Education and Training, Sheikhpura
District Institute of Education and Training, Sheohar
District Institute of Education and Training, Srinagar, Purnia
District Institute of Education and Training, Siwan
District Institute of Education and Training, Sonpur, Saran
District Institute of Education and Training, Daudnagar, Aurangabad
District Institute of Education and Training, Thawe, Gopalganj
District Institute of Education and Training, Tikapatti, Katihar
District Institute of Education and Training, Vaishali
i-Saksham Education and Learning Foundation, Jamui
Nai Sambhavana, Arwal
Radhe Shyam Teachers Training College, Supaul

Chhattisgarh
District Institute of Education and Training, Dantewada
District Institute of Education and Training, Dharamjaigarh, Raigarh
District Institute of Education and Training, Janjgir, Janjgir-Champa
District Institute of Education and Training, Jashpur
District Institute of Education and Training, Kabeerdham
District Institute of Education and Training, Khairagarh, Rajnandgaon
District Institute of Education and Training, Korba
District Institute of Education and Training, Mahasamund
District Institute of Education and Training, Nagri, Dhamtari
District Institute of Education and Training, Uttar Bastar Kanker
Help You Education and Welfare Society, Raipur
Local volunteers of Dakshin Bastar Dantewada, Durg, Raipur and Uttar Bastar Kanker
Prachalit Seva Samiti, Surguja
Prakriti Sewa Sansthan, Bilaspur
Saathi Samaj Sevi Sansthan, Kondagaon, Bastar
Surya College, Jagdalpur, Bastar
Women Tribal Welfare Society, Ambikapur

Dadra and Nagar Haveli
Tilak Maharashtra Vidyapeeth, Pune

Daman and Diu
Local volunteers of Daman and Diu

Goa
Don Bosco College, Punjim

Gujarat
Department of Social Work, Ganpat University, Mehsana
Institute of Language Studies and Applied Social Sciences (ILSASS), Anand
Kartavya Women and Child Development Trust, Mehsana
Krantiguru Shyamji Krishna Verma Kachchh University, Bhuj, Kachchh
Lokmanya Ekta Trust, Navsari
Lokniketan Samaj Karya Mahavidhyalay, Ratanpur, Banaskantha
Samajkarya Mahavidhyalaya, Salal (Himatnagar), Sabarkantha
Sheth P.T. Arts and Science College, Godhra, Panch Mahals
Shikshan Ane Samaj Kalyan Kendra, Amreli
Shree Saraswati College of Social Work, Bharuch
Shree Surabhi M.S.W. College, Rajkot
Shri Sarvajanik B.S.W. and M.S.W. College, Mehsana
Smt. Laxmiben and Shri Chimanlal Mehta Arts College, Ahmedabad
Tarang Foundation, Surendranagar

Haryana

Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan, Sonipat
Central University of Haryana, Jant-Pali, Mahendergarh
Chaudhary Devi Lal University, Sirsa
District Institute of Education and Training, Beeswamil, Sonipat
District Institute of Education and Training, Birhi Kalan, Bhiwani
District Institute of Education and Training, Gurugram
District Institute of Education and Training, Hussainpur, Rewari
District Institute of Education and Training, Iccus, Jind
District Institute of Education and Training, Janauli, Palwal
District Institute of Education and Training, Kaithal
District Institute of Education and Training, Machhhroli, Jhajjar
District Institute of Education and Training, Matana, Fatehabad
District Institute of Education and Training, Mattarsham, Hisar
District Institute of Education and Training, Mewat
District Institute of Education and Training, Panchkula
District Institute of Education and Training, Shahpur, Karnal
District Institute of Education and Training, Tejli, Yamuna Nagar
Maharshi Dayanand University, Rohtak
Pt. Jawahar Lal Nehru Government College, Faridabad
Sanatan Dharma College, Ambala
S.D. (P.G.) College, Panipat

Himachal Pradesh

Chamba Millennium B.Ed. College, Saru, Chamba
District Institute of Education and Training, Bilaspur
District Institute of Education and Training, Chamba
District Institute of Education and Training, Hamirpur
District Institute of Education and Training, Kangra
District Institute of Education and Training, Kinnaur
District Institute of Education and Training, Kullu
District Institute of Education and Training, Lahaul & Spiti
District Institute of Education and Training, Mandi
District Institute of Education and Training, Shimla
District Institute of Education and Training, Sirmaur
District Institute of Education and Training, Solan
District Institute of Education and Training, Una

Jammu and Kashmir

17000 ft Foundation, Leh
Government Degree College, Bandipora
Government Degree College, Baramulla
Government Degree College, Doda
Government Degree College, Ganderbal
Government Degree College, Gurez
Government Degree College, Mendhar, Poonch
Government Degree College, Poonch
Government Degree College, Pulwama
Government Degree College, Ramban
Government Degree College, Udhampur
Government Post Graduate College, Rajouri
Rehmat-e-Alam College of Education, Anantnag
Sheikh-ul-Alam College of Education, Kupwara
Sheikh-ul-Alam Memorial Degree College, Budgam

Jharkhand

Apna Anubhaw, Banka
ASHA (Association for Social and Human Awareness), Khunti
Bihar Pradesh Yuva Parishad, Palamu
District Institute of Education and Training, Bagodar, Giridih
District Institute of Education and Training, Garhwa
District Institute of Education and Training, Gumma, Godda
District Institute of Education and Training, Gamharia, Saraikela-Kharsawan
District Institute of Education and Training, Pindrajora, Bokaro
Dr. Bhim Rao Ambedkar Siksha Sansthan, Dhanbad
Dridh Sankalp, Jamtara
Gram Jyoti, Pakur
Lohardaga Gram Swarajya Sansthan, Lohardaga
Lok Prerna Kendra, Chatra
Primary Teachers' Education College, Chainpur, West Singhbhum
Primary Teachers' Education College, Ghormara, Deoghar
Primary Teachers' Education College, Chitarpur, Ramgarh
Primary Teachers' Education College, Satbarwa, Palamu
Primary Teachers' Education College, Simdega
Primary Teachers' Education College, Bundu, Ranchi
Primary Teachers' Education College, Chakulia, East Singhbhum
Samadhan, Hazaribagh
Samarpan, Koderma
Vikas Bharti, Bishunpur, Gumla

Karnataka

Bhavya Jyothi Trust, Ramnagara
BOFFO Ventures, Dharwad
Centre for Inclusive Social Development, Tumakuru
Centre for Rural Development, Bellary
Chinthana Foundation, Chikkamagaluru
Government First Grade College, Virajpet, Kodagu
Government First Grade College, Yadgir
Jagruthi Seva Samsthe, Kolar
Jeevan Jyothi NGO Society Organisations, Bidar
Little Champs School, Gundlupet, Chamarajanagar
Mahatma Gandhi Rural Development and Social Changes Trust, Shivamogga
Margadarshi Society, Kalaburagi
Navodaya Educational and Environment Development Service (NEEDS), Ranebennur, Haveri
PADI - Value Oriented Education Program (VALORED), Dakshina Kannada
People Organisation for Waste Land and Environment Regeneration (POWER), Vijayapura
Post Graduate Centre, Chikka Aluvara, Kodagu
REACH, Bagalkot
SAMRUDDHI, Raichur
Sarvodaya Integrated Rural Development Society, Koppal
Shikshana Sampanmula Kendragala Okkuta, Dakshina Kannada
Sir M. Visvesvaraya Postgraduate Centre, Mandya
Spoorthy Samsthe, Davanagere
Sri H.D. Devegowda Government First Grade College, Hassan
Sri Krishna College Of Education, Devanahalli, Bengaluru Rural
Swabhimani Minorities Women's Welfare Association, Chitradurga
Swastha Samrudhi Samithi, Chikkaballapura
University of Mysore, Mysuru

Kerala

B.C.M. College, Kottayam
B.V.M. College, Pala, Kottayam
Central University of Kerala, Kasaragod
Christ College, Irinjalakuda, Thrissur
Ideal Arts and Science College, Cherpulassery, Palakkad
Ideal College for Advanced Studies, Thavanur, Malappuram
Little Flower Institute of Social Sciences and Health, Calicut, Kozhikode
Loyola College of Social Sciences, Thiruvananthapuram
Mannam Memorial N.S.S. College, Konni, Pathanamthitta
Marian College Kuttikkanam, Idukki
Mercy College, Palakkad
National College of Arts and Science, Thiruvananthapuram
Nethaji Memorial Arts and Science College, Palakkad
Safa College of Arts and Sciences, Pookkattiri, Malappuram
Sree Sankara University of Sanskrit Regional Centre, Payyanoor, Kannur
Sree Sankaracharya University of Sanskrit Regional Centre, Tirur, Malappuram
Sree Sankaracharya University of Sanskrit, Kalady, Ernakulam
St. Joseph's College, Irinjalakuda, Thrissur
St. Thomas College, Thrissur
St. Albert's College, Ernakulam
St. Joseph's College, Devagiri, Kozhikode
Vidhyadhiraja College of Arts and Science, Karunagappally, Kollam
Vimala College, Thrissur

Madhya Pradesh

Adarsh Yuva Mandal, Chhindwara
Ahimsa Welfare Society, Rajgarh
Aim for the Awareness of Society (AAS), Indore

Akshar Peeth Shiksha Samiti, Ashoknagar
Bardoli Welfare Society, Katni
Centre of Discovery for Village Development, Mandla
Community Development Centre, Balaghat
Darshna Mahila Kalyan Samiti, Chhatarpur
Dharti Gramothan Evam Sahbhagi Gramin Vikas Samiti, Morena
Dr. Bhimrao Ambedkar Seva Parishad, Bhind
Government Madhav Arts and Commerce College (Department of
   Social Work), Ujjain
Government Post Graduate College, Alirajpur
Gram Vikas Prasfutan Samiti, Jharda, Mandsaur
Gramin Swavlamban Samiti, Tikamgarh
Guru Jambh Sewa Samiti, Sagar
Holistic Action Research and Development (HARD), Anuppur
Jai Narayan Sarvodaya Vidyalaya Samiti, Betul
Kalptaru Vikas Samiti, Guna
Kalyani Welfare Society, Shahdol
Krantanjali Social and Educational Welfare Association, Neemuch
Life for Humanity Society, Burhanpur
Local volunteers of Jhabua and Panna
Lokrang Samajik Shodh Vikas Sansthan, Khandwa (East Nimar)
Manav Foundation, Sheopur
Naaz Samaj Sevi Sanstha, Datia
Nav Sahbhagi Vikas Sanstha, Datia
Omkar Krishak Avam Samaj Kalyan Samiti, Sidhi
Panchaj Vikas Parishad, Seoni
Prakash Yuva Mandal Itaura Samiti, Rewa
Raas Rang Yuva Kala Mandal, Khargone
Rang Welfare Society, Damoh
S.B.N. Government Post Graduate College, Barwani
Sahara Saksharta Educational and Social Welfare Society, Raisen
Sahyog Education and Welfare Association (SEWA), Jabalpur
Samanjasya Research & Training Org., Dhar
Sankalp Samajik Vikas Sansthan, Shivpuri
Shakti Kala Evam Sangeet Yuva Mandal Samiti, Umaria
Shiva Gramin Vikas Sansthan (SRDIM), Satna
Shripati Shikshan Samajik Evam Lok Kalyan Samiti, Ratlam
Social Advancement and Resource Foundation (SARF), Vidisha
Sohagpur Mitra Sangh Samiti, Hoshangabad
Swami Vivekanand Shiksha Samiti (SVSS), Sehore
Synergy Sansthan, Harda
The Bhopal School of Social Sciences, Bhopal
The Kanchan Welfare and Education Society, Shajapur
Vidhyabhoomi Jankalyan Samiti, Narsimhapur
Yuva Udaan Educational and Social Welfare Society, Tipras, Dewas

Maharashtra
Abhinav Rural Development Research and Social Organisation,
   Kolhapur
Administrative Service Degree College, Nagpur
Centre for Studies in Rural Development, Institute of Social Work
   and Research, Ahmednagar
College of Social Work, Badnera, Amravati
D.G. Tatkare Mahavidyalay, Mangaon, Raigad
Dadasaheb Dhanaji Nana Choudhary Social Work College,
   Malkapur, Buldhana
Department of Mass Communication, School of Social Sciences,
   Solapur University, Solapur
Diganta Swaraj Foundation, Mumbai
Dr. Babasaheb Ambedkar College of Social Work, Morane, Dhule
Fule-Ambedkar College of Social Work, Gadchiroli
Gramvikas Foundation, Karanja, Washim
Institute for Rural Development and Social Services, Jalgaon
Kavikulaguru Kalidas Sanskrit University, Ramtek, Nagpur
Mahatma Phule College of Social Work, Taloda, Nandurbar
Maratha Vidya Prasarak Samaj's College of Social Work, Nashik
Masum Vikas Mahila Bahuuddeshiya Sanstha, Akola
MGM's College of Journalism and Mass Communication, Aurangabad
Nirmik Samajik Sansodhan Vikas Kendra, Latur
OM Sevabhavi Sanstha, Digras, Parbhani
PAHAL Multipurpose Society, Chandrapur

PARIS Bahuuddeshiya Sanstha, Khadki, Akola
Prahar Samajik Kalyankari Sanstha, Goregaon, Gondiya
Ramkrishna Paramhansa Mahavidyalaya, Osmanabad
Sant Rawool Maharaj Mahavidyalaya, Kudal, Sindhudurg
Saraswati Sevabhavi Sanstha, Bhatwadgaon, Bid
Savitri Jyotirao College of Social Work, Yavatmal
Sharadchandraji Pawar College of Agriculture, Ratnagiri
Shri Sai Sankalp Bahuuddeshiya Seva Bhavi Sanstha, Jalna
Shrimati Panchafuladevi Patil College of Social Work, Khadki, Akola
Suprabhat Mahila Mandal, Pune
Tilak Maharashtra Vidyapeeth, Pune
Wanchit Vikas Loksanstha, Nanded
Yashwantrao Chavan School of Social Work, Satara
Yashwantrao Chawhan Arts, Commerce and Science College,
   Lakhandur, Bhandara
Yuva Prerna Vidhyarthi Seva Sanstha, Wadner, Wardha

Manipur
Chanambam Ibomcha College, Bishnupur
Department of Education, South East Manipur College, Kapaam,
   Chandel
International Ministry Centre, Sagang, Churachandpur
Justice, Unity, Peace and Security Organisation, Shikhong Bazar,
   Thoubal
Kangchup Twikun Youth Organisation, Kangchup Twikun, Senapati
People's Endeavour for Social Change, Tamenglong
Social Help Organisation, Chingamakha Yanglem Leikai, Imphal West
Ura Charitable Trust, Ukhrul Bazar, Ukhrul
Yaawol, Sagolband Tera Sapam Leirak, Imphal West

Meghalaya
Local volunteers of Ri-Bhoi, South Garo Hills and West Khasi Hills
Martin Luther Christian University, Shillong Campus, East Khasi
   Hills
Thomas Jones Synod College, Jowai, Jaintia Hills
Tura Government College Student Union, Tura, West Garo Hills
Williamnagar Government College Student Union, Williamnagar,
   East Garo Hills

Mizoram
Hmar Students' Association, Kolasib
Local volunteers of Aizawl, Champhai, Lawngtlai, Mamit, Saiha and
   Serchhip
Lunglei Government College, Lunglei

Nagaland
District Institute of Education and Training, Dimapur
District Institute of Education and Training, Kohima
District Institute of Education and Training, Mokokchung
District Institute of Education and Training, Mon
District Institute of Education and Training, Phek
District Institute of Education and Training, Teunsang
District Institute of Education and Training, Wokha
District Institute of Education and Training, Zunheboto
Local volunteers of Kiphire and Longleng
People's Agency for Development, Peren

Odisha
All Odisha Martial Arts Association (AOMAA), Malkangiri
Anchalika Vikash Parishada, Cuttack
Biswa Vikas, Sandunguriguda, Kalahandi
District Institute of Education and Training, Agarpada, Bhadrak
District Institute of Education and Training, Anugul
District Institute of Education and Training, Bargarh
District Institute of Education and Training, Debagarh
District Institute of Education and Training, Dhenkanal
District Institute of Education and Training, Ganjam
District Institute of Education and Training, Jagatsinghapur
District Institute of Education and Training, Jajapur
District Institute of Education and Training, Jharsuguda
District Institute of Education and Training, Kalahandi, Bhawanipatna

District Institute of Education and Training, Kandhamal, Tikabali
District Institute of Education and Training, Kendujhar
District Institute of Education and Training, Nayagarh
District Institute of Education and Training, Nuapada
District Institute of Education and Training, Parlakhemundi, Gajapati
District Institute of Education and Training, Sambalpur
Good Luck Computer, Sundargarh
Maa Jageswori Kalaparisada, Ogalpur, Puri
Narayana Computer, Khordha
National Institute of Computer Education and Training (NICET), Jeypore, Koraput
Nature's Club, Kendrapara
Research Academy for Rural Enrichment, Subarnapur
Social Integrity Programme for Health and Education (SIPHAE), Basta, Baleshwar
Vikram Dev Autonomous College, Jeypore, Koraput
Young India, Rayagada

Puducherry
Avvai Village Welfare Society, Karaikal
Trust for Youth and Child Leadership, Puducherry

Punjab
Bhutta College of Education, Ludhiana
Department of Economics, Panjab University, Chandigarh
Department of Sociology, Punjabi University, Patiala
District Institute of Education and Training, Faridkot
District Institute of Education and Training, Fatehgarh Sahib
District Institute of Education and Training, Gurdaspur
Guru Nanak Dev University College, Verka, Amritsar
Hans Raj Mahila Maha Vidyalaya, Jalandhar
J.D. College of Education, Muktsar
Lovely Professional University, Jalandhar
Maharaja Ranjit Singh Punjab Technical University, Bathinda
Rayat Institute of Management, Balachaur, Nawashaher (SBS Nagar)
Shaheed Bhagat Singh College of Education, Patti, Tarn Taran
Shaheed Bhagat Singh State Technical Campus, Ferozpur
Shivam College of Education, Sangrur
Shukdeva Krishna College of Education for Girls, Moga
Y.S. College, Barnala

Rajasthan
Adarsh Navyuvak Mandal, Jaipur
Aravali Paradise Sansthan, Bharatpur
Bamu Systems and Training Centre, Jaipur
Bhagwati Shikshak Prashikshan Mahavidyalaya, Gangapur City, Sawai Madhopur
Consumer Unity and Trust Society (CUTS), Chittorgarh
Digital Computer Centre, Pilani
Doosra Dashak, Jaipur
Educate Girls Globally, Ajmer
Ekal Jan Seva Sansthan, Ajmer
Jain Group of Institutions, Sri Ganganagar
Local volunteers of Dungarpur
Maulana Azad University, Jodhpur
Modi Institute of Management and Technology, Kota
Shiv Charan Mathur Manav Seva Sansthan, Bhilwara
Shiv Shiksha Samiti Ranoli, Tonk
Shri Guru Nanak Khalsa Teacher Training College, Hanumangarh
Society for Sustainable Development, Karauli
Softtech Education Society, Osian, Jodhpur
Vidya Bhawan Society, Udaipur

Sikkim
Government Arts College, Mangshila, North Sikkim
Government College, Rhenock, East Sikkim
Gyalshing Government College, Gyalshing, West Sikkim
Namchi Government College, Kamrang, South Sikkim

Tamil Nadu
Anbu Trust, Sivagangai
Association of Rural Education and Development Service (AREDS), Karur
Centre for Education and Empowerment of the Marginalized (CEEMA), Erode
Coimbatore Multipurpose Social Service Society (CMSSS), Coimbatore
District Institute of Education and Training, Keelapaluvur, Ariyalur
District Institute of Education and Training, G.Ariyur, Villupuram
District Institute of Education and Training, Kilpennathur, Tiruvannamalai
District Institute of Education and Training, Kothagiri, The Nilgiris
District Institute of Education and Training, Munanjipatti, Tirunelveli
District Institute of Education and Training, Palayampatti, Virudhunagar
District Institute of Education and Training, Pudukkottai
District Institute of Education and Training, Ranipet, Vellore
District Institute of Education and Training, Thanjavur
District Institute of Education and Training, Tirur, Thiruvallur
District Institute of Education and Training, Uthamapalayam, Theni
District Institute of Education and Training, Vanaramutti, Thoothukudi
Foundation for Friendly Environment and Medical Awareness, Chennai
HELPS, Kodaikanal, Dindigul
Krupalaya Charitable Trust, Villupuram
Kuzhithurai Integral Development Social Service (KIDSS), Kanniyakumari
New Creations Trust, Madurai
Rural Education and Economic Development Society (REEDS), Ramanathapuram
Rural Organisation for Social Education (ROSE TRUST), Ariyalur
Salem District Network of Positive People, Salem
SIBWE FOUNDATION, Thanjavur
Society for Development of Economically Weaker Section (SODEWS), Vellore
Tamil Nadu Science Forum, Tiruchirappalli
Village Improvement Project Society, Dharmapuri

Telangana
District Institute of Education and Training, Warangal
Dr. Rajendra Prasad B.Ed. College, Adilabad
KIMS Post Graduate College, Karimnagar
Local volunteers of Chittoor and Adilabad
Mahatma Gandhi University, Nalgonda
Palamuru University, Mahabubnagar
Post Graduate Centre, Palamuru University, Kollapur, Mahabubnagar
Roda Mistry College of Social Work and Research Centre, Rangareddy
Shashank Degree and Post Graduate College, Banswada, Nizamabad
Telangana University, Nizamabad
Vivekananda College of Education, Adilabad

Tripura
Ananya Social Welfare and Advancement Society, North Tripura
Chetana Social Organisation, Kolai, Dhalai
Institute of Advanced Studies in Education, Agartala, West Tripura
Organisation for Rural Survival, Belonia, South Tripura

Uttar Pradesh
District Institute of Education and Training, Agra
District Institute of Education and Training, Aligarh
District Institute of Education and Training, Allahabad (Prayagraj)
District Institute of Education and Training, Ambedkar Nagar
District Institute of Education and Training, Auraiya
District Institute of Education and Training, Azamgarh
District Institute of Education and Training, Baghpat
District Institute of Education and Training, Bahraich
District Institute of Education and Training, Ballia
District Institute of Education and Training, Balrampur
District Institute of Education and Training, Banda
District Institute of Education and Training, Barabanki

District Institute of Education and Training, Bareilly
District Institute of Education and Training, Basti
District Institute of Education and Training, Bijnor
District Institute of Education and Training, Budaun
District Institute of Education and Training, Bulandshahr
District Institute of Education and Training, Chandauli
District Institute of Education and Training, Chitrakoot
District Institute of Education and Training, Deoria
District Institute of Education and Training, Etah
District Institute of Education and Training, Etawah
District Institute of Education and Training, Faizabad (Ayodhya)
District Institute of Education and Training, Farrukhabad
District Institute of Education and Training, Fatehpur
District Institute of Education and Training, Firozabad
District Institute of Education and Training, Gautam Buddh Nagar
District Institute of Education and Training, Ghaziabad
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Commentary

Something is changing...

Madhav Chavan[1]

ASER has been witness to changes in India's school education landscape over more than a decade now. In the first years of ASER it was a bit difficult to justify this annual effort. But, as years went by, the individual dots started looking like trends. A look at the proportion of children in Std V who can read Std II level text over the last 10 years indicates that at the national level the proportion was the highest in 2008. This declined till 2012. Over the last six years the level has been rising slowly and unevenly, although the level in 2018 is still substantially lower than in 2008. Something is changing and ASER is sensitive enough to catch the change.

Table 1: % Children in government schools in Std V who can read Std II level text, 2008-2018						
	2008	2010	2012	2014	2016	2018
India	53.1	50.7	41.7	42.2	41.7	44.2
Group 1						
Kerala	73.3	74.0	59.9	61.3	63.3	73.1
Maharashtra	74.3	71.0	55.3	51.7	63.1	66.0
Punjab	61.3	68.7	69.5	60.9	64.0	68.7
Uttarakhand	64.6	63.7	52.2	52.0	55.9	58.0
Haryana	61.1	60.7	43.5	53.9	54.6	58.1
Chhattisgarh	74.1	61.0	44.0	47.1	51.0	57.1
Assam	40.9	42.6	33.3	30.6	32.2	33.5
Madhya Pradesh	86.8	55.2	27.5	27.5	31.4	34.4
Group 2						
Karnataka	42.9	42.9	47.2	45.7	41.9	47.6
Himachal Pradesh	73.6	75.7	71.2	71.5	65.3	74.5
Odisha	59.6	45.5	46.1	49.1	48.8	56.2
Uttar Pradesh	33.4	36.0	25.6	26.8	24.3	36.2
Group 3						
Jharkhand	51.9	48.4	32.5	29.1	31.4	29.4
West Bengal	45.2	54.2	48.7	51.8	50.2	50.5
Gujarat	43.8	43.5	46.3	44.6	52.3	52.0
Rajasthan	45.1	44.2	33.3	34.4	42.5	39.1
Tamil Nadu	26.7	30.9	30.2	49.9	49.4	46.3
Bihar	62.8	57.9	43.1	44.6	38.0	35.1

Although ASER does not analyze the causes of poor or improved learning levels, it is but natural to correlate changes with probable causes. Passage and implementation of the Right to Education Act in the 2009-10 period has to be correlated with the decline of subsequent reading ability at the national level and in most states. In 2012, the then Planning Commission acknowledged for the first time that there was a problem with learning outcomes, although the Ministry of Human Resource Development had been maintaining that learning levels had not gone down. The emphasis on learning of basic reading and arithmetic was not clear for about two to four years after that. This is apparent in the mixed bag of improvement, decline or status quo in state level results over that period. Over the last two years, however, many states have shown big changes, indicative of a change of emphasis towards improved learning outcomes. We can only hope that this emphasis continues regardless of changes of officials and/or political parties in different states and at the national level.

The learning levels of children are indicators of effectiveness or productivity of the education system. Anyone looking at the levels in 2008 and 2018 would conclude that its productivity is down by nearly 9 percentage points, or about 18 percent. However, the fact that numbers for all years in between are available means that we can catch the little ups and downs in different states and at the national level too. In Table 1, I have divided some of the states excluding Goa and most of the north-eastern states into three groups. In the first group there is a decline in reading levels till 2014 followed by a steady, even if small rise over the next four years. In Group 2, the rise is restricted to the 2016-18 period. Group 3 shows ups and downs in learning levels every two years. It is easy to see how each state has behaved over the years. There is clearly a positive change in most states over the last two years, not only in the Std V learning levels, but also in other classes. This change points towards an increased emphasis on improved learning levels in many states. It will be worthwhile watching if the trend of positive change continues in most states and the productivity of the system reaches and then overtakes where it was in 2008.

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[1] President and member of the Board of Directors, Pratham Education Foundation

As we have noted in previous reports, while the productivity of the government school system has declined overall, the effectiveness of the private schools has not changed as dramatically. In 2008, 68% Std V children in private schools could read a Std II level text. This went down to 61% in 2012 and then went up again to 65% by 2018.

Table 2: % Children who can read a Std II level text, government vs private schools						
Std V	2008	2010	2012	2014	2016	2018
Govt	53.1	50.7	41.7	42.2	41.7	44.2
Pvt	67.9	64.2	61.2	62.6	63.0	65.1

The important thing to note is that in 2008, the percentage of Std II level readers in government schools was at 53%, or 15 percentage points lower than the 68% children in private schools. By 2018, this gap has widened to 21 percentage points on a national scale. At the same time, the proportion of children enrolled in private schools in rural India has gone up from 22% in 2008 to 30% in 2018.

There is no doubt that thanks to the poor reading ability at Std V, the overall ability to deal with textbooks in higher standards is that much poorer as the curriculum becomes increasingly ambitious and texts become complex in more than one way. The highest level of reading that ASER measures is at Std II. So, we do not know if those who learn to read by Std II improve their skill with age or additional years in the school. But as we can see in Table 3, the proportion of children who can read at Std II level increases by a good 25 to 30 percentage points between Std V and Std VIII.

Table 3: % Children in government schools who can read a Std II level text, Std V vs Std VIII						
India	2008	2010	2012	2014	2016	2018
Std V	53.1	50.7	41.7	42.2	41.7	44.2
Std VIII	83.6	82.0	73.4	71.5	70.0	69.0

The declining productivity of schools leads to a substantially smaller number of students learning to read basic texts by the time they reach Std V every year. But, the fact that the proportion of 'readers' grows 1.4 or 1.5 times by the time they reach Std VIII means that as children continue to use books, more children learn to read fluently even if not at the desired level. It also suggests that while efforts have to be made to ensure that 100% children are reading fluently by the time they reach Std V, efforts to improve reading ability should be continued even after Std V.

Table 4: % Children in government schools in Std V who can do division, 2008-2018						
	2008	2010	2012	2014	2016	2018
India	34.4	33.9	20.3	20.7	21.1	22.7
Group 1						
Himachal Pradesh	57.4	61.8	40.7	37.9	47.4	51.5
Punjab	39.7	70.8	48.6	37.1	42.4	50.1
Uttar Pradesh	15.8	18.7	9.1	12.1	10.4	17.0
Kerala	38.3	43.1	38.0	25.6	27.1	33.5
Chhattisgarh	59.5	37.8	13.1	14.1	18.6	26.1
Maharashtra	46.9	39.9	20.2	16.6	19.7	31.7
Madhya Pradesh	77.5	38.0	8.9	10.0	15.3	16.5
Gujarat	24.1	19.6	12.4	13.9	14.5	18.4
Uttarakhand	38.4	48.7	27.3	21.4	25.5	26.7
Group 2						
Assam	15.5	22.6	8.9	9.0	9.1	14.4
West Bengal	29.4	38.1	28.7	31.3	28.6	29.2
Haryana	45.7	50.5	25.4	30.8	30.1	34.4
Karnataka	14.9	18.7	17.4	16.7	17.2	19.6
Tamil Nadu	9.0	14.1	9.6	25.6	21.4	27.1
Group 3						
Bihar	50.9	51.0	30.0	31.4	28.9	24.1
Jharkhand	30.5	40.1	20.1	17.6	20.0	15.6
Rajasthan	25.9	25.2	9.9	12.0	15.6	14.1
Odisha	36.0	31.3	17.2	19.9	23.8	23.8

Table 5: % Children in government schools who can do division, Std V vs Std VIII						
India	2008	2010	2012	2014	2016	2018
Std V	34.4	33.9	20.3	20.7	21.1	22.7
Std VIII	65.2	67.0	44.5	40.0	40.2	40.0

Table 6: % Children in private schools who can do division, Std V vs Std VIII						
India	2008	2010	2012	2014	2016	2018
Std V	47.1	44.2	37.8	39.3	38.0	39.8
Std VIII	71.8	72.0	57.1	54.2	51.2	54.2

Just as reading levels have shown some improvement for the last four odd years in several states, arithmetic levels too have improved noticeably in some states compared to what they were four years ago (Table 4). However, the change at the national level is comparatively small. Again, the small improvements over the last four to six years have not been enough to bring the arithmetic ability levels to what they were ten years ago.

Although we see small but consistent improvement in arithmetic learning levels in many states, we cannot ignore the fact that the highest proportion of Std V children who can do division are in Himachal Pradesh and Punjab at just over 50%. The national average is at 22% with Assam, Gujarat, Karnataka, Rajasthan, and Jharkhand showing numbers in the teens.

As in reading, it is apparent from Table 5 that the proportion of children who can solve division sums (and hence, we conclude, all basic arithmetic operations) almost doubles between Std V and VIII in government schools. In private schools too, as seen in Table 6, this proportion increases but it does not quite double. Every year about 4 to 6 percentage point more children in each cohort learn to do division. But, between 2008 and 2018, the proportion of 'division solvers' in Std V in government schools went down from 34% to 22.7%.

Although we can see that the proportion of children who know division does improve within a cohort, it does not reach 100% even after 8 years of schooling. Further, as we saw in ASER 2017 'Beyond Basics', only 15.4% of young adults had the ability to do simple financial calculations involving computation of simple interest.

This means that not only are we not creating a sufficiently literate population, but that most of our population is functionally illiterate.

The fact that we are seeing some improvement in learning outcomes now is a welcome change, assuming that the improvement will continue. But, first of all, the positive change is slow and uncertain. It has to be understood that we are struggling even with basic literacy and numeracy.

We are far from becoming an educated nation.

Can our country take an educational quantum leap? But, which way are we to jump? Should we leap-frog over some curricular goals? Do we have different options in terms of the goals we want to achieve? Or, are we going to continue on the path of linear improvement of the system and all of its components?

These are difficult questions to answer. We have a system of education and we are dependent on it although it is dysfunctional to say the least. There is a curriculum - it expects teachers to teach and children to learn. Everything we know from ASER surveys and NAS results - two different ways of assessing children - indicates that a very small percentage of children are likely to come close to fulfilling all the curricular expectations. The government is talking about unburdening the children by cutting down the curriculum. It sounds like a good idea. But is it? Will the curriculum be cut horizontally, lowering standards in each subject? Or vertically, by dropping certain subjects altogether? Will the curriculum for the various competitive entrance examinations be cut down to half? That seems unlikely given the need to select 'the best' candidates out of hundreds of thousands who compete. If that curriculum is not reduced but the school curriculum is, some children will effectively have to choose a watered down curriculum, while the others go for the higher level of education through coaching classes for competitive examinations.

Is there any other way of unburdening? What if children could appear for examinations whenever they felt they were ready? What if there was no barrier to joining university courses? Any person passing a qualifying examination could register to study degree courses. What if there was no need to enroll in a college and have 75% attendance but instead, have complete access to lectures, notes, assignments, and examinations? There can be many 'what if's if we choose a path to leap-frog and decide to take a non-linear path to change.

There is a lot going on by way of application of digital technology in the field of education in India. But, we need to do more, and it appears to me that all our technology efforts are tied to the dysfunctional system and its old ways. This is unlikely to give the technology the full play it deserves. There is a need to think differently if we want to make a quantum leap.

India is a country where everything has to happen on a massive scale. Developing one successful model and replicating in state after state is one possibility. A decade ago this was attempted with Activity-Based Learning, ABL. The original ABL model left something to be desired and the replication was probably done without much conviction. In the current phase, the emphasis seems to be coming from goal setting and assessment rather than specific models of teaching-learning or teacher training. A motivated state machinery with leadership and consistent policy backing is the key to big systemic changes. NGOs and foundations can be helpful but not without energy from state functionaries. The transparent and simple methodology of assessment of basic learning outcomes developed by ASER has been replicated in other countries in South Asia, Sub-Saharan Africa, and even Latin America. Perhaps India could show the way for massive improvement in learning outcomes too?

Behind the headlines

Rukmini Banerji[1]

Thanks to more than a decade of ASER reports, the main headlines from the surveys are widely known.[2] Even those who are not education experts or researchers can tell you that after five years of schooling, only half of all children in India can read at Std II level. And that the results for basic arithmetic are even more worrying.

In the early years of ASER, there was disbelief. Whether in meetings in the Planning Commission or in discussions at village level, people would say "how is it that children cannot read, after all they are going to school!" Sceptics would question the sampling. Critics would reject the tools. Others would be doubtful about how volunteers could pull off such a massive exercise. But year after year, like clockwork, the report would become available in mid January. The results were consistently saying that learning needs attention. The relentless hard work of thousands of people involved in the effort began to pay off. More studies of children's learning began to appear. All of this influenced and contributed to local as well as national debates on education.[3]

Acknowledging and accepting a problem is certainly an important first step. It is now well recognized that learning levels are low and that they are not changing much as years go by. In fact, for a few years, we even saw distinct declining patterns. What is also known is that although children continue to add years of schooling to their portfolio, for many, learning trajectories remain relatively flat. As Pritchett (2017) puts it, "if a learning profile is flat, schooling only measures 'time served' and not 'skills gained'."[4]

The next step beyond acknowledging, recognizing, and accepting is understanding. Which in turn requires going behind the headlines. The World Development Report 2018 argues that when issues of learning are taken seriously, and learning becomes a high priority, then progress can be made towards solving the learning crisis (WDR 2018). The three fronts on which the report recommends action are assessing learning outcomes; acting on the evidence to make schools work for all learners; and aligning all actors to make the whole system work for learning.

Now that everyone accepts that learning outcomes are worryingly low, let us take a closer look at ASER data to see what else it can tell us. For the purposes of this discussion, let us focus on Std III. After spending two years in the formal education system, children are 'settled' in school. Std III is also the earliest grade at which the national achievement test is administered. It is also relatively straightforward to align what children are expected to do by the end of Std II or beginning of Std III with several of the ASER tasks. In the ASER process, the 'highest' level task, at least in reading, is to ask a child to read a text at Std II level of difficulty. In arithmetic, children are asked to recognize numbers, do a numerical two-digit subtraction problem with borrowing, and finally solve a numerical division problem (e.g. divide a three-digit number by a one-digit number). The ASER tests are progressive, so each child is marked at the highest level that she can comfortably reach. In most states, by the time children enter Std III, they are expected to be reading a simple text fluently and confidently doing arithmetic operations like addition or subtraction with numbers at least up to 100. Hence, if a child can read text at Std II level of difficulty and correctly solve numerical subtraction problems, then we can say that the child is at 'grade level' for Std III.

According to ASER 2018, the all India figure for the percentage of all children in Std III who are able to read at Std II level is 27.2. The corresponding number for the proportion of children who can at least do subtraction is 28.1. It is obvious that these figures are low; in Std III, only a quarter of all children are 'ready' for the grade in which they currently are. In addition, year after year, ASER data has been pointing to the wide spread of learning levels within the same grade. Table 1 shows the distribution of learning levels for a national sample of Std III children (all India rural) in 2018.

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[1] Chief Executive Officer, Pratham Education Foundation

[2] Oza and Bethell (2013). Assessing Learning Outcomes: Policies, Progress and Challenges. Sarva Shiksha Abhiyan. Dfid Funded Research Study. The authors state that "there are still many lessons that can be learnt from the reporting formats used by, for example, Pratham/ASER and Educational Initiatives. Notwithstanding any technical limitations, these agencies consistently produce reports which are attractive and eminently readable. ASER, in particular, has been extremely successful in extracting from its studies "headline findings" which catch the attention of the media and, hence, generate a great deal of press coverage" (p 46).

[3] Oza and Bethell (2013). See p.22 reference to ASER being influential in policy formulation by both the Central and State governments. "The grassroots approach utilised has been significant in bringing attention to learning outcomes in India."

[4] The Pivot from Schooling to Education. RISE Vision Document 1. https://www.riseprogramme.org/sites/www.riseprogramme.org/files/2017-11/RISE_Vision_document-1.pdf

Table 1: ASER 2018: % Of all children in Std III (rural) who:						
Reading level	Cannot recognize letters yet	Can recognize letters but cannot read words	Can read words but cannot read sentences	Can read text at Std I level but not higher	Can read Std II level text	Total
Std III	12.1	22.6	20.8	17.3	27.2	100
Arithmetic level	Cannot recognize numbers till 9 yet	Can recognize numbers till 9 but not higher	Can recognize numbers till 99 but cannot subtract	Can do 2-digit by 2-digit subtraction but not division	Can do 3-digit by 1-digit division or higher	Total
Std III	7.6	26.9	37.5	19.6	8.5	100

All these children are in the same grade and in the same age group but their ability to read or do arithmetic varies widely. Data indicate that in a Std III class, we may have some children who are at Std II level, some at Std I level and some who are like pre-schoolers in terms of their literacy and numeracy levels. This variation has been referred to as one of the "most critical constraints in the structure of the Indian education system today".[5]

Table 1 suggests that only about a quarter of all children in Std III in rural India can read fluently. If you cannot read, you cannot be expected to do a pen-and-paper test. The data in Table 1 clearly shows that the vast majority of children cannot read, which means that they cannot follow written instructions. The first implication of looking closely at the data is that assessment methods for Std III cannot only have the usual written tests. ASER uses tools that are used one-on-one with each child. If we want to understand whether a child can read, there is no way to figure this out, other than asking her to read and then listening to her.

To go one step deeper, let us look at the spread of learning levels in two states - Himachal Pradesh and Uttar Pradesh (Table 2). Both are states where improvement in learning levels is visible in ASER data between 2016 and 2018.

Table 2: ASER 2016-2018, Himachal Pradesh and Uttar Pradesh % Children reading at different levels (Std III, Government schools)						
	Cannot recognize letters yet	Can recognize letters but cannot read words	Can read words but cannot read sentences	Can read text at Std I level but not higher	Can read Std II level text	Total
Himachal Pradesh						
2016	2.4	16.6	12.3	23.6	45	100
2018	2.4	10.6	15.5	24.1	47.4	100
Uttar Pradesh						
2016	28.2	40.3	15.3	8.9	7.2	100
2018	24.5	36.7	16.8	9.7	12.3	100

Even with a cursory look, several patterns are clearly visible. First is the variation between the two states. If there were to be a league table of reading for Std III, Himachal Pradesh would be at the top end of this list while Uttar Pradesh would be towards the bottom. In Himachal Pradesh, almost half of all children can read at Std II level and another quarter are close behind. The picture from UP is exactly opposite. In 2018, in UP, 12% children are at grade level and another roughly 10% are close behind. That leaves three quarters of the children who are at least two grade levels behind. Compared to what is expected in Std III, this suggests that 75% to 80% of children in UP who have reached Std III are still at pre-school level of literacy and numeracy. (As children move up in the school system, the dispersion gets wider. By Std V, there are children who are at grade level as well as children who are still struggling with numbers or letters - so at least five grade levels behind!).

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[5] Karthik Muralidharan (2018). School Education Reforms in India. Dec 2018. https://uchicago.app.box.com/s/ifxfg8fsz3cj5p4lbtef2rl24juc2vze

Imagine the challenge that teachers face in teaching in such contexts. Not only is there vast variation in the levels of children in the class, but distance between the expectations of the curriculum and where children currently are is also massive. The usual teaching-learning approach used in most Indian classrooms is to teach from the grade level textbook and focus on "teaching to the top of the class" (Banerjee and Duflo 2012).[6] Further, "the curriculum targets only the very top of the distribution and leaves most students behind; the immense variation within a classroom makes the delivery of any effective instruction very hard; and, consequently, most students are far from grade-appropriate standards even after completing the full course of elementary education." (Muralidharan 2018)

In an article published in Times of India on January 1, 2019, Raghuram Rajan and Abhijit Banerjee lay out eight things that India needs to do in 2019. For education, they say "The Right to Education Act focuses on input requirements for schools that have little bearing on learning outcomes, which have deteriorated alarmingly. Learning must be our central focus, with all schools, public and private, responsible for delivering a minimum level of basic skills to every child. Bringing those falling behind up to par through remedial teaching will be critical."

Effective ways to bring forward children who are falling behind are available. Pratham's "Teaching at the Right Level" interventions have been rigorously evaluated by MIT's Abdul Latif Jameel Poverty Action Lab over the past two decades. This research has shown that the approach has led to some of the largest and most cost-effective learning gains of any primary education program evaluated. The most recent study in Uttar Pradesh showed that the overall large learning increases in a classroom were particularly driven by the children who most needed help - those who began at the lowest levels of literacy and numeracy. Thus, even the very low learning situation and highly skewed distributions seen in Uttar Pradesh can be reversed in a matter of days with the right focus and effort. As the WDR 2018 suggests, making learning high priority and aligning the system to ensure learning for all can reap good results. Based on these experiences, several state governments across the country are putting time aside during the school day to be used specifically for building foundational skills, and children are being grouped by level rather than grade for instruction. Promising results from the 'teaching-at-the-right-level' approach are becoming visible in large scale implementation by states. More work of this kind will lead to a national belief that the situation seen for Std III in the ASER data can be improved, across states and in other grades, without too much additional cost.

But what led to this learning crisis to begin with? There are many contributing factors. Poorly educated parents and the lack of learning support at home is certainly a contributor. Inadequate school readiness, rote learning methods of teaching, paucity of appropriately trained teachers, and no system of identifying or helping children who are not making adequate progress in the early grades - all can be listed as problems.

However, a key underlying feature is what has been termed the "negative consequences of over-ambitious curriculum" (Beatty & Pritchett 2012).[7] For example, in the Std III textbook in Uttar Pradesh, there is a section where a young child goes with her father to a shop to buy a mobile phone. Her father has Rs. 3975. They see several mobile phones - one for Rs.3260, another for Rs. 3460, yet another for Rs. 3874 and a last one for Rs. 4077. The child and her father have to take a decision on which phone they can buy and how much money they would have left over after buying a mobile phone. Remember this is a situation in which 60% children in the state cannot as yet recognize numbers till 100, and only 11% children can actually do operations involving subtraction.

In conclusion, once the headlines of this year's ASER have been absorbed, anyone reading the ASER 2018 report and analysing the implications of the evidence for policy and practice, must leave with at least these three action points in mind:

■ Appropriate assessment: Pen-and-paper assessments do not make sense for most children in Std III in India. Understanding their current level of reading or arithmetic will need other methods like working with them one-on-one with oral, interactive tasks.

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[6] Abhijit Banerjee and Esther Duflo 2012. Poor Economics: A radical rethinking of the way to flight global poverty. New York. NY: Public Affairs.
[7] https://www.cgdev.org/publication/negative-consequences-overambitious-curricula-developing-countries-working-paper-293

- 'Catch up' action is needed urgently and on large scale. If most children can acquire basic foundational skills like reading and arithmetic by the end of Std II, then a huge national problem of later learning gaps can be solved. Existing research and practice show that effective programs can be implemented to solve the learning crisis early. But this requires moving away, at least for part of the school day or school year, from the current curriculum and textbook content to focus on foundations. To ensure that every child has the opportunity to 'catch up' requires a significant re-aligning of all elements of the education system. This 'catch up' will involve millions of children and hence how to get this done must be the highest priority for policy makers, planners, and practitioners.

- Immediate and thorough re-visioning is needed for the early grades. This extends to rethinking both 'what' and 'how'. What are the goals? What should a child entering Std III be able to do? How can curriculum in the first two years support teachers and schools to enable children to reach these goals? How should it be reflected in textbooks and other content? How should teaching practice and assessment methods be changed? It is not simply a question of 'lightening' the load but more of reconceptualizing what is needed and at what pace. Today's textbooks expect a far higher level of literacy and numeracy ability than today's children bring to the classroom in Std I, II, or III. It is essential and urgent to realign academic expectations with the system's ability to deliver, with teachers' capability to support, and children's capacity to acquire, accumulate, and progress.

All available data shows that India is close to achieving 'schooling for all'. Now is the time to make 'learning for all' a national priority. We need to move beyond this year's ASER headlines into meaningful action. Ensuring that every child has the opportunity to acquire foundational skills in primary school will need substantial changes in the ways that the system currently works. We need to rework what we are doing, why we are doing it, and how we do it, from the policy level to the classroom level.

As a country, we have acknowledged that we have a crisis of learning on hand. Now it is time to understand the contours of the problem and take decisions accordingly, so that year on year there is progress. The first step to lift up the learning trajectory of children is to ensure foundational skills. To enable millions of children to learn how to read, to comprehend and to calculate we need a massive 'catch up' effort. This 'catch up' needs a 'push forward' and not a 'hold back'. We need to believe that the real right to education is not only in terms of years of schooling but 'value added' in terms of learning; first foundational skills, then higher level capabilities and knowledge, and finally to being able to cope with a dynamic and changing wide world beyond.

Equity in learning?

Wilima Wadhwa[1]

This year, ASER visited all rural districts and assessed children on foundational reading and math after a gap of a year. And, the slight signs we had seen of a resurgence in government school learning levels in 2016 seem to have taken root! Learning levels are up in most states in Std III and Std V - this is good news indeed!

Between 2005 and 2014 - the first 10 years of ASER - there were 3 main trends that emerged from the data: First, learning levels were low and slow to change till 2010. There was very little change in learning levels at the all India level till 2010 and a slight decline after that. The decline, post 2010, was coming entirely from government schools, with learning levels in private schools holding up or improving slightly. Second, while children did learn as they progressed through school, these learning trajectories were fairly flat. Even in Std VIII close to a fourth of the children were not fluent readers. And, third, there was a year on year increase in private school enrollment. By 2014, almost a third of all rural children were enrolled in private schools.

ASER data from 2016 and now 2018 suggest that two of these trends seem to be changing since 2014. First, the year on year increase in private school enrollment seems to have stopped. Between 2006 and 2014 private school enrollment increased steadily from 18.7% to 30.8%. Since then, it has remained at about the same level, i.e. 30.6% in 2016 and 30.9% in 2018.

Second, the decline in learning levels observed in government schools after 2010 is slowly reversing, at least in primary grades. Between 2010 and 2013, ASER estimates showed indications of a decline in learning outcomes in government schools. In 2014, it seemed that this trend was arrested and learning levels seemed to stabilize. In ASER 2016, for the first time since 2010, there was an improvement in government school learning levels, even though it was only observed in Std III. This year, not only do we continue to see an improvement in government schools in Std III but also in Std V. In Std III the percentage of children who are at grade level (those who can read a Std II level text) fell from 17.4% in 2009 to 15.9% in 2013. This proportion subsequently increased to 17.2% in 2014, 19.3% in 2016 and now stands at 20.9% in 2018. In Std V, on the other hand, the percentage of children who could read a Std II level text fell steadily from 50.7% in 2010 to 41.7% in 2016. But finally this figure shows an improvement in 2018 at 44.2%.

Two points should be noted here: First, while at the all India level these changes may seem small, they are not insignificant; there is a lot of variation across states with some states showing gains of close to 10 percentage points in 2018. Second, even though the declining trend in learning outcomes of government schools seems to have been arrested and even reversed, it is important to remember that we are talking about foundational abilities. There is still a long way to go to bring children up to grade level.

In the early years of ASER, the fact that learning levels were low and unchanging always needed defending. When learning levels began to decline in 2010, initially that was also viewed with scepticism. However, today there is general acceptance of the fact that India is in a 'learning crisis' requiring urgent action. Since 2014, the government has initiated a variety of learning assessments; NAS is being done more regularly and results are now available at the district level. The ASER 2018 results seem to indicate that there have been changes in teaching-learning in schools as well.

However, the debate has always been around learning levels and whether they have moved up or down. But what about equity? In the context of education, we can think about inequality across three dimensions. First, we can use the lens of school type to examine differences in outcomes. There is a substantial body of literature looking at the differences between government and private schools - in terms of access, facilities as well as learning outcomes. Second, we can look at the entire distribution of learning outcomes. Here, while we know something about the mean of the distribution, there has not been that much discussion on its spread. The spread of the distribution is equally if not more important, because the mean could be increasing for a small proportion of children, thereby pulling up the mean of the entire distribution, with little or no change in the outcomes of the majority of the population. The ideal situation, of course, is one where the mean is rising and the dispersion is falling, so that learning outcomes are improving both overall as well as for all children. And, third, we can use the lens of geographic location to look at inequality across states. The all India figures move slowly, but hide a lot of variation across states.

[1] Director, ASER Centre

First, let's look at the evidence on the differences in learning outcomes of government and private schools. On the face of things, private schools consistently perform better than government schools. However, this is not a fair comparison because of the self-selection associated with children who attend private schools. It is well known that children who go to private schools come from relatively affluent backgrounds and tend to have more educated parents. This affords them certain advantages that aid learning. These advantages are not available to children who are from less advantaged families and are more likely to attend government schools. Once we control for these factors that affect learning, the gap in reading or math levels between children attending different types of schools narrows considerably.

Be that as it may, between 2009 and 2014 the gap between the government and private school outcomes was increasing, even after controlling for other factors outside the school. Government school learning levels were declining and private school outcomes were holding steady or improving. As rural India became more prosperous, parents began to shift their children to private schools, reflected in rising private school enrollments. The pool of children that government schools were drawing their students from thus became steadily more disadvantaged.

Since 2014, however, with outcomes in government schools improving, the gap between government and private schools has narrowed or remained constant. This is true for both reading and math in Std III and Std V. In addition, the contribution of home factors to children's learning outcomes, which had increased between 2009 and 2014, has also remained about the same since then. So, while children in private schools continue to outperform their government school peers, at least the gap between the two seems to have stabilized. From an equity point of view this is certainly a step in the right direction.

We turn now to the second point regarding the distribution of learning outcomes. With 70% of rural children still attending government schools, and the government's continued commitment to the Right of Children to Free and Compulsory Education (RTE), the distribution of learning outcomes in government schools becomes extremely important. The RTE was envisaged as a tool to guarantee access to education to all children in the country, thereby levelling the playing field and removing disadvantages associated with poverty, caste and gender. To a large extent it has been successful in achieving that goal. Even though enrollment in the 6-14 year age group was already over 96% in 2010 when the RTE came into effect, there were still large numbers of children out of school in the 11-14 year age group, especially among girls. In 2010, close to 6% girls in this age group were out of school and 9 major states had numbers in excess of 5%. Today the overall number has decreased to 4%, and there are only 4 states where it is more than 5%. Therefore, the RTE, as an overarching legislation, has also reduced the inequalities in access between states. By and large, this is also true for school facilities. In the last 8 years, as states have beefed up infrastructure in government schools to comply with RTE norms, not only has mean compliance gone up but dispersion across states has also gone down for most indicators.

How has this push towards universalization affected the distribution of learning outcomes in government schools? The fact that learning levels fell after the RTE came into effect in 2010 is well documented now. The observed decline in learning outcomes could be due to a variety of reasons, but one possible explanation could be a direct consequence of bringing children who had never enrolled or had dropped out back into school. These children, understandably, would have had lower learning levels and needed supplementary help to be at par with their peers. If teachers were unable to provide this extra help, the result would lower the average learning levels in government schools. Over time, as these children caught up and progressed through the system, we would expect learning levels to start rising.

But has this happened? Consider children in Std III of government schools. In 2014, there was a slight increase in learning levels for this grade for the first time after 2010, which was sustained in 2016. This year we see an increase in Std III and Std V, suggesting that the 2016 Std III cohort sustained their learning gains and there was value added for the new Std III cohort as well. But did all children gain in the system? If so, we should observe a fall in the dispersion of the Std III learning outcome distribution, at least in the last two years. Instead, what we find is that the standard deviation of the distribution which was unchanging between 2006 and 2010, rose sharply till 2014, increased marginally in 2016 and seems to have stabilized in 2018, albeit at the high 2016 level. So, during the period when learning outcomes were falling, the dispersion was also increasing; and this trend has so far, not been reversed.

This is not surprising since there is a lot of variation across states not just in the level of learning outcomes but also how they have changed over time. For instance, when the overall proportion of Std III children who could read at grade level fell from 16.8% in 2010 to 14.7% in 2011, there were states like Punjab and Gujarat that posted increases of close to 6 percentage points; Meghalaya, Mizoram and Arunachal Pradesh gained 9 percentage points or more. At the other end of the spectrum, in Haryana and Rajasthan this proportion fell by 5 percentage points and in Bihar by 9 percentage points. This large variation across states is evident not just in 'bad times' but also in 'good times'. This year, when most states have shown an improvement, in Rajasthan the percentage of Std III readers fell by 5 percentage points; and in Tamil Nadu the drop was even greater, at over 8 percentage points. This seems to suggest that there is no tendency towards convergence in learning levels across states.

When we look at the dispersion of learning outcomes over time within states, the pattern is similar with most states showing an increase in dispersion between 2010 and 2014. The pattern is less clear in 2016 and 2018. For instance, in Uttar Pradesh dispersion increased in both years; it fell in both years in Himachal Pradesh; it went down and then up in north-eastern states like Arunachal, Mizoram and Manipur; and it went up and then down in Rajasthan. This means that changes in learning levels have been jumpy within states as well.

It is not surprising, therefore, that there was no sustained trend in learning outcomes between 2010 and 2014. Even after 2014, when overall learning levels have shown a slight upward trend, there are very few states where the process has been sustained. For instance, Rajasthan had a big jump of 5 percentage points in 2016, but an equally large fall in 2018, bringing it back to the 2014 level. Telangana is another case in point with a 3 percentage point increase in 2016 and a similar fall in 2018. Just a handful of states have shown a sustained and significant increase in learning outcomes post 2014. Only 4 states showed an improvement of 3 percentage points or more in both 2016 and 2018 - Punjab, Haryana, Gujarat and Maharashtra.

This rising dispersion is reflected in longer tails of the learning distribution over time. This is evident particularly in the left tail. In Table 1 we present the distribution of reading in Std III from 2010 to 2018. While the distribution has shifted to the right, its tails, particularly the lower tail has also become longer. In 2010, while there were only 16.8% children in Std III who could be said to be at grade level (i.e. able to read Std II level text), there were also only 6.5% children who were unable to read even letters. By 2014, this number had more than tripled to 19.2%.

Table 1: % Children able to read at different levels (Std III, Government schools)					
	Not even Letter	Letter	Word	Std. 1 text	Std. 2 text	Total
2010	6.5	19.9	31.2	25.7	16.8	100
2011	10.1	25.3	29.4	20.5	14.7	100
2012	14.8	29.3	23.6	15.7	16.7	100
2013	15.9	28.7	22.8	16.7	15.9	100
2014	19.2	28.8	20.3	14.5	17.2	100
2016	17.1	27.8	20.3	15.5	19.3	100
2018	15.7	26.0	21.5	15.9	20.9	100

Between 2014 and 2018, while the bottom end of the distribution has moved up a little bit, we are still far from where we started in 2010. This is an extremely worrying trend from an equity point of view because it suggests that in each successive cohort more and more children are getting stuck at the bottom end of the distribution. Addressing their learning deficits is not only going to be more difficult as they progress through the system but also of paramount importance if we are to achieve sustained improvements in learning.

In the last few years, the focus has clearly shifted from enrollment to learning in education. The governments - state as well as Central - have instituted their own learning assessments. In 2017, an amendment to the RTE required all states, except Jammu and Kashmir, to prepare "class-wise, subject-wise learning outcomes for all elementary classes" and to also devise "guidelines for putting into practice continuous and comprehensive evaluation, to achieve the defined learning outcomes." Just a few days ago, the second amendment to the RTE did away with the no-detention policy in Std V and Std VIII, giving states flexibility to detain students if they did not pass the relevant examinations. But, as states embark on achieving the goals of RTE 2.0, they must ensure that all children participate and gain from the process.

The early years

Suman Bhattacharjea[1] and Purnima Ramanujan[2]

Young children in ASER 2018

Adaptation is perhaps a key feature of ASER. Each year, while preserving the basic architecture of the survey, ASER adds new questions and domains in order to uncover and report new insights on the status of enrollment and learning in the country.
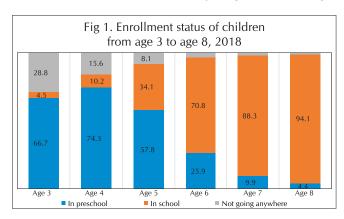
This year, among other changes, the ASER household questionnaire was modified to add to our collective understanding of what young children in India do in the early years. In previous ASERs, the questions we asked were guided by prescribed policy norms for children's participation. For 3- and 4-year-old children, we asked only about preschool enrollment. For children who were 7 or older we asked only about school (Std I and above) enrollment. Children aged 5 or 6 could be included in either category - preschool or primary school. In ASER 2018, we removed these restrictions. For all children aged 3-16, we simply asked whether they were enrolled, and if so, the school or preschool type and grade.

While this means that ASER 2018 enrollment data for 3- and 4-year-olds is not comparable with previous years, we believe it will generate a more accurate picture of what young children in rural India are doing. We have observed over the years that the age-grade distribution in schools does not conform to policy norms, an observation that is also a major finding emerging from recent research conducted by ASER Centre and the Centre for Early Childhood Education and Development (CECED) at Ambedkar University Delhi. The India Early Childhood Education (IECEI) Study, a first of its kind longitudinal study that tracked 14,000 children in 3 major states of India from age 4 to age 8, showed clearly that children take many different pathways through the early years, moving frequently between different preschools and schools as well as periods of non-participation.[3] Moreover, these patterns look very different across states. In other words, the assumption in policy documents that there is a universal, age-based trajectory that children follow from home to preschool to primary school is very far from what happens on the ground.

Where are our young children? The national picture

There are currently two main avenues for accessing early childhood education in India. Far and away the most common provision comprises the 1.3 million Anganwadi centres (AWCs) run by the Ministry of Women and Child Development across the country under the Integrated Child Development Services (ICDS) scheme.[4] The other is the burgeoning private sector, with privately managed primary schools offering pre-primary LKG and UKG classes, spread across rural as well as urban India.[5] A few states in India offer a third possibility as well, in the form of preschool classes integrated within government primary schools, for example in Assam and Jammu and Kashmir.

Given this context, what were young children doing towards the end of 2018 in rural India?

Fig 1. Enrollment status of children from age 3 to age 8, 2018

	Age 3	Age 4	Age 5	Age 6	Age 7	Age 8
Not going anywhere	28.8	15.6	8.1			
In school	4.5	10.2	34.1	70.8	88.3	94.1
In preschool	66.7	74.3	57.8	25.9	9.9	4.4

■ In preschool   ■ In school   ■ Not going anywhere

According to the RTE Act, enrollment in formal school should begin at age 6, with ECE exposure recommended for children between age 3 to 6. However, 26 of India's 35 states and Union Territories allow children to enter Std I at age 5.[6] National-level trends from ASER 2018 indicate that enrollment patterns broadly meet these policy prescriptions (Fig. 1). At age 3, two-thirds of children were enrolled in some form of preschool while at age 6, 7 out of 10 children were enrolled in primary school. But we also see sizeable numbers of children in the 3 to 8 age group with unexpected enrollments. Even at age 3 and 4, a proportion of children are already in primary grades - about 1 out of 10 children

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[3] For more on the IECEI Study, see the policy brief and the published report, both available for download at http://www.asercentre.org/Keywords/p/342.html.
[4] Annual Report, 2016-2017, Ministry of Women and Child Development, Government of India.
[5] According to DISE 2014-2015, 43.26% private schools in the country provided pre-primary classes. For more information, see report on 'Pre-primary sections in government schools', Central Square Foundation, 2016.
[6] Selected Educational Statistics 2011-12, Ministry of Human Resource Development, 2014.
   These broad trends match quite closely with the findings of the IECEI study in the 3 states where it was conducted - Assam, Telangana, and Rajasthan.
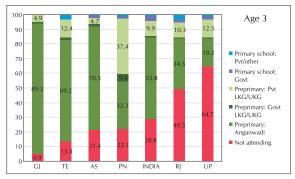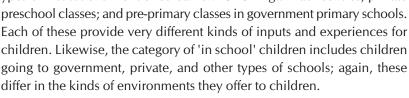
at age 4. The same proportion is still in preschool at age 7, as is a small percentage of 8-year-olds. Corroborating findings from the IECEI Study, we see that enrollment patterns only stabilise at age 8 when over 90% of all children are enrolled in primary school.
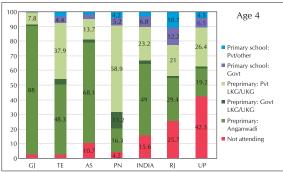
As with many estimates at the all-India level, these national trends hide major variations, not only between states but also with respect to the types of institutions that children attend within each category. The category labelled 'preschool' in Fig 1, for example, includes the three different types of institutions mentioned earlier: ICDS Anganwadi centres; private preschool classes; and pre-primary classes in government primary schools. Each of these provide very different kinds of inputs and experiences for children. Likewise, the category of 'in school' children includes children going to government, private, and other types of schools; again, these differ in the kinds of environments they offer to children.

From age 3 to age 6, what children do varies enormously
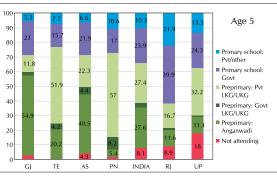
A quick glance at the charts alongside provides a sense of how young children's participation in preschool or school varies, both across the country as well as at different ages.

At **age 3**, national policy recommends that children should be in an ECE program. Gujarat comes closest to meeting the norm, with well over 90% children in some form of preschool, the majority in AWCs. In contrast, in Uttar Pradesh, almost two thirds are not attending anywhere. Assam and Punjab each have close to 80% children enrolled in preschool, but more than a third in Punjab attend a private preschool, while in Assam 70% are in AWCs.

At **age 4**, the proportion of children not enrolled declines substantially across the country. But the variations in what children are doing begin to multiply. For example, in Rajasthan, almost a quarter of all 4-year-olds are already in primary school - with almost equal proportions in government and private schools. In Punjab, while the majority of children enrol in private preschools, about 10% attend a pre-primary class in a government primary school. In Assam, about 7 out of 10 children are attending an AWC at age 4.

At **age 5**, nationally, fewer than 1 child in 10 continues to be out of school or preschool, and about a third of all children are already in primary school. In Uttar Pradesh, close to 2 in every 10 children are not enrolled anywhere. But in Telangana, more than half are in private LKG/UKG classes while in Gujarat, more than half are in AWCs. On the other hand, over 60% children in Rajasthan are in primary grades with a majority in government schools.

At **age 6**, although all children are expected to be in primary school, nationally 3 out of 10 children are not yet at this stage. Over 40% of all 6-year-olds in both Telangana and Assam continue in some form of pre-primary class; while in both Gujarat and Rajasthan, over 80% children are in primary grades. But, while in Gujarat almost all are in government schools, in Rajasthan almost a third are in private schools.

Age 3

Legend: Primary school: Pvt/other; Primary school: Govt; Preprimary: Pvt LKG/UKG; Preprimary: Govt LKG/UKG; Preprimary: Anganwadi; Not attending

	GJ	TE	AS	PN	INDIA	RJ	UP
Top	4.9	12.4	4.7		9.9	10.3	12.5
			37.4			34.5	19.2
	89.2	69.2	70.5	5.4	55.8		64.7
				32.3		49.5	
	4.9	13.5	21.4	22.1	28.8		

Age 4

	GJ	TE	AS	PN	INDIA	RJ	UP
	7.8	4.4	13.7	4.2 / 5.2	6.8	10.7 / 12.2	4.5 / 6.5
		37.9		23.2		26.4	
	88		68.1	58.9	49	21	19.2
		48.3		11.2		29.4	42.3
		10.7	16.3	4.2	15.6	25.7	

Age 5

	GJ	TE	AS	PN	INDIA	RJ	UP
	5.3	7.7	6.6	10.6	10.3	21.9	13.5
	23	15.7	21.9	17	23.9		24.3
	11.8	51.9	22.3	57	27.4	39.9	32.2
	54.9	4.2	4.4			16.7	11.1
		20.2	40.5	8.2	27.6	11.6	18
			4.3	5.4	8.1	8.9	

Age 6

	GJ	TE	AS	PN	INDIA	RJ	UP
	9	23.3	12.8	34.5	21.2	31.7	26.2
		32.5	42				39.4
	81.2		14.9	28.7	49.5	52.7	
		38.3	4.3				24.2
			24.6	32.5	16.4	8.2	
	6.1			7.6		4.1	6.4

Implications

The varied pathways that young children take in the early years have major consequences for what they experience and learn along the way, both before joining primary school as well as once they reach Std I.

In terms of children's 'readiness' to handle primary school content, the IECEI Study demonstrated that neither AWCs nor pre-primary classes in private schools provide children with the opportunities they need to develop sound foundations. Early childhood education is one of six services offered by AWCs and arguably the least developed, given that a single Anganwadi worker is tasked with implementing all six services with little by way of training, resources, or support. While children in AWCs learn to spend time away from home and in the company of other children, there are few structured learning opportunities in place. Pre-primary classes in private schools, on the other hand, look much like primary school classrooms, with teachers focused on (for example) rote-repetition of numbers without helping children to first understand the concept of quantity.

From the perspective of the primary school, children in Std I are far from homogenous in terms of age. ASER 2018 data shows that nationally, more than a quarter of all children entering primary school are 5 years old or younger. Less than 40% are at the mandated age of 6 years, and a third are 7 or older. These age-grade distributions have obvious implications for teaching and learning. A 3-, 4-, or 5-year-old child is simply not developmentally ready to handle the Std I curriculum; the IECEI Study, which measured children's school readiness and early grade learning, showed clearly that younger children are at a disadvantage. From the point of view of a teacher, moreover, teaching the same content to a 5-year-old as to an 8-year-old is not a trivial challenge. The requirement that teachers complete the curriculum for a given grade in a given year - and, by extension, that the children master the content being taught - does a huge disservice to both.

The enormous expansion in the numbers of children entering the education system has meant that there is much more diversity among children than was the case a generation ago. Neither pre-primary nor primary school classrooms are designed to address the issue of increasing diversity in the needs and characteristics of the children they cater to. The outcome in terms of learning is clearly visible. In the elementary school sector, ASER has demonstrated for more than a decade that getting all children into school, while undoubtedly a major achievement, does not by itself ensure that children are able to learn at the level prescribed by the curriculum. ASER data shows that gaps between what children can do and what is expected of them emerge very early in children's school trajectories and widen as children move through the system. A quick look at the Std I language textbook in any state provides a good indication of what children are expected to be able to do when they enter primary school and the huge distance they are expected to travel during the first year itself. But in 2018, ASER data shows that several months into Std I, nationally more than 40% of children are unable to recognize letters of the alphabet, let alone read words or connected text.

The challenge ahead

Extensive international research in disciplines as varied as neuroscience, psychology, and economics shows that early childhood - defined internationally as the age group of 0-8 years - is a critical period during which the foundations of lifelong learning are built. 90% of all brain development takes place by the age of 6. Giving children the kind of inputs and experiences they need in the early years has been proven to have positive effects not only on children's academic performance in school, but also on a range of social and economic outcomes even many years later.

Today, the importance of ECE is widely recognized internationally and is included in the Sustainable Development Goals (SDGs) for 2030 that were approved by countries around the globe, including India. SDG Target 4.2 states that by 2030 countries should 'ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education'.

In India too, the importance of early care and stimulation has been recognized in the National Policy on Early Childhood Care and Education (2013), which aims to provide 'developmentally appropriate preschool education for 3 to 6 year olds with a more structured and planned school readiness component for 5 to 6 year olds.' These recommendations have been

incorporated into the recently created Samagra Shiksha Abhiyan scheme of the Government of India, which has brought renewed focus and attention on ECE through the Integrated Scheme on School Education that aims to treat school education 'holistically without segmentation from pre-nursery to Class 12'. This scheme aims for greater coordination and convergence with the Ministry of Women and Child Development to focus on preschool education for children aged 4-6 years; states are encouraged to co-locate Anganwadi centres in government primary schools or else implement pre-primary classes of up to two years duration prior to Std I.

The limited information available so far suggests that different states are putting different mechanisms in place in order to achieve this integration, which requires coordination not only between academic stages (preschool and primary school), but also between ministries and their respective structures on the ground. In this process, it is also important to take into account the differing contexts across individual states, some of which find expression in the different pathways that children take in the early years. A 'one size fits all' solution for young children is unlikely to be successful.

In both international and national policy documents, the key words are 'quality' and 'developmentally appropriate' education in the early years. The answer is not only to ensure that children attend preschool followed by primary school, but also to ensure that these provide environments that help children to grow and thrive. The continuum envisaged for the early years curriculum should start from and build on what children bring with them when they enter preschool and school; but so far, beyond the IECEI study that looked only at 3 states, little information is available on scale on children's 'school readiness' across the country. Perhaps this will be the question addressed by a future ASER.

A fitter future

Ranajit Bhattacharyya[1]

Since last year, there has been a buzz in our country to popularise sports. Much is being said in terms of getting our youngsters to play. Our sporting icons have been exhorting the government to not only include sports in the school curriculum, but also to increase funding to improve sports infrastructure, thereby creating equal opportunity for both boys and girls to participate in sports across the country. The central government, on its part, has expressed its desire to get 300 million school children to play for an hour each day.

Physical education and sports, though an integral part of education policy documents, has always remained on the fringe and has not received much importance until recent times. India has traditionally been a sports viewing country, and the proliferation of cable TV together with the different professional sports leagues that are now being played and telecast in India, has only accentuated this trend. While children can be seen playing in all fields, grounds, and open-air spaces around the country, much of this play is organized by the children themselves. The culture of playing sports in an organised manner, on a large scale, has never existed in India.

Lamentably, not much data exists on school physical education and sports in India. We do not know how many potential Sainas, Sindhus, and Himas exist in our country, leave alone what kind of facilities exist in the grassroots to produce them.

World over, in most countries, physical education is an integral part of school education, with a consistent allocation in primary and lower secondary education in OECD countries - 9% of school time in primary and 8% in lower secondary.[2] These countries, with higher GDPs, already have good sports infrastructure and facilities, and in recent times they have stepped up their efforts to promote physical education/sports in schools from the perspective of improving academic achievement.[3]

China, after a hiatus of 32 years, participated in the Los Angeles Olympics in 1984[4] and passed the Sports Law of the People's Republic of China in August 1995. The law determined that schools must offer physical education and ensure physical exercise time for students.[5] Physical Education (PE) is part of the compulsory national curriculum set by The Ministry of Education (MOE) of the People's Republic of China from the first year of primary school to the second year of college. The weekly PE time for Grades 1 to 2 should be four hours, and for Std 3 to 6, three hours. Children are required to pass standardized PE tests (modifed for children with special needs) in order to continue their education to the next level.[6]

Late last year, the great Sachin Tendulkar made an impassioned plea to include sports in the school syllabus.[7] Sports, he felt, not only unites people, but also inculcates a sense of responsibility and cooperation. Mary Kom, in her year-end editorial in a leading English daily, lamented the lack of funding to improve school sports infrastructure and thereby scope of nurturing young talent. In the same editorial, she drew our attention to the fact that it is our women who are excelling in international sports, hence, there should not be any gender bias![8] Kom's comment on gender bias is significant, as it is our 'women power' who have been capturing global audiences' attention with their performance. Sports provides an opportunity to break the gender divide.

Perhaps responding to these comments and trends, the government of India has recently initiated a couple of important initiatives related to school sports and education. The first is Khelo India, a national programme for the development of sports. Initiated by the Ministry of Youth Affairs & Sports, Department of Sports, Khelo India is envisaged to be an annual national sports meet. Every year 1,000 top performing sportspersons will be selected for an annual scholarship, which they will get for 8 years, to help them prepare for international events. The 1st Khelo India School Games, a multidisciplinary

[1] An ASER veteran and a sports enthusiast
[2] http://www.oecd.org/education/skills-beyond-school/EDIF%202014--N22%20(eng).pdf
[3] http://www.oecd.org/education/ceri/physicalactivityandlearning.htm
[4] Since 1984, China has been consistently ranking amongst the top 4 nations in terms of the number of Olympic medals they have won, barring the Seoul games in 1988, which has made China an object of both intrigue and envy.
[5] https://www.shs-conferences.org/articles/shsconf/pdf/2016/02/shsconf_sshe2016_02017.pdf
[6] https://helda.helsinki.fi/bitstream/handle/10138/240233/1420.pdf?sequence=1
[7] http://timesofindia.indiatimes.com/articleshow/66709568.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
[8] https://indianexpress.com/article/opinion/columns/tokyo-olympics-2020-target-olympic-podium-scheme-ssa-5517660/

grassroot games scheme for under 17 children, were held in New Delhi in January last year. Haryana, Maharashtra, and Delhi were the top performing states. The 2nd Khelo India Games are being held in January 2019 in Pune.

The second initiative is Samagra Shiksha Abhiyan, an overarching programme for the school education sector extending from pre-school to Std 12, which was announced in the last union budget. It articulates four important ways in which the new scheme will support school sports:[9] sports equipment will be provided to all schools; sports Education will be an integral part of curriculum; every school will receive sports equipment under the scheme to inculcate and emphasize relevance of sports in the school curriculum; and support to 'Khelo India'.

Physical education and sports have also been included on the list of '17 trades' that 'the Centrally Sponsored Scheme of Vocationalisation of Secondary Education has included to enhance individual employability that provides an alternative for those pursuing higher education'.[10]

Policy wise, school sports has never been so good! But do we know where we are at for the 'baseline' of sports expansion in India? Unless we know the status and the gaps, how can we plan adequately to fill them? With this in mind, we were tempted to add a few questions to our ASER 2018 School Observation Sheet to see what kind of physical education facilities currently exist in rural government primary schools. Given the architecture of ASER,[11] where our volunteers collect information on children, teachers, and infrastructure, it was not possible to add detailed probing questions. After multiple field pilots, we decided to collect information on the following aspects of physical education in schools: Dedicated time allocated to physical education, availability of a separate physical education teacher, availability of a playground inside or near the school premises, and availability of sports equipment.

Some school physical education trends captured in ASER 2018[12]

Physical education period in timetable

Two thirds of the schools visited across the country had a timetable with a physical education period. Top states included: Maharashtra (93%), Tamil Nadu (82%), Gujarat (72%), Kerala (83%), and Andhra Pradesh (78%).

Amongst the bottom 7 states with regard to a dedicated period for sports in schools, 6 are from the north-east, including almost three quarters of the schools visited in Manipur and Nagaland and two thirds in Arunachal Pradesh and Meghalaya. These findings are a little surprising because many of these states have a strong culture of sports. Perhaps sports in the north-east is organized in locations other than school. Similarly, in states like Haryana and Punjab, which have traditionally excelled in sports, only half the schools have a physical education period in the time table.

Physical education teacher

Across all states, less than 2 out of 10 primary schools have a dedicated physical education teacher. Most often one of the subject teachers was reported to conduct the physical education period as well.

Among the top states, half the schools in Rajasthan were seen to have dedicated physical education teacher, followed by Kerala, Bihar and Karnataka, where just over a third of the schools had one. A fifth of Haryana schools and a third in Punjab do not have either a physical education teacher or any other subject teacher to supervise the physical education period.

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[9] http://samagra.mhrd.gov.in/features.html

[10] http://mhrd.gov.in/vocationalisation

[11] Every year ASER visits a government school with primary sections in the sampled village, if one exists. Preference is given to government schools with classes from 1 to 7/8, in the absence of which we visit government schools with classes from 1 to 4/5. In case of multiple government primary schools in a sampled village, we visit the government primary school with higher enrollment.

[12] This year our volunteers visited almost 16,000 government primary schools: over 9,000 schools with classes 1 to 4/5 and nearly 7,000 schools with classes 1 to 7/8.

Availability of playground

A more positive finding is that across India, more than two thirds of the schools visited had a playground inside the school premises. 88% schools in Sikkim, 87% in Maharashtra, 86% in Tripura, 84% in Haryana, 83% in Himachal Pradesh, 82% in Gujarat, and 81% in Karnataka are the top states in this category.

Many schools do not have a playground inside the school but use stretches of land just outside the school premises. Almost a third of the schools in Odisha and Jharkhand have playgrounds outside the school premises. Also in these two states, another third of the schools in Odisha and quarter in Jharkhand have no playground at all, either inside or outside the school premises.

Availability of sports equipment

In the case of sports equipment available inside schools, nationally, almost two thirds of the schools visited seemed to fulfil this objective of Samagra Shiksha Abhiyan. In Gujarat, Andhra Pradesh, Sikkim, Jammu and Kashmir, Mizoram, Maharashtra, and Tamil Nadu, almost three quarters of schools were seen to have some form of sports equipment. Lamentably, schools in four north-eastern states: Meghalaya (20%), Arunachal Pradesh (29%), Nagaland (43%), and Manipur (49%), are once again in the bottom with regard to availability of sports equipment.

Supervised physical education activity

Our volunteers did not see much supervised physical education activity at the time of their visit to government primary schools in the sampled villages. Nationally, some form of supervised physical activity was observed in about a quarter of the schools visited. Sikkim is the top performing state in this category, with some supervised physical activity observed in just over half the schools. We cannot say that the remaining schools did not have any supervised physical activity, as our volunteers do not spend the whole day in each school. But, when we look at the states placed in the bottom in this category, we again notice these are the north-eastern states of Arunachal Pradesh, Meghalaya, Nagaland, Manipur, Mizoram, and Tripura. These are states where private school enrollments are high and in most states have gone up since ASER 2016. Uttar Pradesh, which also has a similar trend in private school enrollment seems to have a better record of physical education indicators in ASER 2018 than these states.

The ASER 2018 questions on school physical education and sports are just a beginning to know what is happening in schools. There is also plenty of scope for a detailed in-depth assessment to know the perception of communities, particularly youngsters, towards physical education and sports. Are they aware of the alternate career options it provides? As we have noted earlier for OECD countries and China, we need to know more about the number of hours our school children spend a week participating in sports-based physical activity and the kind of games they play, and to maintain a record of their physical attributes. We also need to map the sports infrastructure that exists at district level. All this will not only help us plan and implement better, but also give us a fair idea of kind of allocations that will have to be made.

In conclusion, we can say that we have made a good beginning by including physical education as a component not only in our school education policy documents, but also starting pan-India school games in the form of Khelo India. We now need to ensure that physical activity becomes an integral part of school life, which leads to widespread participation of our youngsters in sporting activities. We also have to create a system whereby potential talent from this pool of youngsters can be detected and nurtured to compete and excel in various sporting disciplines. Of course, for this to happen we need to create an ecosystem in terms of infrastructure and manpower, for which an enormous amount of planning and money is required. This cannot be achieved unless industry and civil society come out to support these initiatives. The world over, potential sportspersons are selected, irrespective of the type of sports, in their early teens, of which India has aplenty.[13] With a third of our population in the age group of 0 to 18 years, there exists great potential to provide them a meaningful vocation in physical education and sports, as well as a healthy future.

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[13] India's 0-18 population is larger than the entire population of USA, and almost touching the combined population of the European Union.

About ASER

ASER 2018 coverage

596 DISTRICTS

573 PARTNERS

30,000 VOLUNTEERS

17,730 VILLAGES

354,944 HOUSEHOLDS

546,527 CHILDREN

ASER survey calendar

JUN-JUL

RECRUITMENT
ASER state teams travel within their states to recruit Partners and Master Trainers

AUG

NATIONAL TRAINING
ASER central and state teams are trained on the ASER survey process

SEP

STATE TRAINING
ASER state teams train Master Trainers in every state

SEP-NOV

DISTRICT TRAINING
Master Trainers train surveyors in every district

MONITORING
Survey in select villages is supervised by Master Trainers or ASER state teams

CALL CENTRE
ASER state teams monitor the survey via frequent calls to Master Trainers to identify any problems being faced that can be rectified in time

DISTRICT RECHECKS
ASER state teams and Master Trainers conduct desk, phone and field recheck

ASER STATE TEAM RECHECK
ASER state teams recheck villages in some districts randomly and purposively

NOV-DEC

ASER CENTRE RECHECK
ASER central and state teams conduct field recheck

EXTERNAL RECHECK
External organisations conduct field rechecks

DATA ENTRY AND ANALYSIS
Survey data is entered in data centres across India and then analysed in Delhi

JAN

REPORT RELEASE
ASER report is released

Summary of the ASER survey process

A team of two surveyors goes to the village assigned to them by the ASER Master Trainer. They take the Village Pack given to them in the training.

Once in the village, the surveyors meet the Sarpanch/village representative and:
▶ Clearly explain what ASER is and why it is important.
▶ Give him/her the 'Letter for Sarpanch' and request cooperation to conduct the survey in the village.

The surveyors then walk around the entire village and do the following:
▶ Make a rough map of the village, marking the important landmarks. Once the surveyors have walked around the entire village, they make a final map in the survey booklet.
▶ Fill up the Village Information Sheet, based on what they observe in the village.

The surveyors go to the largest government school with primary sections in the village. They:
▶ Meet the Head Master/senior most teacher and explain what ASER is and why it is important.
▶ Give him/her the 'Letter for Head Master' and ask permission to collect information about the school.
▶ Collect information about the school and record it in the School Observation Sheet.
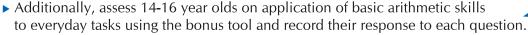
Next, to begin the household survey, the surveyors:
▶ Divide the map into 4 sections or select 4 hamlets.
▶ Randomly select 5 households from each hamlet/section using the 'every 5th household rule'.
▶ Survey a total of 20 households from the selected sections/hamlets.

In each sampled household the surveyors do the following:
▶ Record information about children in the age group of 3-16 years.
▶ Use the testing tool to assess the basic reading and arithmetic levels of children in the age group of 5-16 years with the testing tool, and record the highest level they can do comfortably.
▶ Additionally, assess 14-16 year olds on application of basic arithmetic skills to everyday tasks using the bonus tool and record their response to each question.
▶ Record information about household assets.

ASER

After all 20 households are surveyed, the surveyors submit the completed survey booklets to their respective ASER Master Trainers.

Domains covered in ASER, 2005-2018

Child information

	Indicator / Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2016	2018
General Information	Age and sex	X	X	X	X	X	X	X	X	X	X	X	X
	Enrollment status	X	X	X	X	X	X	X	X	X	X	X	X
	Tuition status			X		X	X	X	X	X	X	X	X
	Tuition fees									X	X	X	X
	Mother's age and education			X	X		X	X	X	X	X	X	X
	Father's age and education					X	X	X	X	X	X	X	X
	School attendance last week (For children currently enrolled in school)				X								
Testing	Foundational reading	X	X	X	X	X	X	X	X	X	X	X	X
	Foundational arithmetic	X	X	X	X	X	X	X	X	X	X	X	X
	Reading comprehension		X										
	Word problems (Arithmetic)			X									
	English (Reading and meaning)			X		X			X		X	X	
	Writing	X	X										
	Bonus tool[1] (Critical thinking applied to everyday tasks)				X		X						X

[1] Bonus tool tasks varied over the years.

Household information

	Indicator / Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2016	2018
General Information	No. of HH[2] members who eat from the same kitchen	X	X	X	X	X	X	X	X	X	X	X	X
	No. of 12th pass HH members									X	X	X	X
	No. of computer proficient HH members						X	X	X	X	X	X	X
	Age and education of adult females in the HH		X			X							
	Occupation of HH children living outside village	X						X					
Household Assets	Type of house				X	X	X	X	X	X	X	X	X
	Motorized 4-wheeler					3					X	X	X
	Motorized 2-Wheeler					3		X	X	X	X	X	X
	Electricity connection				X	X	X	X	X	X	X	X	X
	Toilet				X	X	X	X	X	X	X	X	X
	Television				X	X	X	X	X	X	X	X	X
	Newspaper/Reading material				X	X	X	X	X	X	X	X	X
	Mobile phone				X	X	X	X	X	X	X	X	X
	Domestic animals				X								
	DVD/VCD player						X						
	Language spoken at home							X					
Testing	Adult female testing (Easy para level reading task)		X		X								
	Mother's mobile test (Ability to dial a number)						X						

[2] HH is household.
[3] Both motorized and non-motorized vehicles were recorded.

School information[4]

Indicator / Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2016	2018
School level	✓				✓	✓	✓	✓	✓	✓	✓	✓
Class-wise enrollment and attendance	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
Medium of instruction						✓	✓	✓	✓	✓	✓	✓
Teacher appointment and attendance	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
Classroom observation (Std II and IV)			✓		✓	✓	✓	✓	✓	✓	✓	✓
Mid-day meal	✓				✓	✓	✓	✓	✓	✓	✓	✓
School facilities[5]	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
Physical education												✓
Toilets					✓	✓	✓	✓	✓	✓	✓	✓
School Management Committee										✓	✓	✓
Pre-primary class												✓
School grants information	✓		✓		✓	✓	✓	✓		✓	✓	
School development plan										✓	✓	
Continuous and Comprehensive Evaluation									✓	✓	✓	
School maintenance activities						✓	✓	✓		✓	✓	

[4] In each sampled village, the largest government school with primary sections is visited on the day of survey. Information about schools in this report is based on these visits.

[5] From 2010 onward, school facilities observations were based on observable RTE indicators.

Village information

Indicator / Year	2008	2009	2010	2011	2012	2013	2014	2016	2018
ASHA volunteer		✓							
STD booth		✓	✓	✓					
Pre-school/Anganwadi		✓	✓	✓	✓	✓	✓	✓	✓
Private schools	✓	✓	✓	✓	✓	✓	✓	✓	✓
Government schools	✓	✓	✓	✓	✓	✓	✓	✓	✓
Solar energy equipment			✓	✓	✓	✓	✓	✓	
Computer centre/Internet café			✓	✓	✓	✓	✓	✓	✓
Private health clinic		✓	✓	✓	✓	✓	✓	✓	✓
Government primary/Sub health centre		✓	✓	✓	✓	✓	✓	✓	
PDS shop	✓	✓	✓	✓	✓	✓	✓	✓	
Bank	✓	✓	✓	✓	✓	✓	✓	✓	✓
Post office	✓	✓	✓	✓	✓	✓	✓	✓	✓
Electricity connection	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pucca road to the village	✓	✓	✓	✓	✓	✓	✓	✓	✓

ASER assessment tasks

The testing process addresses ASER's central question - are children acquiring foundational reading and arithmetic skills? The process is designed to record the highest level that each child can comfortably achieve. That is, rather than testing grade-level competencies, ASER is a 'floor test' focusing on basic learning.

Testing is conducted at home, rather than in schools, so as to include out of school children and children attending different types of schools. All children in the 5-16 age group in a sampled household are tested using the same tools, irrespective of age, grade, or schooling status. Children are assessed on basic reading and simple arithmetic. In 2018, ASER included a 'bonus tool' that tested children in the 14-16 age group on their ability to apply basic arithmetic skills to some everyday tasks.

ASER's testing process incorporates various measures to ensure that the it captures the best that each child can do. Surveyors are trained to build rapport with children to create a relaxed and encouraging environment. Testing is conducted in the local language of the child. Children are given the time they need to do each task on the assessment. The testing process is adaptive to the child's ability so that she does not have to attempt all levels. Thus, at the core of this test design is the child's comfort and a commitment to accurately record the highest level the child can perform at.

The following pages outline the ASER testing process used to assess each child on reading, arithmetic, and the bonus tool.

READING TASKS:

All children are assessed using a simple reading tool. The reading test has 4 tasks:

- **Letters:** Set of commonly used letters.

- **Words:** Common, familiar words with 2 letters and 1 or 2 *matras*.

- **Std I level text:** Set of 4 simple linked sentences, each having no more than 6 words. These words (or their equivalent) are in the Std I textbooks of the states.

- **Std II level text:** Short story with 7-10 sentences. Sentence construction is straightforward, words are common and the context is familiar to children. These words (or their equivalent) are in the Std II textbooks used in all states.

While developing the reading tool in each regional language, care is taken to ensure:

- Comparability with previous years' tools with respect to word count, sentence count, type of words and conjoint letters in words.

- Compatibility with the vocabulary and sentence construction used in Std I and Std II language textbooks of the states.

- Familiarity of words and context, established through extensive field piloting.

Sample: Reading test (Hindi)*

Std II level text	Std I level text

राजू नाम का एक लड़का था। उसकी एक बड़ी बहन व एक छोटा भाई था। उसका भाई गाँव के पास के विद्यालय में पढ़ने जाता था। वह खूब मेहनत करता था। उसकी बहन बहुत अच्छी खिलाड़ी थी। उसे लंबी दौड़ लगाना अच्छा लगता था। वे तीनों रोज़ साथ-साथ मौज-मस्ती करते थे।

हर रविवार नानी घर आती है। हमारे लिए मिठाई लाती है। मैं नानी के साथ सोता हूँ। वह मुझे कहानी सुनाती है।

Letters

ह च ट
ल न
फ म र
स त

Words

कुल बड़ा
रोटी
पानी चूना
चलो हीरा
पैर
देर कौन

* This is a sample. It has been shortened to a more concise layout for purposes of this report. However, the four components or 'levels' of the tool remain the same in the full version. Assessments in reading are conducted in 19 languages across the country.
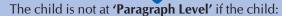
How to test reading?

Std I level text (Paragraph)

Start here →

Ask the child to read either of the 2 paragraphs.
Let the child choose the paragraph herself. If the child does not choose give her any one paragraph to read.
Ask her to read it. Listen carefully to how she reads.

The child is **not** at **'Paragraph Level'** if the child: ■ Reads the paragraph like a string of words, rather than sentences. ■ Reads the paragraph haltingly and stops very often. ■ Reads the paragraph fluently but with **more than 3 mistakes.**	The child is at **'Paragraph level'** if the child: ■ Reads the paragraph like she is reading sentences, rather than a string of words. ■ Reads the paragraph fluently and with ease, even if she is reading slowly. ■ Reads the full paragraph with **3 or less than 3 mistakes.**
If the child is not at **'Paragraph Level'** then ask the child to read words.	If the child can read a paragraph, then ask the child to read the story.

Words

Ask the child to read any 5 words from the list of words.

Let the child choose the words herself. If the child does not choose, then point out any 5 words one by one for her to read.
The child is at **'Word Level'** if the child reads at least **4 out of the 5 words** correctly.

If the child is at **'Word Level'**, then ask her to try to read the same paragraph again and then follow the instructions for paragraph level testing.
If she can correctly and comfortably read at least 4 out of 5 words but is still struggling with the paragraph, then mark the child at **'Word Level'**.
If the child is not at **'Word Level'** (cannot correctly read at least 4 out of the 5 words chosen), then show her the list of letters.

Std II level text (Story)

Ask the child to read the story.
The child is at **'Story Level'** if the child:
■ Reads the story like she is reading sentences, rather than a string of words.
■ Reads the story fluently and with ease, even if she is reading slowly.
■ Reads the full story with **3 or less than 3 mistakes**.

If the child can read the story, then mark the child at **'Story Level'**.
If the child is not at **'Story Level'**, then mark the child at **'Paragraph Level'**.

Letters

Ask the child to recognize any 5 letters from the list of letters.

Let the child choose the letters herself. If the child does not choose, then point out any 5 letters one by one for her to read.
The child is at **'Letter Level'** if the child correctly recognizes at least **4 out of 5** letters correctly.

In the Household Survey Sheet, mark the child at the highest level she can reach.

If the child is at **'Letter Level'**, then ask her to try to read the same words again and then follow the instructions for word level testing.

If she can recognize at least 4 out of 5 letters but cannot read words , then mark the child at **'Letter Level'**.

If the child is not at **'Letter Level'** (cannot recognize at least 4 out of 5 letters chosen), then mark the child at **'Beginner Level'**.

ARITHMETIC TASKS:

All children are assessed using a simple arithmetic tool. The arithmetic test has 4 tasks:

- **Number recognition 1 to 9**

- **Number recognition 10 to 99**

- **Subtraction:** 2-digit numerical subtraction problems with borrowing.

- **Division:** 3-digit by 1-digit numerical division problems with remainder.

While developing the arithmetic tool for the ASER age group, care is taken to ensure compatibility with the learning outcomes defined for number recognition, subtraction (with borrowing), division (3-digits by 1-digit) in state textbooks for Std I, II and III/IV, respectively.

Sample: Arithmetic test

अंक पहचान 1—9	संख्या पहचान 10—99	घटाव	भाग
2 7	76 58	74 − 57 63 − 27	8) 993 (
5 3	48 99	47 − 29 84 − 35	6) 758 (
9 8	34 61	41 − 15 32 − 17	7) 865 (
4 1	46 25	31 − 18 68 − 49	4) 658 (
	86 62		

बच्चे से कोई भी 5 अंक पहचानने को कहें। कम से कम 4 सही होने चाहिए।	बच्चे से कोई भी 5 संख्या पहचानने को कहें। कम से कम 4 सही होनी चाहिए।	बच्चे से कोई भी 2 घटाव के सवाल करने को कहें। दोनों ही सही होने चाहिए।	बच्चे से कोई भी 1 भाग का सवाल करने को कहें। वह सही होना चाहिए।

How to test arithmetic?

Subtraction (2 digits with borrowing)

Start here →

The child is required to solve 2 subtraction problems. Show the child the subtraction problems. First ask the child to choose a problem. If the child does not choose, pick a problem.
Ask the child what the numbers are, then ask the child to identify the subtraction sign.
If the child is able to identify the numbers and the sign, ask her to write and solve the problem at the back of the Household Survey Sheet. Check if the answer is correct.
Even if the first subtraction problem is answered incorrectly, ask the child to solve the second question following the process explained above. If the second problem is correct, ask the child to try and do the first problem again.
If the child makes a careless mistake, then give the child another chance with the same question.

If the child **cannot do both** subtraction problems correctly, then ask the child to recognize numbers from 10-99.
Even if the child does just one subtraction problem incorrectly, give her the number recognition (10-99) task.

If the child **does both** the subtraction problems correctly, ask her to do a division problem.

Number Recognition (10-99)

Ask the child to identify any 5 numbers from the list. Let the child choose the numbers herself. If the child does not choose, then point out any 5 numbers one by one for her to read.
If she can correctly recognize at least **4 out of 5** numbers, then mark her at **'Number Recognition (10-99) Level'**.

Division (3-digits by 1-digit)

The child is required to solve 1 division problem. Show the child the division problems. She can choose any one problem. If not, then you pick one.
Ask her to write and solve the problem.
Observe what she does. If she is able to correctly solve the problem, then mark the child at **'Division Level'**.
Note: The quotient and the remainder both have to be correct.
If the child makes a careless mistake, then give the child another chance with the same question.

If the child is not at **'Number Recognition (10-99) Level'** (cannot correctly recognize at least 4 out of 5 numbers chosen), then ask her to recognize numbers from 1-9.

If the child is unable to solve a division problem correctly, mark the child at **'Subtraction Level'**.

Number Recognition (1-9)

Ask the child to identify any 5 numbers from the list. Let the child choose the numbers herself. If the child does not choose, then point out any 5 numbers one by one for her to read.
If she can correctly recognize at least 4 out of 5 numbers, then mark her at **'Number Recognition (1-9) Level'**.
If the child is not at **'Number Recognition (1-9) Level'** (cannot recognize at least 4 out of 5 numbers chosen), then mark her at **'Beginner Level'**.

The child must solve the numerical arithmetic problems at the back of the household survey sheet.

In the Household Survey Sheet, mark the child at the highest level she can reach.
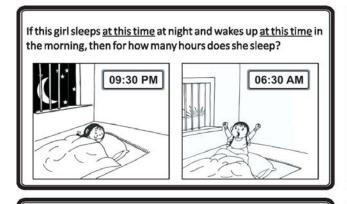
BONUS TOOL TASKS:
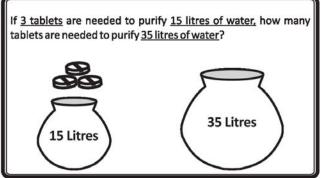
Last year, ASER 2017 'Beyond Basics' survey tested youth in the age group 14 to 16 on their ability to apply basic reading and arithmetic skills to everyday tasks. These tasks included common calculations like counting money, adding weights, measuring length, and calculating the time; specific financial calculations like managing a budget, financial decision making using simple operations, and computing discounts and interest on loans; reading and understanding written instructions; and general knowledge.
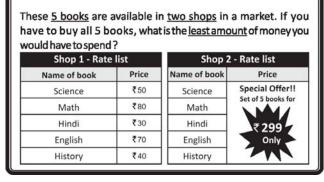
Out of all the questions asked in 2017, four were selected to be administered to 14 to 16 year olds as a 'Bonus tool' in addition to the basic ASER assessment in reading and arithmetic in ASER 2018. These four questions involved calculating time, applying unitary method, using simple operations for financial decision making, and computing a discounted price. Each question is mapped to learning outcomes reflected in state textbooks for Std III, V or VII.
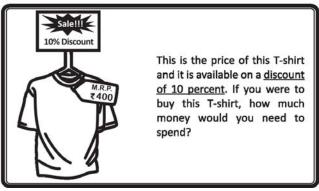
Sample: Bonus tool test

Only for children aged 14-16

To standardize the testing process, surveyors adhered to a set of instructions while administering these questions to 14 to 16 year olds only:

- For each task, the surveyor showed the visual and read out the question. She was not permitted to change/alter the question or give the child an additional explanation, restricting the variation in oral stimulus.

- The surveyor could repeat each question only once. However, the child had the option to read it multiple times on her own.

- The exact answer given by the child for each question was recorded by the surveyor.

- The child could review each answer once.

Note on sampling: ASER 2018 rural

The purpose of ASER's rapid assessment survey in rural areas is twofold: (i) to obtain reliable estimates of the status of children's schooling and basic learning (reading and arithmetic level); and (ii) to measure the change in these basic learning and school statistics over time. Every year a core set of questions regarding schooling status and basic learning levels remains the same. However, new questions are added for exploring different dimensions of schooling and learning at the elementary stage. The latter set of questions is different each year.

The core questions on schooling status and basic reading in the state's local language(s) and arithmetic used in ASER 2018 are identical to those in ASER 2016. In addition, in 2018 we retain questions on paid tuition, parents' education, and selected household and village characteristics from various previous editions of ASER.

New in ASER 2018 are some 'bonus' questions for older children (age 14-16) to test their ability to apply basic arithmetic skills to everyday tasks such as calculating time, applying unitary method, finacial decision making, and computing a discount.[1] ASER 2018 also visited one government primary school in each sampled village, as has been done every year since 2009.

Sampling strategy (Household sample - children's learning and enrollment data)

The sampling strategy used in ASER is designed to generate a representative picture of each district. All rural districts are surveyed. The estimates obtained are then aggregated (using appropriate weights) to the state and all-India levels. As in previous years, the sample size is 600 households per district. The sample is obtained by selecting 30 villages per district and 20 households per village.

The sample design of ASER is a two-stage design, with villages being sampled in the first stage and households in the second stage. In the first stage, in each district, 30 villages are sampled using the PPS (Probability Proportional to Size) sampling technique. PPS is a widely used standard sampling technique for the first stage when the sampling units are of different sizes. In our case, the sampling units are the villages. In the second stage, 20 households are sampled using SRS (Simple Random Sampling) in each of these 30 villages. This method ensures that each household in the district has an equal probability of being selected into the sample.

For ASER 2016, 30 villages were randomly selected in each district using the village directory of the 2011 Census. Because 2016 marked the start of a new series using the Census 2011 frame, no villages were retained from previous ASERs. In ASER 2018, we retain 20 villages from 2016 by randomly dropping 10 from the original sample, and add 10 new villages from the Census 2011 village directory.

For further information

For more information, please see the Frequently Asked Questions (page 323) and the full sampling note (page 261) in this report.

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[1] These questions are taken from ASER 2017 'Beyond Basics', the ASER survey that was designed for and administered to youth in the 14 to 18 age group in 28 districts across the country.

Sample description 2018

State	Census 2011 Actual Districts	Surveyed Districts (ASER 2016)	Surveyed Districts	Surveyed Villages	Surveyed Households	ASER 2018 Surveyed children Age 3-16	Age 3-5	Age 6-14	Age 15-16	Tested children Reading (Age 5-16)	Arithmetic (Age 5-16)	Bonus Tool (Age 14-16)
Andhra Pradesh	13	13	13	390	7794	7579	1495	5207	877	5395	5381	837
Arunachal Pradesh	16	10	8	235	4446	5416	1309	3609	498	3830	3820	462
Assam	27	26	26	780	15521	21940	4159	15297	2484	16074	16026	2503
Bihar	38	38	38	1140	22817	50338	10453	34642	5243	33839	33712	4953
Chhattisgarh	18	16	16	479	9579	14145	2765	9395	1985	10295	10277	2098
Dadra and Nagar Haveli	1	1	1	28	600	887	188	575	124	547	546	115
Daman and Diu	2	2	2	17	1180	1152	160	839	153	807	806	142
Goa	2		2	47	906	688	119	479	90	546	542	93
Gujarat	26	26	26	779	15551	18650	3190	13016	2444	12821	12791	2172
Haryana	21	21	21	628	12562	19006	3791	13011	2204	14224	14191	2417
Himachal Pradesh	12	12	12	358	7105	9811	1782	6876	1153	7595	7577	1503
Jammu and Kashmir	22	9	14	409	8157	14343	2598	9954	1791	10092	10032	1593
Jharkhand	24	24	24	720	14423	28585	5640	19935	3010	19369	19284	2518
Karnataka	30	30	30	900	17999	29312	4839	21295	3178	23634	23635	4103
Kerala	14	12	12	352	7202	6375	1151	4314	910	4688	4646	983
Madhya Pradesh	50	50	50	1500	29961	48791	9604	32856	6331	31409	31328	5273
Maharashtra	33	33	33	990	19765	25979	4685	18242	3052	19606	19554	3450
Manipur	9	9	9	263	5104	7802	1803	5390	609	5741	5719	750
Meghalaya	7	7	7	210	4113	7979	1757	5332	890	5439	5369	754
Mizoram	8	8	8	223	4769	6978	1386	5021	571	5904	5889	860
Nagaland	11	11	11	320	6506	11039	2451	7595	993	8740	8720	980
Odisha	30	30	30	900	17916	24650	4545	17145	2960	17393	17348	2257
Puducherry	2	2	2	55	1178	995	179	669	147	724	718	138
Punjab	20	20	20	596	11865	12799	2425	8693	1681	9461	9429	1731
Rajasthan	33	33	33	989	19713	34952	6828	23810	4314	23918	23833	3804
Sikkim	4	3	4	116	2366	2606	416	1741	449	1685	1637	206
Tamil Nadu	31	31	31	923	18557	20435	3170	14665	2600	15749	15706	2655
Telangana	9	9	9	270	5394	6033	1175	4106	752	4185	4125	646
Tripura	4	4	4	120	2399	2663	503	1809	351	2161	2158	452
Uttar Pradesh	71	70	70	2100	41984	82470	15898	56742	9830	59342	59157	8612
Uttarakhand	13	13	13	383	7320	10157	1823	6887	1447	7496	7473	1579
West Bengal	18	18	17	510	10192	11972	2441	7924	1607	8121	8067	1606
All India	**619**	**591**	**596**	**17730**	**354944**	**546527**	**104728**	**377071**	**64728**	**390830**	**389496**	**62245**

*State/UT pages for Dadra and Nagar Haveli, Daman and Diu, Goa, and Puducherry have not been presented in this report due to insufficient sample size.
**Andhra Pradesh was bifurcated into Telangana and Andhra Pradesh in 2014. As a result, the sample frames of Census 2011 do not have the new state divisions. Of the 22 districts in undivided Andhra Pradesh, 9 rural districts are located in Telangana and the remaining 13 districts are located in Andhra Pradesh. ASER estimates for the two states are based on this separation of districts.
*** ASER 2018 was unable to reach some districts of Arunachal Pradesh, Chhattisgarh, Jammu and Kashmir, Kerala, and West Bengal due to logistical constraints and security concerns.

The national picture

ASER 2018 (Rural) findings

ASER 2018 reached 596 districts in rural India. A total of 354,944 households and 546,527 children in the age group 3 to 16 were surveyed.

Schooling levels: enrollment and attendance

- **Overall enrollment (age 6-14):** For more than ten years, since 2007, the enrollment of children for the age group 6 to 14 has been above 95%. The proportion of children (age 6-14) who are not enrolled in school has fallen below 3% for the first time and stands at 2.8% in 2018.

- **Girls out of school:** In 2006, the all India proportion of girls in the age group 11 to 14 who were out of school stood at 10.3%. In that year, 9 major states had out of school figures for girls (age 11-14) above 10%. In 2018, the overall proportion of girls in the 11 to 14 age group out of school has fallen to 4.1%. This figure is more than 5% in only 4 states.

  Further, ten years ago in 2008, nationally, more than 20% of girls in the 15 to 16 age group were not enrolled in school. In 2018, this figure has decreased to 13.5%.

- **Private school enrollment:** The period 2006 to 2014 saw a year-on-year increase in the proportion of children (age 6-14) enrolled in private school. In 2014, this figure stood at 30.8%. Since then private school enrollment appears to have plateaued for this age group. The percentage of children (age 6-14) enrolled in private school was 30.6% in 2016 and is almost unchanged at 30.9% in 2018.

  The national average hides changes in private school figures across states. There has been a decline in private school enrollment of more than 2 percentage points over 2016 levels in Rajasthan, Uttar Pradesh, and Kerala. An increase of more than 2 percentage points over 2016 is visible in Jammu and Kashmir, Himachal Pradesh, Bihar, and Gujarat. Most states in the north-east, other than Mizoram, see an increase in private school enrollment between 2016 and 2018.

Learning levels: foundational skills in reading and arithmetic

Reading: *The ASER reading test assesses whether a child can read letters, words, a simple paragraph at Std I level of difficulty, or a 'story' at Std II level of difficulty. The test is administered one on one to all children in the age group 5 to 16 and the child is marked at the highest level that she or he can reach.*

- **Std III:** The percentage of all children in Std III who can read at Std II level has been climbing slowly over the past few years. This figure has increased from 21.6% in 2013 to 23.6% in 2014 to 25.1% in 2016, and finally to 27.2% in 2018. Among children enrolled in Std III in government schools, six states (Punjab, Haryana, Mizoram, Uttar Pradesh, Gujarat, and Kerala) show an improvement of more than 5 percentage points over 2016 levels.

- **Std V:** Slightly more than half of all children enrolled in Std V can read at least a Std II level text. This figure has inched up from 47.9% in 2016 to 50.3% in 2018. For government school children enrolled in Std V, states showing an increase of 5 percentage points or more from 2016 to 2018 are Himachal Pradesh, Uttar Pradesh, Odisha, Chhattisgarh, Karnataka, Kerala, Arunachal Pradesh, and Mizoram; with Punjab and Andhra Pradesh close behind.

- **Std VIII:** By Std VIII, the last year of compulsory schooling in India, children are expected not only to have mastered foundational skills but to have proceeded well beyond the basic stage. ASER 2018 data indicates that of all children enrolled in Std VIII in India, about 73% can read at least a Std II level text. This number is unchanged from 2016.

Arithmetic: *The ASER arithmetic test assesses whether a child can recognize numbers from 1 to 9, recognize numbers from 10 to 99, do a 2-digit numerical subtraction problem with borrowing, or correctly solve a numerical division problem (3-digit by 1-digit). The tasks are administered one on one to all children in the age group 5 to 16 and the child is marked at the highest level that she or he can reach.*

- **Std III:** The all India figure for children in Std III who are able to do at least subtraction has not changed much, from 27.6% in 2016 to 28.1% in 2018. For government school children, this figure was 20.3% in 2016 and 20.9% in 2018. However, government school children in some states are doing significantly better, with an increase of 3 percentage points or more over 2016. These include Punjab, Haryana, Assam, Uttar Pradesh, Gujarat, Maharashtra, and Kerala.

- **Std V:** The proportion of children in Std V across India who are able to do division has inched up slightly, from 26% in 2016 to 27.8% in 2018. But among government school children, some states have shown significant improvements of 5 percentage points or more over 2016 levels. These include Punjab, Uttar Pradesh, Assam, Chhattisgarh, Maharashtra, Kerala, and Tamil Nadu.

- **Std VIII:** The overall performance of Std VIII in basic arithmetic has not changed much over time. Currently about 44% of all children in Std VIII can solve a 3-digit by 1-digit numerical division problem correctly. While this figure has gone down from 2016 to 2018 in many states, government school children in some states show substantial improvements in the last two years: for example, Punjab (from 48% to 58.4%), Uttar Pradesh (from 25.5% to 32%), Maharashtra (from 32.4% to 41.4%), and Tamil Nadu (from 42.6% to 49.6%).

Learning levels: 'beyond basics'

In ASER 2018, children in the age group 14 to 16 were given a few tasks which required calculations to be done in everyday contexts. Children were asked to calculate time, compute how many tablets would be required to purify water (application of unitary method), figure out where to buy books given two different price lists (financial decision making), and compute a discount. Each of these tasks was done one on one. Results are reported for those children in this age group who could do at least subtraction correctly.

- **Gender differences in reading and arithmetic the 14-16 age group:** For the age group 14 to 16, the all India figure for the proportion of girls who can read at least a Std II level text is very similar to that of boys. Both are around 77%. However, girls outperform boys in many states like Himachal Pradesh, Punjab, West Bengal, Assam, Chhattisgarh, Maharashtra, Karnataka, and Tamil Nadu.

  In basic arithmetic, boys seem to hold a substantial advantage. Nationally, 50% of all boys in the age group 14 to 16 can correctly solve a division problem as compared to 44% of all girls. But in states like Himachal Pradesh, Punjab, Karnataka, Kerala, and Tamil Nadu, girls in this age group are doing better than boys in arithmetic.

- **'Beyond basics' - bonus tool tasks:** Of the 14-16 year olds who could solve a numerical division problem, a little under half could compute the time question correctly, 52% could apply the unitary method to calculate how many tablets were needed to purify a given volume of water, about 37% were able to take the correct decision regarding the purchase of books, and less than 30% could compute the discount correctly. In all cases, fewer girls could solve questions correctly as compared to boys.

  Further, performance on these everyday tasks was uniformly lower among those in this age group who could do subtraction but not division, as compared to those who could do division.

School observations

As part of the ASER survey, one government school with primary sections is visited in each sampled village. Preference is given to a government upper primary school (Std I-VII/VIII) if one exists in the village.

In 2018, ASER surveyors visited 15,998 government schools with primary sections. 9,177 were primary schools and 6,821 were upper primary schools. This represented an increase of almost 13.6% over the number of upper primary schools visited in 2016. Large increases in the number of sampled villages with upper primary schools were visible in Haryana, Uttar Pradesh, Assam, and Madhya Pradesh.

Small schools

- Nationally, in 2018, 4 out of 10 government primary schools visited had less than 60 students enrolled. This number has increased every year over the last decade. It was 26.1% in 2009, 30% in 2011, 33.1% in 2013, 39.8% in 2016, and stands at 43.3% in 2018.

- This decade-long pattern of year-on-year increase in the proportion of small schools is seen in Himachal Pradesh (from 58.1% in 2009 to 84% in 2018), Chhattisgarh (from 19.3% in 2009 to 40.7% in 2018), and Madhya Pradesh (from 18.1% in 2009 to 49.6% in 2018).

Teacher and student attendance

- At the all India level, no major change is seen in students' and teachers' attendance. Average teacher attendance has hovered at around 85% and average student attendance at around 72% for the past several years in both primary and upper primary schools.

- However, states exhibit very different patterns of attendance. States with student attendance of 90% or more in primary schools in 2018 were Karnataka and Tamil Nadu. Those with teacher attendance of 90% or more in 2018 were Jharkhand, Odisha, Karnataka, and Tamil Nadu.

- In primary schools, student attendance improved by 3 percentage points or more over 2016 levels in Uttar Pradesh, Rajasthan, Punjab, Odisha, and Chhattisgarh.

School facilities

- The Right to Education Act was implemented in 2010 and the first cohort of students to benefit from its provisions completed 8 years of compulsory schooling in 2018. Nationally, substantial improvements are visible over this 8-year period in the availability of many school facilities mandated by RTE. The fraction of schools with usable girls' toilets doubled, reaching 66.4% in 2018. The proportion of schools with boundary walls increased by 13.4 percentage points, standing at 64.4% in 2018. The percentage of schools with a kitchen shed increased from 82.1% to 91%, and the proportion of schools with books other than textbooks available increased from 62.6% to 74.2% over the same period.

- However, the national averages hide major variations across states. Deficiencies are particularly marked in Jammu and Kashmir and most of the north-eastern states. In these states, less than 50% of schools had provision for drinking water or girls' toilets available in 2018. With the exception of Assam, majority of schools in states in the north-east did not have library books available for students in 2018. While elsewhere in the country the mid-day meal was served on the day of the visit in well over 80% of schools, this proportion was less than 50% in many states in this region.
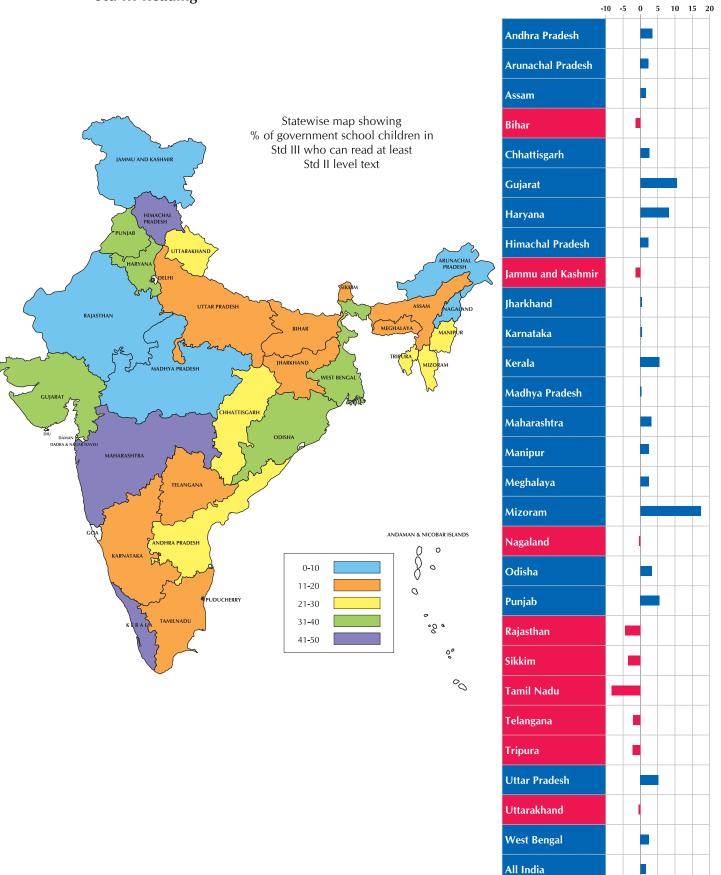
Physical education and sports facilities

This year, ASER introduced a series of questions on the availability of sports infrastructure in schools.

- In 2018, about 8 out of 10 schools had a playground available for students, either within the school premises or close by. A playground was accessible in more than 90% of schools in Himachal Pradesh, Haryana, and Maharashtra. But more than a quarter of all schools in Jammu and Kashmir, Bihar, Odisha, and Jharkhand did not have access to a playground.

- Physical education teachers are scarce in schools across rural India. Only 5.8% of all primary schools and 30.8% of upper primary schools had a physical education teacher available. In majority of schools, another teacher was tasked with supervising physical education activities as well. But in Haryana, Rajasthan and Kerala, the proportion of schools with a physical education teacher is significantly higher than the national average.

- Sports equipment of some kind was observed in 55.8% of primary schools and 71.5% of upper primary schools. States where significantly higher proportions of schools had sports equipment available included Himachal Pradesh, Tamil Nadu, and Andhra Pradesh.

India RURAL

Std III Reading

Statewise map showing
% of government school children in
Std III who can read at least
Std II level text

Legend (map):
- 0-10
- 11-20
- 21-30
- 31-40
- 41-50

Statewise chart showing percentage point change
in government school children in Std III
who can read Std II level text (ASER 2016-2018)

State	Value
Andhra Pradesh	
Arunachal Pradesh	
Assam	
Bihar	
Chhattisgarh	
Gujarat	
Haryana	
Himachal Pradesh	
Jammu and Kashmir	
Jharkhand	
Karnataka	
Kerala	
Madhya Pradesh	
Maharashtra	
Manipur	
Meghalaya	
Mizoram	
Nagaland	
Odisha	
Punjab	
Rajasthan	
Sikkim	
Tamil Nadu	
Telangana	
Tripura	
Uttar Pradesh	
Uttarakhand	
West Bengal	
All India	

India RURAL

Std III Arithmetic

Statewise map showing
% of government school children in
Std III who can do at least subtraction

Legend	
0-10	
11-20	
21-30	
31-40	
41-50	
51-60	

Statewise chart showing percentage point change in
government school children in Std III who can do
at least subtraction (ASER 2016-2018)

India RURAL

Std V Reading

Statewise map showing
% of government school children in
Std V who can read
Std II level text

	21-30
	31-40
	41-50
	51-60
	61-70
	71-80

ANDAMAN & NICOBAR ISLANDS

Statewise chart showing percentage point
change in government school children in
Std V who can read Std II level text
(ASER 2016-2018)

State	
Andhra Pradesh	
Arunachal Pradesh	
Assam	
Bihar	
Chhattisgarh	
Gujarat	
Haryana	
Himachal Pradesh	
Jammu and Kashmir	
Jharkhand	
Karnataka	
Kerala	
Madhya Pradesh	
Maharashtra	
Manipur	
Meghalaya	
Mizoram	
Nagaland	
Odisha	
Punjab	
Rajasthan	
Sikkim	
Tamil Nadu	
Telangana	
Tripura	
Uttar Pradesh	
Uttarakhand	
West Bengal	
All India	

India RURAL

Std V Arithmetic

Statewise map showing
% of government school children in
Std V who can do division

0-10	(light blue)
11-20	(orange)
21-30	(yellow)
31-40	(green)
41-50	(purple)
51-60	(pink)

Statewise chart showing percentage point
change in government school children in
Std V who can do division
(ASER 2016-2018)

India RURAL

Std VIII Reading

Statewise map showing
% of government school children in
Std VIII who can read
Std II level text

Legend:
- 51-60
- 61-70
- 71-80
- 81-90

Statewise chart showing percentage point
change in government school children in
Std VIII who can read Std II level text
(ASER 2016-2018)

- Andhra Pradesh
- Arunachal Pradesh
- Assam
- Bihar
- Chhattisgarh
- Gujarat
- Haryana
- Himachal Pradesh
- Jammu and Kashmir
- Jharkhand
- Karnataka
- Kerala
- Madhya Pradesh
- Maharashtra
- Manipur
- Meghalaya
- Mizoram
- Nagaland
- Odisha
- Punjab
- Rajasthan
- Sikkim
- Tamil Nadu
- Telangana
- Tripura
- Uttar Pradesh
- Uttarakhand
- West Bengal
- All India

India RURAL

Std VIII Arithmetic

Statewise map showing
% of government school children in
Std VIII who can do division

21-30	
31-40	
41-50	
51-60	
61-70	

JAMMU AND KASHMIR
HIMACHAL PRADESH
PUNJAB
UTTARAKHAND
HARYANA
DELHI
RAJASTHAN
UTTAR PRADESH
ARUNACHAL PRADESH
SIKKIM
ASSAM
NAGALAND
MEGHALAYA
MANIPUR
BIHAR
TRIPURA
MIZORAM
GUJARAT
MADHYA PRADESH
JHARKHAND
WEST BENGAL
DIU
DAMAN
DADRA &
NAGAR HAVELI
CHHATTISGARH
ODISHA
MAHARASHTRA
TELANGANA
GOA
ANDHRA PRADESH
KARNATAKA
PUDUCHERRY
KERALA
TAMIL NADU
ANDAMAN & NICOBAR ISLANDS

Statewise chart showing percentage point
change in government school children in
Std VIII who can do division
(ASER 2016-2018)

-20 -15 -10 -5 0 5 10 15

Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
Gujarat
Haryana
Himachal Pradesh
Jammu and Kashmir
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttar Pradesh
Uttarakhand
West Bengal
All India

India RURAL
ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 596 OUT OF 619 DISTRICTS
Data is not presented where sample size is insufficient.
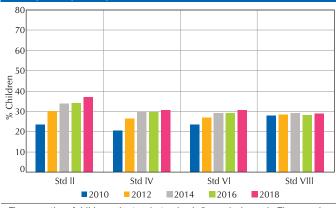
Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	65.6	30.9	0.7	2.8	100
Age 7-16: All	64.2	30.8	0.7	4.4	100
Age 7-10: All	66.0	31.7	0.7	1.6	100
Age 7-10: Boys	62.4	35.4	0.7	1.6	100
Age 7-10: Girls	69.9	27.8	0.7	1.6	100
Age 11-14: All	65.0	30.6	0.7	3.7	100
Age 11-14: Boys	61.6	34.4	0.7	3.3	100
Age 11-14: Girls	68.4	26.8	0.8	4.1	100
Age 15-16: All	57.4	28.9	0.6	13.1	100
Age 15-16: Boys	55.7	31.2	0.5	12.6	100
Age 15-16: Girls	59.0	26.9	0.7	13.5	100
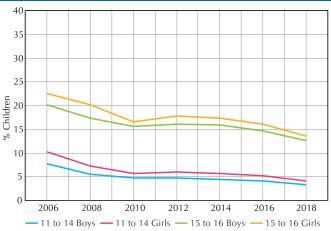
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 22.6% in 2006, 17.9% in 2012, and 13.5% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 36.9% as compared to 28.6% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	27.6	38.1	20.5	7.8	6.1								100
II		5.9	13.5	37.3	28.3	7.0	8.0						100
III			4.1	12.6	39.4	25.7	11.2	6.9					100
IV				4.5	14.2	33.1	33.0	7.5	5.2	2.5			100
V					5.5	9.3	41.7	26.0	11.4	6.2			100
VI						4.4	13.9	34.1	33.7	9.0	4.9		100
VII							5.5	10.3	42.5	29.2	8.3	4.2	100
VIII								4.5	15.2	41.4	27.0	8.4	3.5	100

This table shows the age distribution for each grade. For example, of all children in Std III, 39.4% children are 8 years old but there are also 12.6% who are 7, 25.7% who are 9, 11.2% who are 10, and 6.9% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	55.8	1.0	9.9	3.3	1.1	0.1	28.8	100
Age 4	49.0	2.1	23.2	6.8	3.2	0.2	15.6	100
Age 5	27.6	2.8	27.4	23.9	9.9	0.3	8.1	100
Age 6	7.6	1.9	16.4	49.5	20.7	0.5	3.3	100
Age 7	1.8	0.8	7.3	59.1	28.7	0.6	1.8	100
Age 8	0.7	0.4	3.3	62.6	30.8	0.7	1.5	100

Data is not presented where sample size is insufficient.

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असर ASER 2018 RURAL
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Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	42.7	32.6	13.7	5.2	5.8	100
II	21.3	30.2	21.3	12.5	14.7	100
III	12.1	22.6	20.8	17.3	27.2	100
IV	7.6	15.9	16.6	19.3	40.7	100
V	5.9	11.7	13.0	19.1	50.3	100
VI	3.8	8.8	10.5	17.2	59.8	100
VII	2.5	6.5	8.3	15.0	67.7	100
VIII	1.9	5.3	6.7	13.2	72.8	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 12.1% cannot even read letters, 22.6% can read letters but not words or higher, 20.8% can read words but not Std I level text or higher, 17.3% can read Std I level text but not Std II level text, and 27.2% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
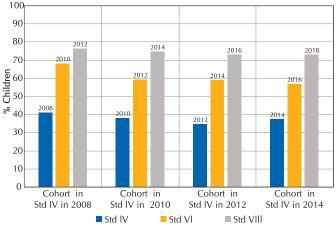
Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	16.7	33.8	21.5
2014	17.2	37.8	23.6
2016	19.3	38.0	25.2
2018	20.9	40.6	27.3

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Reading Tool (Hindi)

Std II level text

रामपुर में एक मैदान था। वहाँ कुछ नहीं उगता था। वहाँ कोई खेलने नहीं जाता था। एक दिन कुछ लोग आए। उन्होंने गाँव के लोगों को बुलाया। सबने मिलकर तय किया कि यहाँ बगीचा बनाया जाए। खाद मंगाकर तरह-तरह के पौधे लगाए गए। सही समय पर पानी दिया गया। आज वहाँ एक सुंदर बगीचा है। इसलिए वहाँ सभी खेलने जाते हैं।

Std I level text

रूपा बाहर खेल रही थी। खेलते-खेलते रात हो गई। रूपा अपने घर चली गई। वह खाना खाकर सो गई।

Letters

द क च
ल ब
ह थ त
म ख

Words

नाक तोता
कूड़ा
खुश मैना
मौका सेब
पीला
झोला दिन

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	41.7	61.2	46.9	73.4	84.2	76.5
2014	42.2	62.6	48.0	71.5	82.4	74.7
2016	41.7	63.0	47.9	70.0	81.0	73.1
2018	44.2	65.1	50.5	69.0	82.9	73.0

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

Legend: ■ Std IV ■ Std VI ■ Std VIII

Cohort in Std IV in 2008: 2008 = ~41, 2010 = 68.2, 2012 = 76.5
Cohort in Std IV in 2010: 2010 = ~38, 2012 = ~59, 2014 = ~75
Cohort in Std IV in 2012: 2012 = ~34, 2014 = ~59, 2016 = ~73
Cohort in Std IV in 2014: 2014 = ~37, 2016 = ~57, 2018 = ~73

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 41% and in Std VI (in 2010) was 68.2%. When the cohort reached Std VIII in 2012, this figure was 76.5%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	35.7	37.1	21.3	3.9	2.0	100
II	14.9	36.1	34.6	10.6	3.8	100
III	7.6	26.9	37.5	19.6	8.5	100
IV	4.4	19.2	34.2	24.6	17.6	100
V	3.3	13.8	30.5	24.5	27.8	100
VI	2.2	9.7	29.4	24.0	34.7	100
VII	1.6	7.5	28.0	24.0	39.0	100
VIII	1.1	5.6	27.3	22.1	43.9	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 7.6% cannot even recognize numbers 1-9, 26.9% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 37.5% can recognize numbers up to 99 but cannot do subtraction, 19.6% can do subtraction but cannot do division, and 8.5% can do division. For each grade, the total of these exclusive categories is 100%.
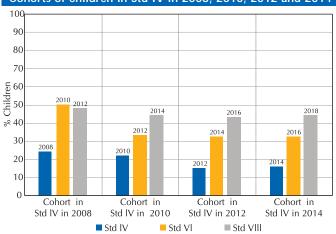
Arithmetic Tool (Hindi)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	19.8	43.4	26.4
2014	17.2	43.4	25.4
2016	20.3	44.1	27.7
2018	20.9	43.5	28.2

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	20.3	37.8	24.9	44.5	57.1	48.1
2014	20.7	39.3	26.1	40.0	54.2	44.2
2016	21.1	38.0	26.0	40.2	51.2	43.3
2018	22.7	39.8	27.9	40.0	54.2	44.1

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 24.1% and in Std VI (in 2010) was 50.2%. When the cohort reached Std VIII in 2012, this figure was 48.1%. The progress of each of these cohorts can be understood in the same way.

India RURAL

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
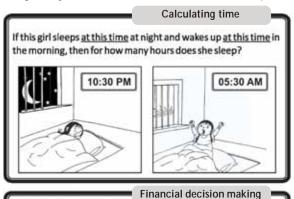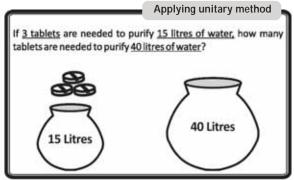
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	33.2	36.8	35.0
Age 11-13	61.2	64.1	62.7
Age 14-16	76.9	76.9	76.9
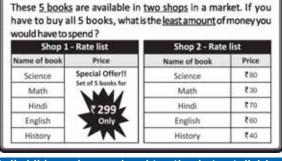
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	36.4	35.7	36.1	15.7	14.4	15.0
Age 11-13	61.1	58.4	59.7	38.0	35.0	36.4
Age 14-16	69.6	64.4	66.8	50.1	44.1	46.9

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

If this girl sleeps at this time at night and wakes up at this time in the morning, then for how many hours does she sleep?

10:30 PM   05:30 AM

Applying unitary method

If 3 tablets are needed to purify 15 litres of water, how many tablets are needed to purify 40 litres of water?

15 Litres   40 Litres

Financial decision making

These 5 books are available in two shops in a market. If you have to buy all 5 books, what is the least amount of money you would have to spend?

Shop 1 - Rate list	
Name of book	Price
Science	Special Offer!! Set of 5 books for
Math	
Hindi	₹ 299 Only
English	
History	

Shop 2 - Rate list	
Name of book	Price
Science	₹ 80
Math	₹ 30
Hindi	₹ 70
English	₹ 60
History	₹ 40

Calculating discount

Sale!!! 10% Discount
M.R.P ₹ 200

This is the price of this T-shirt and it is available on a discount of 10 percent. If you were to buy this T-shirt, how much money would you need to spend?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	33.8	31.8	32.7	38.6	34.1	36.2	27.0	24.3	25.5	15.2	10.7	12.8
Age 15	36.0	32.9	34.3	40.4	33.1	36.4	28.4	24.1	26.0	19.8	12.5	15.8
Age 16	38.3	31.5	34.4	41.4	32.6	36.4	28.3	23.1	25.3	21.0	11.9	15.8
Age 14-16	35.7	32.1	33.7	39.9	33.4	36.3	27.8	23.9	25.6	18.3	11.6	14.6

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	47.6	43.0	45.4	56.4	47.3	52.0	38.2	34.5	36.4	31.3	23.6	27.5
Age 15	49.9	44.9	47.4	56.7	48.1	52.4	38.5	36.5	37.5	34.7	25.5	30.1
Age 16	51.6	45.8	48.6	55.3	50.1	52.6	38.4	36.7	37.5	36.4	27.8	31.9
Age 14-16	49.5	44.5	47.0	56.2	48.4	52.3	38.3	35.8	37.1	33.8	25.5	29.6

Data is not presented where sample size is insufficient.

Performance of states

Table 14: Private school enrollment, girls not in school, and learning levels by state 2018

State	Private school	Not in school		Std III: Learning levels		Std V: Learning levels		Std VIII: Learning levels	
	% Children (Age 6-14) enrolled in private schools	% Girls (Age 11-14) not enrolled in school	% Girls (Age 15-16) not enrolled in school	% Children who can read Std II level text	% Children who can do at least subtraction	% Children who can read Std II level text	% Children who can do division	% Children who can read Std II level text	% Children who can do division
Andhra Pradesh	35.2	2.9	9.7	22.4	38.4	59.7	39.3	78.2	47.6
Arunachal Pradesh	35.2	2.9	8.6	18.8	33.9	37.1	27.3	70.5	50.1
Assam	24.8	2.6	9.6	19.9	29.7	40.1	17.8	60.8	31.2
Bihar	16.9	4.2	9.8	23.5	28.4	41.3	29.9	71.2	56.9
Chhattisgarh	20.0	5.6	21.2	29.8	19.3	59.5	26.9	78.7	31.1
Gujarat	12.4	3.6	24.9	33.1	25.6	53.7	20.1	73.2	35.6
Haryana	55.3	2.3	6.8	46.2	53.7	69.1	50.9	81.2	63.2
Himachal Pradesh	40.7	0.5	2.0	47.8	50.2	76.9	56.6	89.9	61.0
Jammu and Kashmir	40.1	2.4	12.5	22.3	36.2	41.9	25.0	64.8	32.9
Jharkhand	19.0	3.4	11.2	18.8	22.5	34.4	19.0	66.4	44.0
Karnataka	29.1	1.2	7.8	19.2	26.3	46.0	20.5	70.3	39.0
Kerala	46.9	0.5	0.6	52.5	47.9	77.2	43.7	89.6	51.8
Madhya Pradesh	26.1	7.7	26.8	17.6	13.9	41.6	19.8	64.4	36.6
Maharashtra	37.6	1.6	5.1	42.0	27.2	66.4	30.2	80.2	40.5
Manipur	70.4	1.6	5.4	35.8	58.5	67.5	50.5	86.5	72.5
Meghalaya	58.6	2.0	9.2	24.6	19.2	50.1	7.2	82.8	28.1
Mizoram	27.2	0.2	3.7	25.6	58.9	64.3	40.2	89.4	71.0
Nagaland	48.6	2.6	6.4	22.6	36.9	48.0	25.8	83.6	51.3
Odisha	10.5	2.1	12.3	38.7	30.9	58.4	25.4	72.6	42.5
Punjab	52.2	1.6	6.2	39.4	49.7	71.6	53.0	85.1	62.4
Rajasthan	35.8	7.4	20.1	20.4	17.3	49.1	23.3	78.3	41.6
Sikkim	30.7	0.9	5.1	29.4	41.0	41.7	12.5	79.0	44.6
Tamil Nadu	32.1	0.2	1.4	10.2	26.0	40.7	25.4	73.2	50.2
Telangana	41.8	0.9	6.2	18.0	34.3	43.7	27.1	69.0	48.3
Tripura	13.9	0.4	1.2	25.6	34.8	45.0	19.2	68.3	30.7
Uttar Pradesh	49.7	7.4	22.2	28.1	26.6	52.0	29.6	73.7	44.4
Uttarakhand	42.7	2.2	6.6	34.5	32.3	64.3	37.5	83.8	48.6
West Bengal	7.9	1.3	4.8	40.0	38.4	50.7	29.7	61.8	28.7
All India	30.9	4.1	13.5	27.2	28.1	50.3	27.8	72.8	44.0

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ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 596 OUT OF 619 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 15: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	8419	8858	9675	9177
Upper primary schools (Std I-VII/VIII)	5821	6378	6007	6821
Total schools visited	14240	15236	15682	15998

Table 16: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	72.9	71.3	71.4	72.4
% Teachers present (Average)	87.1	85.0	85.4	85.1
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	73.4	71.1	73.2	72.3
% Teachers present (Average)	86.4	85.8	84.7	85.8

Table 17: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	55.2	62.8	63.7	63.4
% Schools where Std IV children were observed sitting with one or more other classes	49.0	56.8	58.0	58.0
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	54.0	59.9	59.3	60.9
% Schools where Std IV children were observed sitting with one or more other classes	41.6	48.4	49.2	48.1

School facilities

Table 18: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	82.1	88.1	89.7	91.0
	Mid-day meal served in school on day of visit	84.6	85.1	87.1	87.1
Drinking water	No facility for drinking water	17.0	13.9	14.8	13.9
	Facility but no drinking water available	10.3	10.5	11.2	11.3
	Drinking water available	72.7	75.6	74.0	74.8
	Total	100	100	100	100
Toilet	No toilet facility	11.0	6.3	3.5	3.0
	Facility but toilet not useable	41.8	28.5	27.9	22.8
	Toilet useable	47.2	65.2	68.6	74.2
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	31.2	18.8	12.4	11.5
	Separate provision but locked	18.7	12.9	11.6	10.5
	Separate provision, unlocked but not useable	17.2	12.6	14.1	11.7
	Separate provision, unlocked and useable	32.9	55.7	61.9	66.4
	Total	100	100	100	100
Library	No library	37.4	21.9	24.6	25.8
	Library but no books being used by children on day of visit	24.7	37.4	32.9	37.3
	Library books being used by children on day of visit	37.9	40.7	42.6	36.9
	Total	100	100	100	100
Electricity	Electricity connection			67.9	75.0
	Of schools with electricity connection, % schools with electricity available on day of visit			75.0	78.5
Computer	No computer available for children to use	84.2	80.4	80.0	78.7
	Available but not being used by children on day of visit	7.2	12.6	11.9	14.8
	Computer being used by children on day of visit	8.6	7.0	8.1	6.5
	Total	100	100	100	100

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 19: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	27.3	36.0	39.8	43.3
Upper primary schools (Std I-VII/VIII)	2.7	7.2	8.9	10.7

Table 20: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	58.4	69.1	62.9
	No physical education period but dedicated time allotted	22.4	17.0	20.1
	No physical education period and no dedicated time allotted	19.2	14.0	17.0
	Total	100	100	100
Physical education teacher	Separate physical education teacher	5.8	30.8	16.5
	Other physical education teacher	63.0	46.6	56.0
	No physical education teacher	31.2	22.6	27.5
	Total	100	100	100
Playground	Playground inside the school premises	65.0	70.3	67.2
	Playground outside the school premises	15.9	15.0	15.5
	No accessible playground	19.1	14.7	17.2
	Total	100	100	100
Availability of any sports equipment		55.8	71.5	62.5
Supervised physical education activity observed on day of visit		23.5	30.3	26.4

Table 21: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	94.0	94.8	95.5

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	10.7	7.7	6.9
Between July and September	74.1	63.0	72.1
After September	15.2	29.4	21.0

Data is not presented where sample size is insufficient.

Table 22: Trends over time
Performance of schools with respect to selected Right to Education indicators by state 2010, 2014, 2016 and 2018

State	Number of schools visited 2010	Number of schools visited 2014	Number of schools visited 2016	Number of schools visited 2018	PTR & CTR % Schools complying with: Pupil-teacher ratio 2010	2014	2016	2018	Classroom-teacher ratio 2010	2014	2016	2018	School facilities % Schools that have: Office/store/office cum store 2010	2014	2016	2018	Playground 2010	2014	2016	2018
Andhra Pradesh	374	380	380	379	60.0	47.5	58.6	61.5	53.9	76.0	70.6	70.0	57.0	53.2	58.5	58.6	61.2	57.4	54.2	61.9
Arunachal Pradesh	259	189	212	159	78.0	69.4	71.1	74.2	79.8	68.7	84.3	65.3	77.7	75.6	82.9	86.6	58.9	61.7	68.5	55.4
Assam	519	597	701	714	33.6	34.0	35.2	47.4	67.7	70.1	73.6	68.5	57.5	52.1	54.0	63.1	61.5	56.3	68.8	61.0
Bihar	967	1088	1111	1100	8.8	12.7	11.7	19.7	48.2	60.5	65.8	59.6	69.0	77.7	83.2	83.7	48.3	50.9	47.5	51.1
Chhattisgarh	425	442	473	468	39.6	53.8	55.2	56.6	64.2	68.1	67.9	71.8	79.0	82.3	84.4	82.8	45.0	64.2	67.2	68.8
Gujarat	623	720	644	644	62.7	69.0	81.6	83.5	84.2	89.7	90.5	86.3	80.2	86.2	82.1	78.0	75.5	88.1	79.4	82.6
Haryana	528	577	593	613	40.3	46.0	52.6	76.3	75.1	70.4	77.5	79.2	85.8	84.5	89.6	88.3	79.7	81.8	84.3	83.4
Himachal Pradesh	261	277	283	293	60.6	60.7	61.5	56.8	76.7	78.2	81.5	78.9	75.9	79.3	82.0	79.8	75.6	81.0	81.9	81.7
Jammu and Kashmir		343		376		89.0		92.6		53.0		43.8		77.2		84.5		48.6		54.7
Jharkhand	547	625	576	674	11.2	21.9	22.4	28.3	81.2	83.1	82.2	83.1	84.9	87.7	83.9	86.6	37.9	33.3	33.3	39.1
Karnataka	769	712	808	848	69.4	70.4	72.8	79.4	82.8	84.1	84.7	82.6	72.1	78.7	80.6	81.8	66.0	72.0	73.0	78.9
Kerala	275	265	328	279	89.2	96.6	91.7	94.6	80.3	89.4	93.2	84.7	88.4	96.5	95.2	93.2	76.3	74.7	81.7	67.7
Madhya Pradesh	1219	1257	1458	1451	19.4	48.6	51.5	49.0	81.4	63.0	64.2	71.3	69.5	67.1	67.9	70.7	61.1	66.3	66.4	69.2
Maharashtra	902	875	781	927	58.9	72.7	77.1	77.6	87.6	85.3	80.5	83.7	34.3	36.2	36.6	38.7	84.7	88.3	89.9	86.8
Manipur	125	179	180	158	74.3	92.6	93.0	92.9	62.5	36.1	22.5	23.6	67.5	79.2	76.6	72.9	71.8	51.4	46.5	59.7
Meghalaya	110	129	129	143	54.3	60.0	49.6	45.2	84.2	67.3	90.5	78.1	34.6	41.2	44.3	47.5	45.8	54.0	55.7	54.4
Mizoram	174	187	222	233	89.1	83.9	68.7	75.4	57.6	77.3	74.3	69.1	78.5	91.7	81.9	84.1	39.0	72.2	55.8	65.5
Nagaland	223	255	300	289	91.9	92.1	97.1	97.6	78.6	73.9	57.5	56.1	83.8	81.0	86.9	82.4	64.2	43.8	53.8	52.1
Odisha	741	824	840	812	22.5	38.4	50.3	55.8	74.0	68.8	72.8	72.9	74.7	80.4	79.9	84.9	44.4	32.4	29.2	31.9
Punjab	449	496	546	554	34.9	64.0	67.8	76.1	76.9	69.3	65.0	72.8	78.5	78.5	81.1	80.1	69.3	70.6	68.8	72.0
Rajasthan	896	903	919	837	46.4	66.6	65.2	67.2	82.0	72.2	78.4	79.3	91.2	93.2	91.9	94.3	51.7	62.6	64.6	70.3
Sikkim	69	77	84	108	93.4	91.9	98.7	99.0	61.3	78.6	58.3	81.2	92.7	87.7	89.0	73.7	79.7	91.9	85.2	87.9
Tamil Nadu	662	648	708	750	47.0	58.6	52.0	59.9	75.2	74.0	82.1	81.2	54.8	58.2	54.6	50.9	68.7	66.2	71.2	72.5
Telangana	258	264	265	259	64.2	58.5	60.2	66.4	52.6	66.7	73.0	68.5	75.1	87.0	84.2	80.7	83.9	76.7	78.0	77.0
Tripura	98	105	111	115	68.5	81.4	85.2	82.2	60.0	47.7	52.9	70.3	89.6	87.6	92.5	84.2	89.5	75.2	81.7	83.5
Uttar Pradesh	1896	1971	1966	1998	16.1	19.9	30.8	33.3	81.6	79.8	73.8	71.3	88.6	88.3	87.8	86.3	60.8	78.1	66.4	71.3
Uttarakhand	337	301	324	296	13.7	24.6	29.2	31.3	87.4	86.1	78.7	81.8	87.7	88.3	88.1	90.7	67.0	68.1	63.5	68.6
West Bengal	408	456	446	441	26.2	46.9	52.2	64.3	64.8	68.6	63.1	54.8	79.0	84.8	86.1	81.5	42.1	50.7	56.1	52.8
All India	**14240**	**15236**	**15682**	**15998**	**38.9**	**49.3**	**53.1**	**57.8**	**76.2**	**72.8**	**73.5**	**72.9**	**74.1**	**76.6**	**77.4**	**77.2**	**62.0**	**65.3**	**64.5**	**66.5**

Data is not presented where sample size is insufficient.

Table 22: Trends over time
Performance of schools with respect to selected Right to Education indicators by state 2010, 2014, 2016 and 2018

School facilities — % Schools with:

State	Boundary wall				Kitchen shed for cooking mid-day meal				Drinking water available				Toilet available and useable				Girls' toilet available and useable			
	2010	2014	2016	2018	2010	2014	2016	2018	2010	2014	2016	2018	2010	2014	2016	2018	2010	2014	2016	2018
Andhra Pradesh	47.2	44.3	49.5	55.1	64.2	65.1	70.0	72.9	64.8	61.2	56.6	58.1	38.6	64.3	82.9	86.4	25.4	54.2	72.8	81.1
Arunachal Pradesh	24.5	44.9	50.0	51.4	64.0	57.4	56.0	57.4	53.2	53.5	50.7	44.7	25.3	35.1	49.3	50.0	12.2	24.5	35.8	28.2
Assam	19.1	24.3	32.4	59.5	80.2	82.7	86.7	92.2	60.9	65.3	66.7	68.0	33.1	58.7	61.7	21.2	13.7	47.0	54.2	15.9
Bihar	48.1	52.4	50.3	55.7	64.0	87.7	87.2	91.6	78.7	90.4	89.5	89.7	33.6	60.6	70.6	75.6	18.1	46.2	60.8	63.0
Chhattisgarh	48.8	60.8	62.4	71.8	86.1	92.9	94.7	97.0	77.6	80.3	85.0	82.5	29.6	68.9	78.1	85.7	20.0	53.4	70.2	75.7
Gujarat	84.4	90.9	94.2	96.3	88.3	90.0	91.9	90.4	79.4	87.0	84.6	88.0	64.8	84.8	82.9	91.3	49.9	81.4	81.1	87.4
Haryana	82.7	91.4	91.6	90.8	51.0	75.8	82.0	88.2	74.6	76.2	75.8	82.0	67.9	81.8	85.5	90.8	52.8	79.6	82.3	84.4
Himachal Pradesh	37.9	66.4	57.4	63.6	82.5	97.1	97.5	99.3	83.2	87.7	84.7	89.4	56.0	87.6	84.0	94.2	38.7	86.2	79.5	86.3
Jammu and Kashmir		28.7		38.7		75.5		86.3		51.6		54.6		58.1		73.0		46.7		48.2
Jharkhand	27.0	24.7	33.0	34.8	73.5	83.9	88.4	88.7	73.8	80.2	81.5	82.6	26.8	52.9	62.8	74.9	20.9	48.0	61.4	72.5
Karnataka	59.3	73.7	81.2	84.7	92.9	93.0	95.1	93.0	75.8	81.2	75.3	76.8	38.4	60.2	63.1	70.8	31.8	55.1	59.3	66.4
Kerala	81.8	77.7	79.3	80.2	98.1	98.8	98.1	99.2	85.7	83.0	80.5	52.9	58.2	84.8	82.0	89.4	43.9	80.2	78.8	83.4
Madhya Pradesh	37.3	40.2	39.7	44.7	89.9	89.8	85.7	85.7	78.5	75.3	73.0	71.0	50.3	55.1	58.5	68.3	28.9	40.3	45.9	56.5
Maharashtra	57.5	66.9	74.4	74.0	78.2	92.0	95.6	94.9	69.0	70.5	67.1	70.9	53.0	66.3	67.9	70.1	43.2	59.1	62.4	63.9
Manipur	11.3	9.6	9.5	14.4	58.4	52.8	51.5	61.6	5.1	15.7	15.3	6.5	40.2	53.1	43.8	44.9	8.4	19.8	24.5	15.4
Meghalaya	14.2	9.7	6.8	12.7	60.6	83.3	86.7	84.5	23.9	16.5	19.8	15.5	24.5	38.8	51.9	44.8	14.8	16.8	38.5	29.9
Mizoram	37.7	51.1	26.7	35.5	96.2	94.0	93.6	96.1	48.5	68.5	64.7	57.4	55.6	33.7	40.0	44.6	30.8	28.1	25.3	34.9
Nagaland	42.8	52.6	40.8	36.4	81.7	79.2	84.0	83.0	37.0	23.4	22.6	27.3	53.9	68.0	50.0	61.8	30.6	45.0	40.9	47.0
Odisha	40.8	48.2	47.4	50.5	74.4	82.8	87.8	89.9	70.3	81.4	77.7	82.9	44.4	63.2	75.5	75.7	34.7	53.3	65.8	69.3
Punjab	82.8	88.9	91.9	92.6	94.7	94.5	96.9	99.1	83.1	81.0	81.9	82.7	61.2	79.2	80.1	89.5	49.4	71.6	75.4	83.9
Rajasthan	70.1	84.5	82.4	84.6	83.8	89.8	90.8	92.8	68.0	73.4	70.1	72.8	65.4	81.5	83.2	84.9	50.3	73.7	79.8	80.9
Sikkim	14.5	42.7	38.8	35.9	95.7	97.3	97.6	95.3	76.8	74.0	71.1	74.5	59.4	73.0	77.4	82.4	37.5	65.2	75.0	75.7
Tamil Nadu	60.7	71.0	72.9	75.6	96.7	97.5	97.9	96.2	80.5	79.8	82.4	80.2	44.6	79.8	79.3	90.2	35.1	68.7	76.2	86.2
Telangana	61.2	58.9	69.3	71.4	71.0	76.1	80.8	86.4	64.8	61.2	56.6	57.2	38.6	64.3	74.7	77.0	25.4	54.2	64.2	71.9
Tripura	19.4	28.2	39.5	31.6	88.2	97.1	99.1	98.3	40.0	56.2	59.1	45.6	43.0	58.7	65.8	53.0	30.3	57.1	40.0	32.7
Uttar Pradesh	44.4	64.3	66.9	72.4	89.3	96.0	96.5	95.4	82.2	85.8	82.0	85.1	47.4	54.9	54.8	72.7	33.9	49.1	51.5	67.2
Uttarakhand	66.8	56.6	56.7	58.3	96.3	97.3	95.6	98.0	68.3	69.2	72.1	75.6	53.4	69.2	74.9	85.8	24.0	53.7	61.3	67.2
West Bengal	34.5	48.7	56.5	55.1	86.3	95.4	93.2	94.0	67.2	78.4	78.4	81.3	52.1	70.8	76.9	81.1	23.7	46.9	63.0	67.7
All India	**51.0**	**58.8**	**60.3**	**64.4**	**82.1**	**88.1**	**89.7**	**91.0**	**72.7**	**75.6**	**74.0**	**74.8**	**47.2**	**65.2**	**68.6**	**74.2**	**32.9**	**55.7**	**61.9**	**66.4**

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Data is not presented where sample size is insufficient.

Table 23: Trends over time
Performance of schools with respect to other selected indicators by state 2010, 2014, 2016 and 2018

% Schools with:

State	Total enrollment of 60 or less				Std II children observed sitting with one or more classes				Std IV children observed sitting with one or more classes				Library books available				Library books being used by the children on day of visit			
	2010	2014	2016	2018	2010	2014	2016	2018	2010	2014	2016	2018	2010	2014	2016	2018	2010	2014	2016	2018
Andhra Pradesh	31.5	33.0	36.1	38.6	63.3	67.1	64.2	61.9	55.3	56.3	59.2	57.6	92.0	97.2	94.7	91.0	77.6	65.6	70.5	54.8
Arunachal Pradesh	33.9	38.0	40.7	49.0	31.7	39.3	33.5	37.3	26.9	31.3	27.2	27.2	13.0	25.0	34.6	24.1	6.3	8.2	8.5	4.4
Assam	40.9	36.1	44.6	41.0	43.4	58.9	58.5	52.2	40.8	55.4	53.4	46.5	20.8	45.3	59.3	73.1	10.5	23.6	34.6	38.8
Bihar	0.2	0.4	0.5	1.3	57.1	63.1	60.3	66.5	48.3	58.2	54.4	55.3	52.9	76.3	69.3	59.1	28.2	30.5	32.8	27.5
Chhattisgarh	16.1	33.6	41.0	40.2	64.9	76.4	75.9	71.3	51.1	54.0	56.0	53.3	72.9	89.5	86.0	89.7	36.5	26.2	24.5	23.8
Gujarat	4.6	6.6	12.3	12.8	36.5	48.4	53.3	50.9	33.0	40.5	50.1	45.4	83.8	92.3	87.8	85.3	48.5	38.3	42.3	40.5
Haryana	6.5	10.0	15.3	17.6	32.5	34.4	46.0	41.5	29.7	27.4	38.6	37.8	64.6	84.2	83.2	84.0	31.6	36.0	40.9	39.1
Himachal Pradesh	48.6	71.3	80.8	83.1	58.3	74.1	73.9	81.1	52.4	73.0	71.0	74.3	80.3	95.7	94.6	97.3	41.3	40.6	32.5	24.3
Jammu and Kashmir		55.9		52.4		66.4		61.3		60.9		52.1		54.4		58.9		28.1		26.6
Jharkhand	7.7	15.9	19.7	18.9	66.1	76.3	78.1	78.1	60.7	72.3	71.7	69.3	61.6	89.7	81.1	87.1	28.4	60.7	49.7	50.5
Karnataka	17.8	22.3	25.7	26.3	75.6	80.4	77.9	83.6	37.0	39.2	44.1	44.1	92.4	91.8	91.6	83.0	64.8	54.3	50.4	36.1
Kerala	19.9	30.5	20.7	24.1	7.1	11.5	13.0	17.0	5.4	9.8	10.9	21.0	83.1	94.7	93.6	90.0	62.4	82.2	81.4	30.5
Madhya Pradesh	10.4	26.2	31.7	33.8	66.9	77.8	78.2	82.6	57.4	69.3	71.1	75.0	56.3	84.0	79.5	84.0	29.1	43.7	40.0	43.8
Maharashtra	16.7	21.1	25.8	26.4	40.3	45.5	50.3	49.8	36.3	40.2	45.9	44.5	86.1	82.6	83.7	88.4	66.5	36.4	45.9	36.9
Manipur	35.3	52.5	58.1	63.6	37.7	33.3	44.0	43.9	32.1	31.3	41.3	38.4	9.2	18.0	11.7	9.0	5.9	2.8	3.3	3.2
Meghalaya	71.0	68.6	69.9	69.0	64.0	67.5	60.3	77.3	60.4	61.0	59.3	75.6	22.0	23.6	28.7	10.6	15.6	22.1	22.5	2.8
Mizoram	39.8	63.7	57.3	84.1	28.0	25.3	27.7	2.2	25.8	25.3	27.8	1.7	6.4	16.9	9.1	17.6	1.7	6.0	3.6	2.6
Nagaland	45.8	35.2	52.9	61.3	19.0	17.1	11.9	11.4	17.9	17.2	10.7	11.7	13.3	14.6	17.4	12.9	9.2	5.5	8.0	6.9
Odisha	21.4	23.7	30.8	31.3	72.8	77.6	80.1	78.9	62.1	67.1	71.0	69.8	65.3	88.2	82.1	80.3	46.8	65.6	61.0	54.0
Punjab	17.2	25.4	32.7	38.2	52.2	47.6	55.4	58.5	37.5	42.3	50.2	53.8	96.0	88.7	91.8	88.1	66.0	39.7	49.4	44.9
Rajasthan	13.0	17.9	19.5	17.7	66.2	78.3	73.5	72.9	52.9	65.9	63.9	60.3	63.7	87.8	86.0	81.8	23.3	38.8	40.2	34.1
Sikkim	23.2	26.7	39.8	53.3	9.0	18.1	28.9	23.8	9.2	18.8	26.0	20.4	44.1	55.3	57.3	52.3	26.5	40.8	40.2	31.8
Tamil Nadu	24.4	35.7	36.7	39.6	79.3	69.1	71.1	64.1	74.4	64.6	64.4	60.7	79.1	86.5	84.3	83.8	57.8	52.3	60.6	52.4
Telangana	17.2	19.7	26.8	34.8	57.1	57.3	52.1	60.5	48.3	46.3	43.5	49.0	92.0	97.2	86.6	77.7	77.6	65.6	58.6	55.7
Tripura	9.4	21.9	24.6	28.7	40.0	43.7	42.2	53.5	21.5	29.9	20.4	27.4	35.4	60.0	50.0	41.2	19.8	43.8	39.1	29.8
Uttar Pradesh	4.6	9.1	12.4	10.4	51.0	62.8	62.8	62.2	45.9	59.1	57.7	58.9	48.7	74.6	71.5	63.1	22.9	36.2	42.8	35.7
Uttarakhand	69.0	76.7	75.0	73.1	61.9	80.1	77.6	75.7	56.8	76.9	75.0	71.7	47.7	85.9	87.0	84.8	20.4	36.9	41.3	26.1
West Bengal	10.1	23.3	23.3	20.2	42.5	47.2	43.8	46.1	33.9	36.4	44.0	38.9	49.5	66.3	58.3	66.1	31.8	43.6	46.2	38.4
All India	**17.3**	**24.0**	**28.0**	**29.4**	**54.8**	**61.6**	**62.1**	**62.4**	**45.9**	**53.3**	**54.7**	**53.9**	**62.6**	**78.1**	**75.4**	**74.2**	**37.9**	**40.7**	**42.6**	**36.9**

India RURAL

Data is not presented where sample size is insufficient.

Table 23: Trends over time
Performance of schools with respect to other selected indicators by state 2010, 2014, 2016 and 2018

State	Computer available for children				Computer available and children observed using them on day of visit				Mid-day meal served in school on day of visit			
	2010	2014	2016	2018	2010	2014	2016	2018	2010	2014	2016	2018
Andhra Pradesh	9.3	13.6	17.4	22.6	6.2	5.6	9.5	6.6	99.7	99.5	99.5	96.0
Arunachal Pradesh	14.3	10.2	12.3	7.7	8.0	3.2	1.0	1.3	47.1	57.5	50.5	36.2
Assam	1.8	2.4	1.2	6.5	0.2	0.7	0.3	1.6	67.3	61.7	70.8	64.0
Bihar	6.9	5.7	7.1	3.4	4.0	0.7	0.8	0.6	57.2	69.2	76.5	84.5
Chhattisgarh	4.1	0.5	1.5	2.4	1.7	0.0	0.2	0.4	94.6	86.1	80.1	91.7
Gujarat	52.2	81.3	75.2	66.9	27.9	28.5	31.5	24.0	96.2	94.2	95.4	94.1
Haryana	17.4	11.5	10.6	18.3	6.9	3.7	2.4	5.1	93.7	91.7	92.5	85.3
Himachal Pradesh	6.7	5.5	7.8	6.6	3.2	3.3	1.8	2.1	98.0	93.8	98.9	93.1
Jammu and Kashmir		8.8		17.2		2.6		4.6		74.7		77.3
Jharkhand	7.0	4.0	4.3	6.6	4.1	1.3	1.1	1.1	92.6	78.6	80.7	79.0
Karnataka	29.4	39.5	45.0	41.8	13.4	15.9	14.6	9.9	96.0	98.9	98.8	97.5
Kerala	82.8	89.8	89.0	75.4	66.7	41.1	69.9	22.4	100.0	74.6	94.1	96.1
Madhya Pradesh	7.5	4.2	2.5	3.8	1.7	0.9	0.3	0.7	94.7	88.3	88.4	82.9
Maharashtra	33.3	46.3	55.1	64.6	19.8	14.7	17.8	19.0	90.7	94.8	94.5	94.7
Manipur	8.5	16.3	15.0	9.0	2.5	5.1	4.4	3.2	47.8	34.5	49.4	46.4
Meghalaya	2.8	1.6	1.7	2.1	0.9	0.8	0.9	0.7	51.9	40.7	47.9	47.9
Mizoram	7.7	1.6	5.0	9.9	5.9	0.5	0.9	0.4	94.0	72.0	91.7	89.2
Nagaland	14.8	11.4	14.6	13.2	3.7	5.5	3.1	2.4	31.9	24.1	24.6	27.4
Odisha	7.1	13.9	15.5	18.7	4.4	5.8	6.4	6.1	88.8	96.8	98.1	98.8
Punjab	10.7	8.7	8.9	21.5	5.2	2.2	3.2	3.8	97.9	92.7	95.2	93.4
Rajasthan	15.7	33.8	34.9	38.6	5.3	8.2	10.5	11.6	94.8	82.7	91.8	95.1
Sikkim	39.1	42.9	39.0	33.6	24.6	24.7	18.3	9.4	98.6	85.1	86.8	78.5
Tamil Nadu	47.0	62.4	57.5	57.9	29.4	27.1	33.1	29.3	99.4	99.8	99.2	98.7
Telangana	9.3	13.6	12.2	10.6	6.2	5.6	4.6	3.1	98.4	99.6	98.9	95.8
Tripura	8.5	7.8	10.1	4.4	5.3	3.9	1.8	0.9	74.7	97.1	98.2	96.5
Uttar Pradesh	1.4	2.2	2.7	3.3	0.3	0.3	0.6	0.7	71.3	93.9	91.2	93.3
Uttarakhand	6.7	8.8	9.6	9.8	1.5	2.0	2.5	0.7	95.0	92.3	95.0	88.1
West Bengal	1.3	2.0	4.1	6.7	0.5	1.5	1.1	1.2	63.4	66.7	67.4	81.6
All India	**15.8**	**19.6**	**20.0**	**21.3**	**8.6**	**7.0**	**8.1**	**6.5**	**84.6**	**85.1**	**87.1**	**87.1**

Andhra Pradesh, Arunachal Pradesh

Assam, Bihar

Chhattisgarh

Andhra Pradesh RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 13 OUT OF 13 DISTRICTS
Data is not presented where sample size is insufficient.

Annual Status of Education Report
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School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018
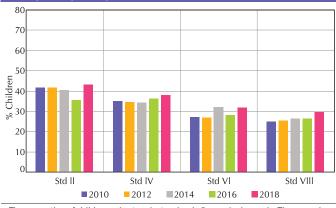
Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	63.2	35.2	0.3	1.4	100
Age 7-16: All	62.1	35.0	0.3	2.6	100
Age 7-10: All	59.9	39.5	0.2	0.4	100
Age 7-10: Boys	56.5	42.8	0.3	0.4	100
Age 7-10: Girls	63.1	36.3	0.1	0.5	100
Age 11-14: All	66.5	30.6	0.4	2.5	100
Age 11-14: Boys	63.8	33.8	0.3	2.1	100
Age 11-14: Girls	68.9	27.7	0.5	2.9	100
Age 15-16: All	57.1	33.7	0.2	9.0	100
Age 15-16: Boys	57.8	33.7	0.2	8.3	100
Age 15-16: Girls	56.4	33.7	0.2	9.7	100
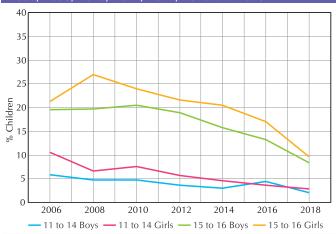
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Legend: 11 to 14 Boys, 11 to 14 Girls, 15 to 16 Boys, 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 21.3% in 2006, 21.6% in 2012, and 9.7% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

Legend: 2010, 2012, 2014, 2016, 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 43.3% as compared to 29.6% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	23.2	48.8	20.6	5.5			2.1						100
II		3.2	15.1	55.0	20.5			6.1					100
III			0.9	19.1	53.1	19.0	5.0		2.8				100
IV				2.1	17.3	49.5	23.2	5.2		2.7			100
V					2.3	15.5	55.9	20.1		6.2			100
VI						2.9	15.5	50.8	23.3	6.3	1.2		100
VII							2.3	12.5	55.1	24.1	5.2	0.9	100
VIII								2.3	13.2	56.4	22.4	5.7	100

This table shows the age distribution for each grade. For example, of all children in Std III, 53.1% children are 8 years old but there are also 19.1% who are 7, 19% who are 9, 5% who are 10, and 2.8% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	71.3	0.9	6.6	1.4	1.6	0.0	18.2	100
Age 4	53.4	1.5	36.6	2.2	2.1	0.0	4.2	100
Age 5	30.4	1.6	41.8	15.8	8.4	0.0	2.0	100
Age 6	2.3	0.3	25.7	46.6	24.4	0.0	0.7	100
Age 7	0.4	0.2	5.6	53.9	39.5	0.2	0.3	100
Age 8	0.2	0.0	1.1	58.3	40.2	0.0	0.2	100

Andhra Pradesh RURAL

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	30.5	36.0	28.0	4.3	1.2	100
II	11.9	24.8	42.9	11.3	9.2	100
III	6.1	13.8	36.6	21.1	22.4	100
IV	2.7	6.0	24.8	22.7	43.8	100
V	1.6	3.9	13.8	21.0	59.7	100
VI	1.4	3.1	11.7	19.8	63.9	100
VII	2.0	5.2	10.4	12.2	70.3	100
VIII	1.4	2.5	7.6	10.3	78.2	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 6.1% cannot even read letters, 13.8% can read letters but not words or higher, 36.6% can read words but not Std I level text or higher, 21.1% can read Std I level text but not Std II level text, and 22.4% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
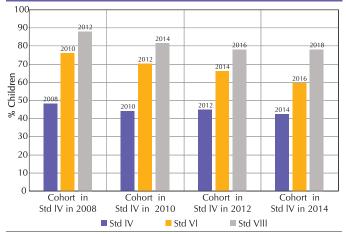
Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	28.0	28.9	28.3
2014	21.3	32.0	24.7
2016	19.0	28.3	22.6
2018	22.6	22.5	22.6

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Reading Tool (Telugu)

Std II level text	Std I level text

రఘు నిదలేదే సరికి తెలుగు కనపడింది. అతను వెలుగు వస్తున్న వైపు వెళ్ళాము. ప్రతిరోజు ఆ వైపున ఆకాశంలో సూర్యుడు ఉదయిస్తాడు. రఘు వెనకాలే అతని అక్కయ్య వచ్చింది. సూర్యుడు ఉదయించే దిక్కును తూర్పు దిక్కును అంటారు. అస్తమించే దిక్కును వడమర దిక్కు అంటారు. ఉదయించే సూర్యునికి ఎదురుగా నిలబడి చేతులు చాచితే ఎడమవైపున ఉన్న దిక్కును ఉత్తర దిక్కు అని, కుడివైపున ఉన్న దిక్కును దక్షిణ దిక్కు అని అంటారు.

బాల బాలికలారా రారండి ఆటలు, పాటలు పాడండి పలకా, బలపం తీసుకొని రారండి అ ఆ ఇ ఈ రాయండి.

Letters	Words
గ ఊ	నేల బండి గొరి
బ ఇ	రీమ అర
ల ఒ	పేరు గంట ఊడ
శ న	సూది ఒంటె
వ య	

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	64.0	58.8	62.4	87.7	89.1	88.1
2014	57.0	58.2	57.4	79.5	87.4	81.6
2016	52.6	60.6	55.3	73.5	91.1	78.0
2018	57.1	64.8	59.7	78.6	77.5	78.2

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 48.4% and in Std VI (in 2010) was 75.9%. When the cohort reached Std VIII in 2012, this figure was 88.1%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

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Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	23.8	33.3	39.3	3.2	0.6	100
II	8.4	19.0	57.4	12.9	2.3	100
III	3.9	7.0	50.8	32.8	5.5	100
IV	1.1	3.6	35.5	40.9	19.0	100
V	0.4	1.8	24.8	33.8	39.3	100
VI	0.6	1.0	24.3	32.6	41.5	100
VII	0.4	1.0	19.8	35.6	43.3	100
VIII	0.6	0.2	19.8	31.8	47.6	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 3.9% cannot even recognize numbers 1-9, 7% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 50.8% can recognize numbers up to 99 but cannot do subtraction, 32.8% can do subtraction but cannot do division, and 5.5% can do division. For each grade, the total of these exclusive categories is 100%.
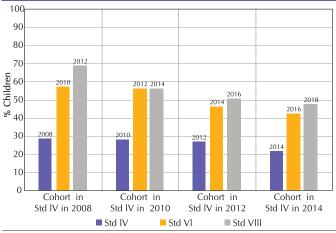
Arithmetic Tool (Telugu)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	46.3	67.1	54.1
2014	31.4	57.8	39.8
2016	39.1	62.9	48.3
2018	34.1	45.6	38.5

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	41.8	53.4	45.4	65.0	80.5	68.9
2014	37.8	37.3	37.6	53.0	65.7	56.4
2016	35.9	40.3	37.4	41.2	76.9	50.5
2018	36.7	45.3	39.7	44.0	56.1	47.6

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014
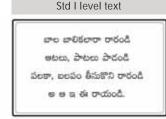

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 28.7% and in Std VI (in 2010) was 57.2%. When the cohort reached Std VIII in 2012, this figure was 68.9%. The progress of each of these cohorts can be understood in the same way.
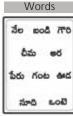
Andhra Pradesh RURAL

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
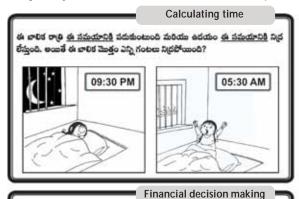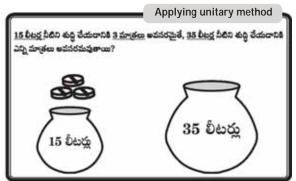
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	35.0	42.6	39.0
Age 11-13	61.3	73.3	67.9
Age 14-16	79.6	83.0	81.4
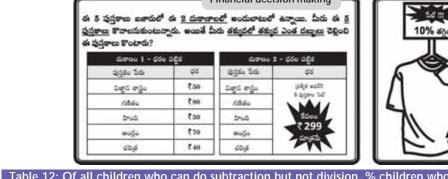
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	50.5	56.7	53.7	18.0	20.0	19.1
Age 11-13	73.6	76.4	75.1	40.8	44.2	42.7
Age 14-16	79.8	81.4	80.6	58.1	56.2	57.1
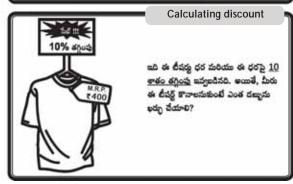
Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

Applying unitary method

Financial decision making

Calculating discount

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	35.2	38.5	36.9	36.4	46.1	41.5	15.5	29.1	22.6	14.7	12.0	13.3
Age 15	36.8	40.0	38.8	19.2	40.8	32.5	19.2	21.1	20.4	11.0	17.9	15.3
Age 16	47.8	44.9	46.0	22.6	30.5	27.4	19.2	13.1	15.5	31.9	11.7	19.8
Age 14-16	38.8	40.8	39.9	27.9	40.0	34.8	17.5	21.9	20.0	17.8	14.0	15.6

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	56.4	36.7	45.6	64.5	51.3	57.2	25.9	28.1	27.1	31.1	27.2	28.9
Age 15	53.9	53.5	53.7	55.3	55.6	55.4	21.4	26.3	23.9	38.6	21.6	29.9
Age 16	53.4	42.8	47.8	54.0	51.0	52.4	34.5	26.7	30.4	32.7	29.1	30.8
Age 14-16	54.6	44.1	49.0	58.1	52.6	55.2	26.8	27.1	26.9	34.3	25.9	29.8

Andhra Pradesh RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 13 OUT OF 13 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	275	276	296	309
Upper primary schools (Std I-VII/VIII)	99	104	84	70
Total schools visited	374	380	380	379

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	76.0	79.5	83.5	81.5
% Teachers present (Average)	83.7	84.5	87.3	82.5
Upper primary schools (Std I-VII/VIII)	**2010**	**2014**	**2016**	**2018**
% Enrolled children present (Average)	74.5	79.8	81.5	84.1
% Teachers present (Average)	82.3	78.8	87.2	80.1

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	66.4	67.3	62.2	63.0
% Schools where Std IV children were observed sitting with one or more other classes	58.0	58.2	58.0	59.0
Upper primary schools (Std I-VII/VIII)	**2010**	**2014**	**2016**	**2018**
% Schools where Std II children were observed sitting with one or more other classes	55.7	67.0	71.4	57.4
% Schools where Std IV children were observed sitting with one or more other classes	47.9	52.0	63.1	50.0

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	64.2	65.1	70.0	72.9
	Mid-day meal served in school on day of visit	99.7	99.5	99.5	96.0
Drinking water	No facility for drinking water	22.8	16.2	15.0	12.7
	Facility but no drinking water available	12.4	22.6	28.4	29.2
	Drinking water available	64.8	61.2	56.6	58.1
	Total	100	100	100	100
Toilet	No toilet facility	23.4	13.0	4.2	2.9
	Facility but toilet not useable	38.1	22.7	12.9	10.6
	Toilet useable	38.6	64.3	82.9	86.4
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	53.1	28.4	15.6	8.9
	Separate provision but locked	9.2	8.7	6.3	4.2
	Separate provision, unlocked but not useable	12.3	8.7	5.3	5.9
	Separate provision, unlocked and useable	25.4	54.2	72.8	81.1
	Total	100	100	100	100
Library	No library	8.0	2.8	5.3	9.0
	Library but no books being used by children on day of visit	14.4	31.6	24.2	36.2
	Library books being used by children on day of visit	77.6	65.6	70.5	54.8
	Total	100	100	100	100
Electricity	Electricity connection			95.5	96.5
	Of schools with electricity connection, % schools with electricity available on day of visit			89.8	93.1
Computer	No computer available for children to use	90.7	86.5	82.6	77.5
	Available but not being used by children on day of visit	3.0	7.9	7.9	15.9
	Computer being used by children on day of visit	6.2	5.6	9.5	6.6
	Total	100	100	100	100

Andhra Pradesh RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	36.9	40.4	39.2	43.8
Upper primary schools (Std I-VII/VIII)	16.3	13.5	25.0	15.7

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	76.7	85.5	78.3
	No physical education period but dedicated time allotted	16.1	11.6	15.2
	No physical education period and no dedicated time allotted	7.2	2.9	6.4
	Total	100	100	100
Physical education teacher	Separate physical education teacher	2.3	8.7	3.5
	Other physical education teacher	70.8	68.1	70.3
	No physical education teacher	26.9	23.2	26.2
	Total	100	100	100
Playground	Playground inside the school premises	60.8	64.3	61.4
	Playground outside the school premises	18.0	20.0	18.4
	No accessible playground	21.2	15.7	20.2
	Total	100	100	100
Availability of any sports equipment		79.0	88.4	80.7
Supervised physical education activity observed on day of visit		37.0	44.6	38.4

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	99.2	98.4	99.2

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	5.7	1.4	1.1
Between July and September	94.1	89.4	84.5
After September	0.3	9.2	14.4

Arunachal Pradesh RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 8 OUT OF 16 DISTRICTS
Data is not presented where sample size is insufficient.
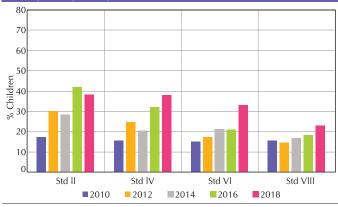
School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	60.1	35.2	0.8	3.9	100
Age 7-16: All	63.0	31.9	0.8	4.3	100
Age 7-10: All	55.8	40.4	0.7	3.1	100
Age 7-10: Boys	53.3	43.7	0.8	2.2	100
Age 7-10: Girls	58.3	37.2	0.5	3.9	100
Age 11-14: All	66.4	29.0	1.0	3.6	100
Age 11-14: Boys	65.3	29.7	0.8	4.3	100
Age 11-14: Girls	67.6	28.4	1.2	2.9	100
Age 15-16: All	74.8	14.5	0.6	10.1	100
Age 15-16: Boys	74.5	13.7	0.3	11.5	100
Age 15-16: Girls	75.1	15.4	0.9	8.6	100
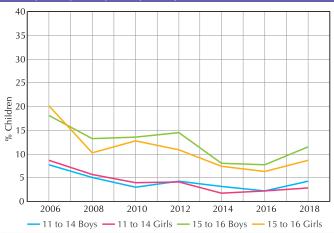
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Legend: 11 to 14 Boys — 11 to 14 Girls — 15 to 16 Boys — 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 20.2% in 2006, 10.9% in 2012, and 8.6% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

Legend: 2010 2012 2014 2016 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 38.3% as compared to 23% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	31.1	31.7	17.4	10.8	9.1								100
II	5.7	17.2	34.2	18.6	11.2	6.1	7.1						100
III		5.2	12.4	29.5	24.6	14.3	5.4	6.1	2.7				100
IV			4.3	14.8	24.7	23.9	12.1	11.3	8.8				100
V			6.1	12.1	26.1	27.4	13.8	6.9	7.6				100
VI			3.3	11.5	26.2	25.2	19.4	10.6	3.8				100
VII			6.3	12.4	25.1	26.6	14.9	10.0	4.8				100
VIII			4.8	15.6	23.1	29.8	17.0	9.8					100

This table shows the age distribution for each grade. For example, of all children in Std III, 29.5% children are 8 years old but there are also 12.4% who are 7, 24.6% who are 9, 14.3% who are 10, 5.4% who are 11, 6.1% who are 12, and 2.7% who are 13 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	35.2	3.8	17.9	3.0	0.4	0.0	39.7	100
Age 4	25.6	8.0	39.4	6.9	1.9	0.0	18.2	100
Age 5	17.1	8.4	36.1	24.0	7.7	0.0	6.8	100
Age 6	12.1	4.1	20.1	32.7	24.7	0.0	6.4	100
Age 7	8.7	2.1	10.7	40.1	34.6	0.4	3.4	100
Age 8	3.6	3.0	3.4	51.5	36.3	0.4	1.9	100

Data is not presented where sample size is insufficient.

ASER
Annual Status of Education Report
असर
2018
RURAL
Facilitated by PRATHAM

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	25.5	48.6	19.5	5.5	1.0	100
II	6.6	48.0	29.3	8.7	7.4	100
III	5.4	34.3	28.1	13.4	18.8	100
IV	1.2	23.0	31.2	20.4	24.3	100
V	1.0	18.0	23.3	20.6	37.1	100
VI	0.6	12.5	17.8	17.3	51.7	100
VII	0.4	4.9	12.4	20.1	62.2	100
VIII	0.0	5.4	8.2	16.0	70.5	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 5.4% cannot even read letters, 34.3% can read letters but not words or higher, 28.1% can read words but not Std I level text or higher, 13.4% can read Std I level text but not Std II level text, and 18.8% can read Std II level text. For each grade, the total of these exclusive categories is 100%.

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018
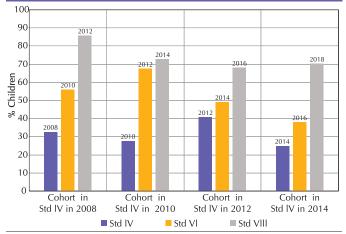
Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	15.5	42.1	21.2
2014	5.8	24.9	10.3
2016	2.3	33.5	11.8
2018	4.8	44.0	18.7

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Reading Tool (English)

Std II level text

It was the rainy season. The sky was full of clouds. There was a cool breeze blowing. Asif was eager to play on a swing. His older brother got a thick rope. They tied it on the tree and made a swing. Many children joined them and they all started playing. They played till it got dark.

Std I level text

This is a big monkey.
He lives on a tree.
He likes to jump.
He also likes bananas.

Letters

r o k
d i
f y s
b n

Words

moon like
ant
sun hot
baby dark
net
bus gold

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	52.1	68.8	55.4	84.4	95.6	85.9
2014	43.4	51.2	44.5	70.5	83.8	72.5
2016	16.7	52.6	25.3	63.1	89.3	68.1
2018	22.1	64.7	37.0	64.1	91.8	70.1

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 32.7% and in Std VI (in 2010) was 55.8%. When the cohort reached Std VIII in 2012, this figure was 85.9%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

**Table 7: % Children by grade and arithmetic level
All children 2018**

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	21.0	30.1	36.4	7.1	5.3	100
II	4.3	17.6	56.9	16.7	4.6	100
III	2.4	10.1	53.6	27.1	6.8	100
IV	1.2	4.6	47.4	35.1	11.8	100
V	0.2	2.9	36.7	32.9	27.3	100
VI	0.6	2.1	33.4	32.0	31.9	100
VII	0.0	1.0	26.5	31.3	41.3	100
VIII	0.0	0.5	21.4	28.0	50.1	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 2.4% cannot even recognize numbers 1-9, 10.1% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 53.6% can recognize numbers up to 99 but cannot do subtraction, 27.1% can do subtraction but cannot do division, and 6.8% can do division. For each grade, the total of these exclusive categories is 100%.
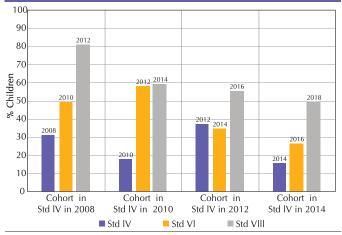
Arithmetic Tool (English)

**Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018**

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	47.9	70.1	52.6
2014	34.0	47.3	37.1
2016	22.2	53.2	31.6
2018	23.5	51.7	33.5

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

**Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018**

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	43.1	61.4	46.7	79.5		81.1
2014	35.6	36.9	35.8	59.7		59.5
2016	11.7	41.2	18.7	52.5		55.5
2018	22.1	36.4	27.1	42.6		49.3

* This is the weighted average for children in government and private schools only.

**Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014**

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 31.1% and in Std VI (in 2010) was 49.2%. When the cohort reached Std VIII in 2012, this figure was 81.1%. The progress of each of these cohorts can be understood in the same way.

Arunachal Pradesh RURAL

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
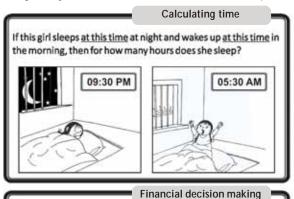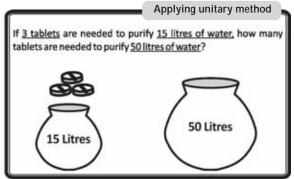
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	21.3	23.8	22.6
Age 11-13	46.0	45.8	45.9
Age 14-16	58.1	66.3	62.3
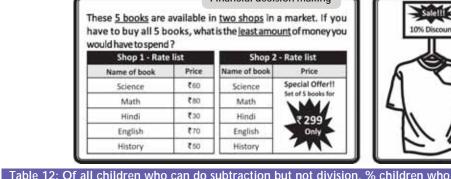
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	40.7	36.5	38.5	11.5	10.9	11.2
Age 11-13	60.2	58.8	59.5	34.4	30.5	32.4
Age 14-16	71.4	70.1	70.7	39.5	46.4	43.1

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

If this girl sleeps at this time at night and wakes up at this time in the morning, then for how many hours does she sleep?

09:30 PM   05:30 AM

Applying unitary method

If 3 tablets are needed to purify 15 litres of water, how many tablets are needed to purify 50 litres of water?

15 Litres   50 Litres

Financial decision making

These 5 books are available in two shops in a market. If you have to buy all 5 books, what is the least amount of money you would have to spend?

Shop 1 - Rate list	
Name of book	Price
Science	₹60
Math	₹80
Hindi	₹30
English	₹70
History	₹50

Shop 2 - Rate list	
Name of book	Price
Science	Special Offer!!
Math	Set of 5 books for
Hindi	₹299 Only
English	
History	

Calculating discount

Sale!! 10% Discount

M.R.P. ₹300

This is the price of this T-shirt and it is available on a discount of 10 percent. If you were to buy this T-shirt, how much money would you need to spend?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	33.8	15.7	23.6	19.7	24.0	22.1	12.8	26.2	20.4	2.9	3.1	3.0
Age 15	37.9	21.5	29.3	30.1	23.5	26.7	20.2	8.9	14.3	12.8	2.8	7.6
Age 16	36.0	23.3	33.3	32.9	41.3	34.7	25.7	0.0	20.2	7.4	8.7	7.6
Age 14-16	35.9	18.9	28.1	27.9	26.0	27.0	20.0	16.2	18.3	7.5	3.7	5.8

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	37.4	41.5	40.0	51.8	31.1	38.8	26.8	26.7	26.7	15.1	9.4	11.5
Age 15	41.5	51.7	47.3	65.4	38.1	50.0	32.1	31.4	31.7	21.6	13.8	17.2
Age 16	56.6	44.8	50.2	52.3	27.8	38.9	36.7	39.0	38.0	15.0	21.3	18.4
Age 14-16	44.3	45.9	45.2	57.1	32.8	42.9	31.6	31.3	31.4	17.6	13.8	15.3

Arunachal Pradesh RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 8 OUT OF 16 DISTRICTS
Data is not presented where sample size is insufficient.

Annual Status of Education Report
ASER 2018 RURAL
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School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	152	91	86	58
Upper primary schools (Std I-VII/VIII)	107	98	126	101
Total schools visited	259	189	212	159

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	82.5	84.4	76.2	77.7
% Teachers present (Average)	85.3	83.5	81.2	71.1

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	30.7	39.0	33.5	37.9
% Schools where Std IV children were observed sitting with one or more other classes	26.7	30.3	27.3	27.5

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	64.0	57.4	56.0	57.4
	Mid-day meal served in school on day of visit	47.1	57.5	50.5	36.2
Drinking water	No facility for drinking water	36.9	40.1	37.0	35.9
	Facility but no drinking water available	9.9	6.4	12.3	19.5
	Drinking water available	53.2	53.5	50.7	44.7
	Total	100	100	100	100
Toilet	No toilet facility	20.8	30.8	11.9	12.0
	Facility but toilet not useable	53.9	34.1	38.9	38.0
	Toilet useable	25.3	35.1	49.3	50.0
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	60.4	51.6	34.7	42.3
	Separate provision but locked	11.3	10.1	12.6	16.8
	Separate provision, unlocked but not useable	16.2	13.8	16.8	12.8
	Separate provision, unlocked and useable	12.2	24.5	35.8	28.2
	Total	100	100	100	100
Library	No library	87.0	75.0	65.4	76.0
	Library but no books being used by children on day of visit	6.7	16.9	26.1	19.6
	Library books being used by children on day of visit	6.3	8.2	8.5	4.4
	Total	100	100	100	100
Electricity	Electricity connection			57.5	62.8
	Of schools with electricity connection, % schools with electricity available on day of visit			72.8	46.2
Computer	No computer available for children to use	85.7	89.8	87.7	92.3
	Available but not being used by children on day of visit	6.4	7.0	11.4	6.4
	Computer being used by children on day of visit	8.0	3.2	1.0	1.3
	Total	100	100	100	100

Arunachal Pradesh RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018
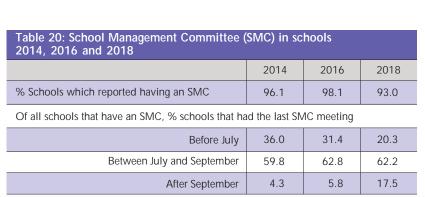
	2010	2014	2016	2018
All schools (Std I-IV/V and Std I-VII/VIII)	33.9	38.0	40.7	49.0

Table 19: Physical education and sports in schools 2018

% Schools with		All schools (Std I-IV/V and Std I-VII/VIII)
Dedicated time for physical education	Physical education period in the timetable	23.0
	No physical education period but dedicated time allotted	16.2
	No physical education period and no dedicated time allotted	60.8
	Total	100
Physical education teacher	Separate physical education teacher	16.2
	Other physical education teacher	12.2
	No physical education teacher	71.6
	Total	100
Playground	Playground inside the school premises	57.3
	Playground outside the school premises	13.3
	No accessible playground	29.3
	Total	100
Availability of any sports equipment		28.9
Supervised physical education activity observed on day of visit		8.3

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	96.1	98.1	93.0

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	36.0	31.4	20.3
Between July and September	59.8	62.8	62.2
After September	4.3	5.8	17.5

Assam RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 26 OUT OF 27 DISTRICTS
Data is not presented where sample size is insufficient.
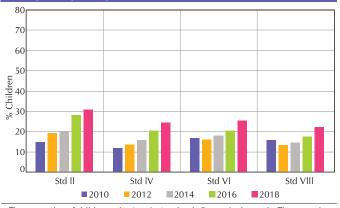
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School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	71.7	24.8	1.2	2.3	100
Age 7-16: All	70.1	24.4	1.4	4.2	100
Age 7-10: All	71.6	26.9	0.5	0.9	100
Age 7-10: Boys	68.6	29.8	0.6	1.1	100
Age 7-10: Girls	74.8	24.1	0.4	0.8	100
Age 11-14: All	71.4	23.2	1.9	3.6	100
Age 11-14: Boys	68.6	24.9	2.0	4.6	100
Age 11-14: Girls	74.0	21.6	1.8	2.6	100
Age 15-16: All	62.8	21.4	2.1	13.7	100
Age 15-16: Boys	59.2	21.0	2.2	17.7	100
Age 15-16: Girls	66.3	22.0	2.1	9.6	100
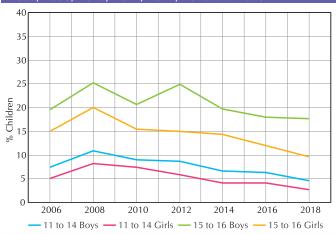
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

— 11 to 14 Boys — 11 to 14 Girls — 15 to 16 Boys — 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 15% in 2006, 14.9% in 2012, and 9.6% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

■ 2010 ■ 2012 ■ 2014 ■ 2016 ■ 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 30.9% as compared to 22.3% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	25.9	36.8	24.6	8.7	4.1								100
II	3.2	11.9	33.9	33.3	9.7	5.2	3.0						100
III	2.3		10.5	32.7	29.8	14.5	5.3	4.9					100
IV	2.4			10.5	28.2	37.7	11.3	6.5	3.4				100
V	2.6				7.4	34.8	32.9	15.1	5.2	1.9			100
VI	2.4					9.6	25.4	42.8	14.0	5.8			100
VII	2.2						6.1	33.4	39.7	12.8	5.8		100
VIII	2.8							9.2	34.0	37.5	11.7	4.9	100

This table shows the age distribution for each grade. For example, of all children in Std III, 32.7% children are 8 years old but there are also 10.5% who are 7, 29.8% who are 9, 14.5% who are 10, 5.3% who are 11, and 4.9% who are 12 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	70.5	1.5	4.7	1.6	0.4	0.1	21.4	100
Age 4	68.1	2.6	13.7	3.5	1.4	0.0	10.7	100
Age 5	40.5	4.4	22.3	21.9	6.6	0.0	4.3	100
Age 6	24.6	4.3	14.9	42.0	12.8	0.0	1.5	100
Age 7	12.7	8.4	6.9	50.5	21.1	0.2	0.2	100
Age 8	3.4	6.1	4.7	61.5	23.3	0.1	0.9	100

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Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	36.0	37.3	16.8	6.2	3.8	100
II	14.0	29.5	31.8	14.3	10.5	100
III	7.6	22.6	28.2	21.7	19.9	100
IV	5.6	16.4	23.3	24.4	30.4	100
V	4.1	10.6	19.4	25.8	40.1	100
VI	2.8	7.7	15.7	26.4	47.5	100
VII	2.2	5.8	11.7	24.3	55.9	100
VIII	0.8	5.0	8.8	24.6	60.8	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 7.6% cannot even read letters, 22.6% can read letters but not words or higher, 28.2% can read words but not Std I level text or higher, 21.7% can read Std I level text but not Std II level text, and 19.9% can read Std II level text. For each grade, the total of these exclusive categories is 100%.

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	10.4	32.1	14.5
2014	10.7	35.2	14.8
2016	12.8	32.2	17.2
2018	14.4	35.4	20.0

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Reading Tool (Assamese)

Std II level text	Std I level text

জেউতি আৰু মাইনু সখী। দুয়ো একেলগে খেলা-ধূলা কৰে। এদিন দুয়োৰে আম খাবলৈ মন গ'ল। দুয়োৰে ঘৰত আমৰ গছ নাই। সেইবাবে দুয়োজনীয়ে গাঁৱত থকা আমৰ বাগিচালৈ গ'ল। সেই সময়ত বাগিচাৰ চকিদাৰজন আম গছৰ তলতে বহি আছিল। দুয়োজনীয়ে বাগিচাৰ চকিদাৰজনক সুধি গছৰ পৰা আম পাৰি খালে। আবেলি হোৱাৰ আগতে দুয়োজনীয়ে ৰং মনেৰে ঘৰলৈ উভতিল।

মমীৰ এজনী ছাগলী আছে। ছাগলীজনীৰ নাম মিঠু। তাইৰ দুটা পোৱালী আছে। এজনী চিকু আনজনী পিকু।

Letters	Words

ল ন ফ
হ ট
ধ শ ত
জ ঢ

ফুল জাপি
মৃগ
পানী খেল
ধূপ কোৱা
হীৰা
টকা জাঠৈ

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	33.3	52.9	36.4	66.2	77.6	67.8
2014	30.6	52.2	33.4	62.2	73.3	63.9
2016	32.2	61.1	37.8	62.4	68.1	63.4
2018	33.5	60.9	40.3	58.1	70.8	61.1

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

Bar chart with y-axis "% Children" from 0 to 100. Categories: Cohort in Std IV in 2008 (2008, 2010, 2012), Cohort in Std IV in 2010 (2010, 2012, 2014), Cohort in Std IV in 2012 (2012, 2014, 2016), Cohort in Std IV in 2014 (2014, 2016, 2018). Legend: Std IV, Std VI, Std VIII.

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 32.3% and in Std VI (in 2010) was 58.4%. When the cohort reached Std VIII in 2012, this figure was 67.8%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	30.9	41.7	19.6	2.9	4.9	100
II	11.0	36.6	32.8	15.4	4.3	100
III	5.8	27.7	36.9	22.8	6.9	100
IV	4.4	22.2	33.0	29.3	11.1	100
V	2.7	16.1	30.9	32.6	17.8	100
VI	1.7	10.8	33.3	33.2	21.0	100
VII	1.7	9.3	33.2	30.5	25.4	100
VIII	0.6	7.2	28.8	32.2	31.2	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 5.8% cannot even recognize numbers 1-9, 27.7% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 36.9% can recognize numbers up to 99 but cannot do subtraction, 22.8% can do subtraction but cannot do division, and 6.9% can do division. For each grade, the total of these exclusive categories is 100%.
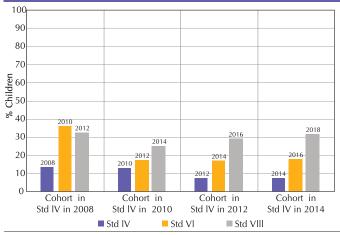
Arithmetic Tool (Assamese)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	15.1	39.9	19.8
2014	15.6	43.3	20.3
2016	19.8	50.0	26.6
2018	23.4	47.1	29.8

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	8.9	26.9	11.7	29.5	49.2	32.2
2014	9.0	30.3	11.8	21.7	43.8	25.0
2016	9.1	32.8	13.7	25.3	44.2	28.8
2018	14.4	28.2	17.8	28.1	42.9	31.5

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 13.6% and in Std VI (in 2010) was 35.8%. When the cohort reached Std VIII in 2012, this figure was 32.3%. The progress of each of these cohorts can be understood in the same way.

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Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
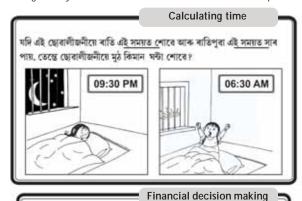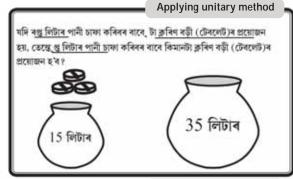
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	25.0	26.8	25.9
Age 11-13	46.2	48.9	47.6
Age 14-16	65.0	68.2	66.7

Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	35.6	33.9	34.8	9.7	9.6	9.7
Age 11-13	54.5	51.2	52.8	22.3	20.6	21.4
Age 14-16	68.2	62.1	64.9	39.2	32.2	35.5
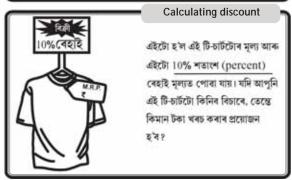
Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	35.8	26.6	30.7	36.4	31.2	33.5	19.1	17.7	18.3	16.0	14.7	15.3
Age 15	29.0	28.2	28.6	37.0	32.8	35.0	22.9	26.9	24.8	16.4	15.0	15.7
Age 16	38.2	34.2	35.7	27.2	35.3	32.1	21.5	14.5	17.3	23.1	18.4	20.2
Age 14-16	33.6	29.2	31.2	34.7	32.8	33.7	21.2	19.7	20.4	17.6	15.8	16.7

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	46.6	39.8	43.0	52.8	42.0	47.1	32.2	27.1	29.5	34.9	24.7	29.5
Age 15	40.2	36.9	38.5	46.8	44.8	45.8	30.6	30.0	30.3	39.5	31.9	35.7
Age 16	40.7	37.7	39.4	40.8	41.9	41.3	30.8	26.3	28.9	33.7	27.1	30.9
Age 14-16	42.7	38.3	40.5	47.3	43.0	45.2	31.3	28.0	29.7	36.2	27.8	32.1

Assam RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 26 OUT OF 27 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	503	567	663	597
Upper primary schools (Std I-VII/VIII)	16	30	38	117
Total schools visited	519	597	701	714

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	69.0	70.8	72.1	72.9
% Teachers present (Average)	90.0	87.5	89.7	87.4

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	43.8	58.9	58.5	52.2
% Schools where Std IV children were observed sitting with one or more other classes	41.0	55.4	53.7	46.5

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	80.2	82.7	86.7	92.2
	Mid-day meal served in school on day of visit	67.3	61.7	70.8	64.0
Drinking water	No facility for drinking water	23.2	19.4	21.0	17.5
	Facility but no drinking water available	16.0	15.4	12.3	14.5
	Drinking water available	60.9	65.3	66.7	68.0
	Total	100	100	100	100
Toilet	No toilet facility	19.1	8.0	3.6	3.1
	Facility but toilet not useable	47.8	33.3	34.8	75.7
	Toilet useable	33.1	58.7	61.7	21.2
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	52.2	22.8	11.9	13.3
	Separate provision but locked	18.5	19.0	18.3	62.3
	Separate provision, unlocked but not useable	15.6	11.3	15.6	8.6
	Separate provision, unlocked and useable	13.7	47.0	54.2	15.9
	Total	100	100	100	100
Library	No library	79.2	54.7	40.7	26.9
	Library but no books being used by children on day of visit	10.3	21.7	24.7	34.3
	Library books being used by children on day of visit	10.5	23.6	34.6	38.8
	Total	100	100	100	100
Electricity	Electricity connection			23.6	35.5
	Of schools with electricity connection, % schools with electricity available on day of visit			71.4	80.1
Computer	No computer available for children to use	98.3	97.7	98.9	93.5
	Available but not being used by children on day of visit	1.6	1.7	0.9	5.0
	Computer being used by children on day of visit	0.2	0.7	0.3	1.6
	Total	100	100	100	100

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
All schools (Std I-IV/V and Std I-VII/VIII)	40.9	36.1	44.6	41.0

Table 19: Physical education and sports in schools 2018

% Schools with		All schools (Std I-IV/V and Std I-VII/VIII)
Dedicated time for physical education	Physical education period in the timetable	65.3
	No physical education period but dedicated time allotted	20.1
	No physical education period and no dedicated time allotted	14.6
	Total	100
Physical education teacher	Separate physical education teacher	3.9
	Other physical education teacher	62.3
	No physical education teacher	33.9
	Total	100
Playground	Playground inside the school premises	61.3
	Playground outside the school premises	18.2
	No accessible playground	20.6
	Total	100
Availability of any sports equipment		50.2
Supervised physical education activity observed on day of visit		29.8

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	97.8	98.5	96.2

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	30.6	19.5	12.1
Between July and September	61.3	57.4	72.7
After September	8.1	23.1	15.2

Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018
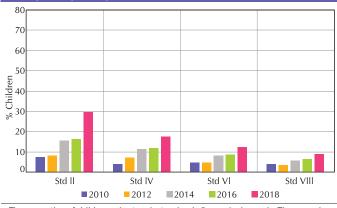
Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	78.1	16.9	1.0	3.9	100
Age 7-16: All	78.9	15.6	0.9	4.7	100
Age 7-10: All	76.4	19.4	1.2	3.1	100
Age 7-10: Boys	72.1	23.7	1.2	3.0	100
Age 7-10: Girls	80.8	14.9	1.1	3.2	100
Age 11-14: All	80.4	14.8	0.8	4.0	100
Age 11-14: Boys	76.3	19.2	0.7	3.9	100
Age 11-14: Girls	84.3	10.7	0.8	4.2	100
Age 15-16: All	81.6	7.2	0.4	10.8	100
Age 15-16: Boys	78.5	9.3	0.4	11.8	100
Age 15-16: Girls	84.3	5.5	0.4	9.8	100
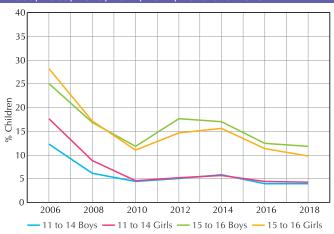
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 28.2% in 2006, 14.6% in 2012, and 9.8% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 29.7% as compared to 8.9% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	28.1	30.3	18.0	11.3	12.4								100
II	9.9	15.1	25.4	26.9	8.6	8.7	5.4						100
III	2.2	5.4	12.5	29.3	20.9	18.0	11.8						100
IV	2.6		5.3	17.0	19.2	34.3	8.7	9.2	3.8				100
V	2.8			6.7	9.2	34.2	19.8	17.6	5.7	4.0			100
VI	7.9				18.3	21.0	33.7	11.5	7.6				100
VII	2.3					7.8	10.8	34.5	26.2	11.2	7.4		100
VIII	8.2						20.4	27.2	27.3	11.5	5.4		100

This table shows the age distribution for each grade. For example, of all children in Std III, 29.3% children are 8 years old but there are also 5.4% who are 6, 12.5% who are 7, 20.9% who are 9, 18% who are 10, and 11.8% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	56.6	0.4	3.9	4.5	1.3	0.1	33.3	100
Age 4	55.8	0.8	11.3	10.3	3.5	0.5	17.8	100
Age 5	36.4	0.7	17.0	27.4	6.3	0.8	11.5	100
Age 6	13.3	0.5	16.5	52.9	10.1	1.0	5.7	100
Age 7	3.5	0.6	13.8	62.9	14.8	0.9	3.6	100
Age 8	1.7	0.2	8.3	68.9	16.9	1.2	2.9	100

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Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	53.9	21.5	8.2	5.2	11.2	100
II	35.0	29.0	12.6	8.0	15.5	100
III	24.0	26.6	15.2	10.7	23.5	100
IV	16.1	23.4	14.0	13.2	33.3	100
V	12.7	17.7	12.5	15.9	41.3	100
VI	6.7	14.5	12.1	14.1	52.7	100
VII	4.2	8.7	8.4	12.0	66.7	100
VIII	2.9	7.7	7.2	11.1	71.2	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 24% cannot even read letters, 26.6% can read letters but not words or higher, 15.2% can read words but not Std I level text or higher, 10.7% can read Std I level text but not Std II level text, and 23.5% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
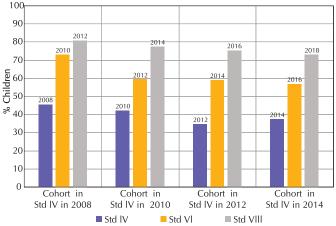
Reading Tool (Hindi)

Std II level text	Std I level text

Std II level text:

नगमा समझदार लड़की थी। मगर उसका छोटा भाई अमन बहुत नटखट था। एक दिन दोनों बाज़ार में घूम रहे थे। अमन ने रास्ते में पकौड़े देखे। उसे पकौड़े बहुत पसंद थे। माँ उसके लिए पकौड़े बनाती थी। नगमा ने कहा यह पकौड़े तीखे होंगे। मगर अमन नहीं माना। अमन ने पकौड़े खाए और उसकी आँखों से आँसू निकलने लगे।

Std I level text:

रात हो गई है। चाँद दिख रहा है। तारे भी चमक रहे हैं। सब लोग सो गए हैं।

Letters:

न प म
च स
थ ग द
र ल

Words:

आग सोच
ताला
गिर पानी
मौका धुन
देश
पैसा बूढ़ा

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	14.2	52.7	16.8
2014	15.6	66.1	21.9
2016	13.9	62.5	20.8
2018	12.3	62.0	23.7

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	43.1	74.8	44.4	80.3	93.1	80.7
2014	44.6	87.8	48.2	76.9	86.8	77.3
2016	38.0	82.6	41.8	73.9	96.0	75.2
2018	35.1	78.1	41.3	69.5	93.0	71.4

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 45.6% and in Std VI (in 2010) was 73.1%. When the cohort reached Std VIII in 2012, this figure was 80.7%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	42.7	29.4	15.4	6.9	5.7	100
II	22.7	36.9	22.2	9.4	8.9	100
III	12.1	32.6	26.9	13.9	14.6	100
IV	7.8	26.2	27.2	15.7	23.1	100
V	6.6	18.6	27.8	17.1	29.9	100
VI	3.2	12.4	26.8	17.4	40.3	100
VII	2.5	6.3	21.5	18.9	50.8	100
VIII	1.3	4.9	20.4	16.4	56.9	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 12.1% cannot even recognize numbers 1-9, 32.6% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 26.9% can recognize numbers up to 99 but cannot do subtraction, 13.9% can do subtraction but cannot do division, and 14.6% can do division. For each grade, the total of these exclusive categories is 100%.
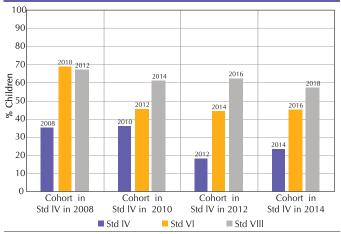
Arithmetic Tool (Hindi)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	25.1	68.4	28.1
2014	18.0	68.0	24.2
2016	20.0	72.0	27.3
2018	18.0	65.6	28.9

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	30.0	60.6	31.3	66.4	85.2	67.0
2014	31.4	72.4	34.9	60.3	80.9	61.2
2016	28.9	72.5	32.6	61.0	85.4	62.4
2018	24.1	64.0	29.9	55.1	78.7	57.0

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 35.1% and in Std VI (in 2010) was 68.9%. When the cohort reached Std VIII in 2012, this figure was 67%. The progress of each of these cohorts can be understood in the same way.

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Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
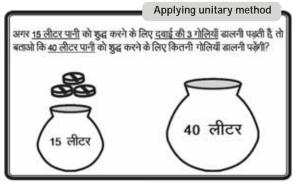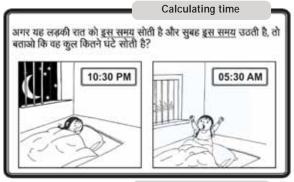
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	30.7	28.3	29.6
Age 11-13	59.0	57.9	58.5
Age 14-16	79.2	72.0	75.1
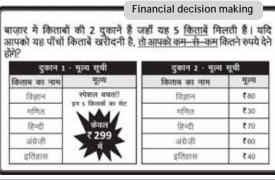
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	37.2	31.5	34.4	21.5	16.7	19.2
Age 11-13	66.7	58.6	62.5	49.8	41.2	45.3
Age 14-16	80.4	70.3	74.7	65.9	54.3	59.3
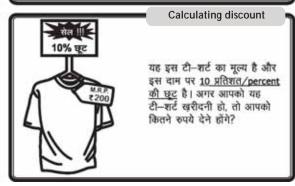
Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

अगर यह लड़की रात को इस समय सोती है और सुबह इस समय उठती है, तो बताओ कि वह कुल कितने घंटे सोती है?

10:30 PM   05:30 AM

Applying unitary method

अगर 15 लीटर पानी को शुद्ध करने के लिए दवाई की 3 गोलियाँ डालनी पड़ती है तो बताओ कि 40 लीटर पानी को शुद्ध करने के लिए कितनी गोलियाँ डालनी पड़ेंगी?

15 लीटर   40 लीटर

Financial decision making

बाज़ार में किताबों की 2 दुकानें हैं जहाँ यह 5 किताबें मिलती है। यदि आपको यह पाँचों किताबें खरीदनी है, तो आपको कम-से-कम कितने रुपये देने होंगे?

दुकान 1 - मूल्य सूची	
किताब का नाम	मूल्य
विज्ञान	स्पेशल बचत!! इन 5 किताबों का सेट
गणित	
हिन्दी	केवल ₹ 299 में
अंग्रेजी	
इतिहास	

दुकान 2 - मूल्य सूची	
किताब का नाम	मूल्य
विज्ञान	₹80
गणित	₹30
हिन्दी	₹70
अंग्रेजी	₹60
इतिहास	₹40

Calculating discount

सेल !!! 10% छूट
M.R.P ₹200

यह इस टी-शर्ट का मूल्य है और इस दाम पर 10 प्रतिशत/percent की छूट है। अगर आपको यह टी-शर्ट खरीदनी हो, तो आपको कितने रुपये देने होंगे?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	43.7	29.7	35.3	32.1	28.2	29.8	26.7	16.6	20.6	24.2	9.6	15.5
Age 15	40.7	25.4	32.0	38.1	30.4	33.8	20.6	20.8	20.7	20.6	9.7	14.4
Age 16	48.0	36.9	41.1	39.4	31.8	34.7	20.4	11.7	15.0	22.6	6.4	12.5
Age 14-16	43.8	30.5	35.9	36.1	29.9	32.4	23.0	16.4	19.1	22.5	8.7	14.3

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	49.0	42.3	45.9	54.9	41.3	48.5	32.9	26.5	29.9	32.6	23.8	28.5
Age 15	48.8	40.3	44.4	54.4	41.5	47.7	37.9	27.9	32.7	35.3	21.7	28.3
Age 16	52.7	39.0	44.6	53.1	44.9	48.3	37.1	28.0	31.7	39.6	23.3	30.0
Age 14-16	49.8	40.6	45.1	54.3	42.4	48.2	35.5	27.4	31.3	35.1	23.0	28.8

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 38 OUT OF 38 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	265	224	245	237
Upper primary schools (Std I-VII/VIII)	702	864	866	863
Total schools visited	967	1088	1111	1100

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	56.1	58.2	59.1	56.5
% Teachers present (Average)	84.6	77.5	74.6	68.5
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	55.9	52.1	52.0	52.9
% Teachers present (Average)	80.6	76.0	76.5	73.0

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	67.6	79.3	71.8	83.3
% Schools where Std IV children were observed sitting with one or more other classes	63.7	79.0	67.1	74.0
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	53.0	58.8	56.9	61.9
% Schools where Std IV children were observed sitting with one or more other classes	43.4	52.8	50.6	50.3

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	64.0	87.7	87.2	91.6
	Mid-day meal served in school on day of visit	57.2	69.2	76.5	84.5
Drinking water	No facility for drinking water	9.6	2.3	3.5	3.5
	Facility but no drinking water available	11.7	7.3	7.1	6.8
	Drinking water available	78.7	90.4	89.5	89.7
	Total	100	100	100	100
Toilet	No toilet facility	19.3	6.4	4.8	3.4
	Facility but toilet not useable	47.2	33.0	24.6	21.1
	Toilet useable	33.6	60.6	70.6	75.6
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	49.9	25.4	17.4	16.7
	Separate provision but locked	15.1	14.3	7.5	9.1
	Separate provision, unlocked but not useable	16.9	14.1	14.3	11.2
	Separate provision, unlocked and useable	18.1	46.2	60.8	63.0
	Total	100	100	100	100
Library	No library	47.1	23.7	30.7	40.9
	Library but no books being used by children on day of visit	24.7	45.8	36.6	31.6
	Library books being used by children on day of visit	28.2	30.5	32.8	27.5
	Total	100	100	100	100
Electricity	Electricity connection			72.6	69.5
	Of schools with electricity connection, % schools with electricity available on day of visit			63.6	71.4
Computer	No computer available for children to use	93.1	94.3	92.9	96.6
	Available but not being used by children on day of visit	2.9	5.0	6.3	2.8
	Computer being used by children on day of visit	4.0	0.7	0.8	0.6
	Total	100	100	100	100

Bihar RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	0.4	1.8	2.1	5.9
Upper primary schools (Std I-VII/VIII)	0.2	0.0	0.1	0.0

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	35.7	64.7	58.5
	No physical education period but dedicated time allotted	22.2	17.5	18.5
	No physical education period and no dedicated time allotted	42.2	17.8	23.0
	Total	100	100	100
Physical education teacher	Separate physical education teacher	4.4	46.7	37.6
	Other physical education teacher	44.3	32.9	35.4
	No physical education teacher	51.3	20.4	27.0
	Total	100	100	100
Playground	Playground inside the school premises	42.0	55.0	52.2
	Playground outside the school premises	22.9	20.2	20.8
	No accessible playground	35.1	24.8	27.0
	Total	100	100	100
Availability of any sports equipment		34.9	59.9	54.5
Supervised physical education activity observed on day of visit		14.2	26.4	23.6

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	91.0	94.2	95.2

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	13.7	8.7	7.4
Between July and September	71.2	65.9	80.4
After September	15.1	25.4	12.1

Chhattisgarh RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 16 OUT OF 18 DISTRICTS
Data is not presented where sample size is insufficient.
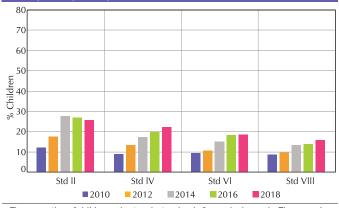
School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	76.4	20.0	0.0	3.6	100
Age 7-16: All	74.6	18.2	0.0	7.2	100
Age 7-10: All	75.7	22.6	0.0	1.7	100
Age 7-10: Boys	73.7	24.1	0.0	2.2	100
Age 7-10: Girls	77.7	21.1	0.0	1.2	100
Age 11-14: All	78.0	16.4	0.1	5.5	100
Age 11-14: Boys	75.4	19.1	0.1	5.5	100
Age 11-14: Girls	80.3	14.1	0.1	5.6	100
Age 15-16: All	65.1	13.1	0.0	21.7	100
Age 15-16: Boys	61.9	15.6	0.0	22.5	100
Age 15-16: Girls	67.7	11.1	0.1	21.2	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

— 11 to 14 Boys   — 11 to 14 Girls   — 15 to 16 Boys   — 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 33.6% in 2006, 18.1% in 2012, and 21.2% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

■ 2010   ■ 2012   ■ 2014   ■ 2016   ■ 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 25.6% as compared to 15.7% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	17.1	57.9	19.8	5.2									100
II	2.7	10.8	53.5	28.6	4.5								100
III		2.5	11.1	53.3	25.7	5.6	1.9						100
IV		1.9		12.8	45.7	33.4	6.2						100
V			2.9		9.1	52.3	28.6	5.3	1.9				100
VI			2.8			11.2	48.1	31.2	5.0	1.7			100
VII				1.7			10.5	49.0	30.7	6.3	1.8		100
VIII				2.0				11.9	49.7	27.3	7.5	1.6	100

This table shows the age distribution for each grade. For example, of all children in Std III, 53.3% children are 8 years old but there are also 11.1% who are 7, 25.7% who are 9, 5.6% who are 10, and 1.9% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	75.4	0.0	9.1	0.6	0.4	0.0	14.5	100
Age 4	69.9	0.3	19.8	1.4	1.1	0.0	7.6	100
Age 5	45.4	0.5	25.5	16.4	7.3	0.0	5.0	100
Age 6	7.8	0.0	7.4	60.4	21.8	0.0	2.6	100
Age 7	0.7	0.0	2.0	71.3	24.8	0.0	1.2	100
Age 8	0.6	0.0	0.2	73.2	24.4	0.0	1.6	100

Chhattisgarh RURAL

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	45.6	39.7	9.7	2.0	2.9	100
II	19.5	39.5	19.1	10.5	11.3	100
III	10.4	25.4	17.8	16.5	29.8	100
IV	5.8	13.8	15.2	18.7	46.6	100
V	3.4	12.1	9.3	15.8	59.5	100
VI	2.5	7.7	7.5	16.0	66.4	100
VII	1.3	5.8	6.7	10.1	76.1	100
VIII	1.7	5.0	5.8	8.8	78.7	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 10.4% cannot even read letters, 25.4% can read letters but not words or higher, 17.8% can read words but not Std I level text or higher, 16.5% can read Std I level text but not Std II level text, and 29.8% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
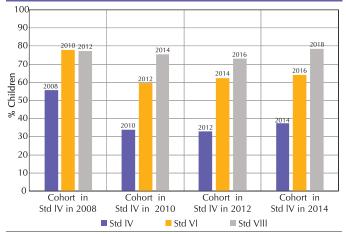
Reading Tool (Hindi)

Std II level text

राजू नाम का एक लड़का था। उसकी एक बड़ी बहन व एक छोटा भाई था। उसका भाई गाँव के पास के विद्यालय में पढ़ने जाता था। वह खूब मेहनत करता था। उसकी बहन बहुत अच्छी खिलाड़ी थी। उसे लंबी दौड़ लगाना अच्छा लगता था। वे तीनों रोज़ साथ-साथ मौज-मस्ती करते थे।

Std I level text

हर रविवार नानी घर आती है। हमारे लिए मिठाई लाती है। मैं नानी के साथ सोता हूँ। वह मुझे कहानी सुनाती है।

Letters

ह च ट
ल न
फ म र
स त

Words

कुल बड़ा
रोटी
पानी चूना
चलो हीरा
पैर
देर कौन

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	15.7	41.0	19.9
2014	15.4	42.3	21.3
2016	22.2	47.3	28.1
2018	25.0	46.7	29.8

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	44.0	64.2	46.2	76.2	89.0	77.5
2014	47.1	76.6	52.4	73.8	90.6	75.9
2016	51.0	75.9	56.0	70.9	89.9	73.5
2018	57.1	70.2	59.6	77.0	87.8	78.7

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 56% and in Std VI (in 2010) was 78.2%. When the cohort reached Std VIII in 2012, this figure was 77.5%. The progress of each of these cohorts can be understood in the same way.

Chhattisgarh RURAL

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	37.8	47.6	13.1	1.0	0.6	100
II	11.4	50.7	33.4	4.2	0.4	100
III	6.6	34.5	39.6	16.9	2.4	100
IV	2.7	23.5	38.6	23.9	11.3	100
V	1.7	17.4	32.6	21.6	26.8	100
VI	1.3	15.2	31.0	22.7	29.8	100
VII	0.8	12.3	36.4	24.1	26.4	100
VIII	1.3	6.7	39.8	21.2	31.0	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 6.6% cannot even recognize numbers 1-9, 34.5% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 39.6% can recognize numbers up to 99 but cannot do subtraction, 16.9% can do subtraction but cannot do division, and 2.4% can do division. For each grade, the total of these exclusive categories is 100%.

Arithmetic Tool (Hindi)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	12.1	27.3	14.6
2014	9.6	31.1	14.2
2016	14.5	37.7	20.0
2018	16.0	30.7	19.3

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	13.1	22.3	14.1	29.8	46.0	31.4
2014	14.1	35.7	18.0	25.4	58.7	29.6
2016	18.6	40.8	23.1	25.3	45.6	28.1
2018	26.1	30.2	26.9	28.0	47.3	31.0

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

Std IV   Std VI   Std VIII

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 39.5% and in Std VI (in 2010) was 55.2%. When the cohort reached Std VIII in 2012, this figure was 31.4%. The progress of each of these cohorts can be understood in the same way.
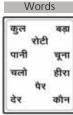
Chhattisgarh RURAL

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
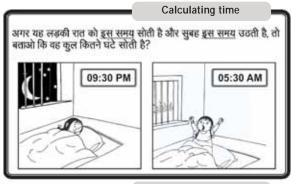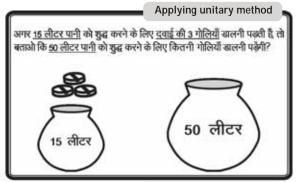
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	38.3	44.0	41.3
Age 11-13	66.6	73.5	70.3
Age 14-16	76.9	83.0	80.5

Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	29.3	32.0	30.7	11.0	12.3	11.7
Age 11-13	51.3	50.2	50.7	28.4	28.0	28.2
Age 14-16	54.5	51.9	53.0	32.5	31.1	31.7

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

अगर यह लड़की रात को इस समय सोती है और सुबह इस समय उठती है, तो बताओ कि वह कुल कितने घंटे सोती है?

09:30 PM   05:30 AM

Applying unitary method

अगर 15 लीटर पानी को शुद्ध करने के लिए दवाई की 3 गोलियाँ डालनी पड़ती हैं तो बताओ कि 50 लीटर पानी को शुद्ध करने के लिए कितनी गोलियाँ डालनी पड़ेंगी?

15 लीटर   50 लीटर

Financial decision making

बाज़ार में किताबों की 2 दुकानें हैं जहाँ यह 5 किताबें मिलती हैं। यदि आपको यह पाँचों किताबें खरीदनी है, तो आपको कम-से-कम कितने रुपये देने होंगे?

दुकान 1 - मूल्य सूची
किताब का नाम	मूल्य
विज्ञान	₹60
गणित	₹80
हिन्दी	₹30
अंग्रेजी	₹70
इतिहास	₹50

दुकान 2 - मूल्य सूची
किताब का नाम	मूल्य
विज्ञान	स्पेशल बचत!! इन 5 किताबों का सेट
गणित	
हिन्दी	
अंग्रेजी	केवल ₹ 299 में
इतिहास	

Calculating discount

सेल !!! 10% छूट
M.R.P ₹300

यह इस टी–शर्ट का मूल्य है और इस दाम पर 10 प्रतिशत/percent की छूट है। अगर आपको यह टी–शर्ट खरीदनी हो, तो आपको कितने रुपये देने होंगे?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018
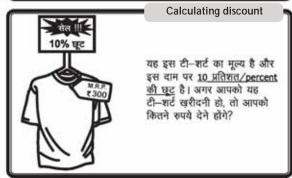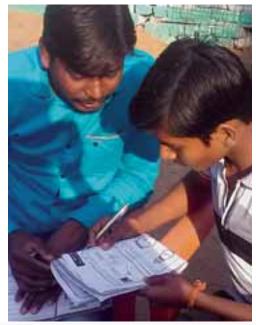
Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	28.3	27.9	28.1	28.3	33.2	30.9	34.3	18.9	26.0	5.2	2.0	3.5
Age 15	40.2	33.5	35.8	44.0	28.6	33.9	40.1	38.3	38.9	15.6	9.4	11.5
Age 16	36.5	36.2	36.4	46.1	31.8	39.2	48.8	25.1	37.3	21.4	10.2	16.0
Age 14-16	34.2	32.2	33.1	38.5	31.1	34.3	40.9	27.9	33.6	13.5	7.0	9.8

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	45.6	35.8	39.8	58.0	50.2	53.3	47.3	50.4	49.1	34.2	18.9	25.1
Age 15	47.1	40.3	43.3	61.0	49.6	54.6	52.5	45.3	48.5	38.9	25.6	31.4
Age 16	40.3	44.8	42.9	61.5	47.5	53.6	45.8	53.7	50.2	39.6	27.8	32.9
Age 14-16	44.4	40.1	41.9	60.1	49.2	53.8	48.6	49.8	49.3	37.5	23.8	29.7

Chhattisgarh RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 16 OUT OF 18 DISTRICTS
Data is not presented where sample size is insufficient.

Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	301	431	468	459
Upper primary schools (Std I-VII/VIII)	124	11	5	9
Total schools visited	425	442	473	468

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	70.5	74.6	68.3	75.2
% Teachers present (Average)	86.5	82.2	79.6	84.2

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	64.8	76.2	75.8	71.3
% Schools where Std IV children were observed sitting with one or more other classes	51.1	53.9	56.0	53.3

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	86.1	92.9	94.7	97.0
	Mid-day meal served in school on day of visit	94.6	86.1	80.1	91.7
Drinking water	No facility for drinking water	12.9	10.2	5.5	7.9
	Facility but no drinking water available	9.6	9.5	9.5	9.6
	Drinking water available	77.6	80.3	85.0	82.5
	Total	100	100	100	100
Toilet	No toilet facility	28.9	8.2	5.1	2.1
	Facility but toilet not useable	41.5	22.9	16.8	12.2
	Toilet useable	29.6	68.9	78.1	85.7
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	46.2	29.8	13.7	10.1
	Separate provision but locked	16.3	7.6	4.7	3.2
	Separate provision, unlocked but not useable	17.5	9.2	11.4	11.0
	Separate provision, unlocked and useable	20.0	53.4	70.2	75.7
	Total	100	100	100	100
Library	No library	27.1	10.5	14.0	10.3
	Library but no books being used by children on day of visit	36.5	63.3	61.5	66.0
	Library books being used by children on day of visit	36.5	26.2	24.5	23.8
	Total	100	100	100	100
Electricity	Electricity connection			86.6	91.6
	Of schools with electricity connection, % schools with electricity available on day of visit			73.1	82.0
Computer	No computer available for children to use	95.9	99.5	98.5	97.7
	Available but not being used by children on day of visit	2.4	0.5	1.3	1.9
	Computer being used by children on day of visit	1.7	0.0	0.2	0.4
	Total	100	100	100	100

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
All schools (Std I-IV/V and Std I-VII/VIII)	16.1	33.6	41.0	40.2

Table 19: Physical education and sports in schools 2018

% Schools with		All schools (Std I-IV/V and Std I-VII/VIII)
Dedicated time for physical education	Physical education period in the timetable	65.9
	No physical education period but dedicated time allotted	24.1
	No physical education period and no dedicated time allotted	10.1
	Total	100
Physical education teacher	Separate physical education teacher	8.5
	Other physical education teacher	73.4
	No physical education teacher	18.1
	Total	100
Playground	Playground inside the school premises	70.0
	Playground outside the school premises	18.2
	No accessible playground	11.8
	Total	100
Availability of any sports equipment		49.6
Supervised physical education activity observed on day of visit		18.7

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	99.8	99.2	98.9

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	4.9	4.4	1.8
Between July and September	94.2	95.2	80.5
After September	0.9	0.4	17.7

Gujarat, Haryana

Himachal Pradesh, Jammu and Kashmir

Jharkhand

Gujarat RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 26 OUT OF 26 DISTRICTS
Data is not presented where sample size is insufficient.
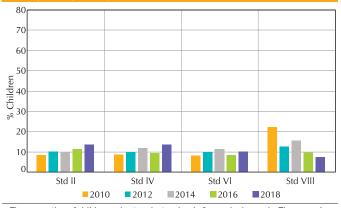
School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	85.6	12.4	0.1	1.8	100
Age 7-16: All	81.2	13.7	0.1	5.0	100
Age 7-10: All	86.2	13.1	0.1	0.6	100
Age 7-10: Boys	83.4	15.6	0.2	0.8	100
Age 7-10: Girls	89.3	10.2	0.1	0.4	100
Age 11-14: All	84.4	12.4	0.1	3.1	100
Age 11-14: Boys	83.6	13.8	0.0	2.6	100
Age 11-14: Girls	85.3	11.0	0.1	3.6	100
Age 15-16: All	61.7	18.4	0.1	19.8	100
Age 15-16: Boys	65.0	19.6	0.0	15.4	100
Age 15-16: Girls	57.9	17.0	0.2	24.9	100
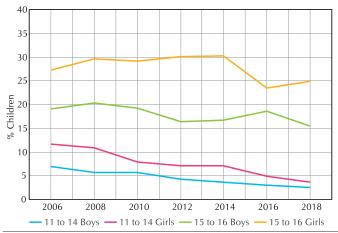
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

— 11 to 14 Boys — 11 to 14 Girls — 15 to 16 Boys — 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 27.3% in 2006, 30.1% in 2012, and 24.9% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

■ 2010 ■ 2012 ■ 2014 ■ 2016 ■ 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 13.7% as compared to 7.4% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	17.2	72.4	8.3	2.1									100
II	1.3	7.4	79.0	11.2	1.1								100
III		0.7	9.5	76.0	12.1	1.7							100
IV			1.3	10.7	69.0	15.9	3.2						100
V				0.8	8.0	75.0	13.0	3.2					100
VI					0.9	7.5	70.3	17.7	3.7				100
VII						1.2	8.2	68.6	18.4	3.6			100
VIII							1.3	7.9	72.1	13.0	5.7		100

This table shows the age distribution for each grade. For example, of all children in Std III, 76% children are 8 years old but there are also 9.5% who are 7, 12.1% who are 9, and 1.7% who are 10 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school Anganwadi	Pre-school Govt LKG/ UKG	Pre-school Pvt LKG/ UKG	School Govt	School Pvt	School Other	Not in pre-school or school	Total
Age 3	89.2	1.1	4.7	0.0	0.0	0.0	4.9	100
Age 4	88.0	0.9	7.8	0.7	0.2	0.0	2.5	100
Age 5	54.9	2.3	11.8	23.0	5.3	0.0	2.7	100
Age 6	6.1	0.2	2.4	81.2	9.0	0.0	1.1	100
Age 7	0.6	0.0	0.1	85.9	12.5	0.1	0.9	100
Age 8	0.0	0.0	0.0	86.6	12.8	0.0	0.6	100

Gujarat RURAL

Annual Status of Education Report
असर ASER 2018 RURAL
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Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	36.5	40.8	14.7	4.2	3.8	100
II	13.0	24.3	33.1	19.1	10.6	100
III	6.1	15.5	22.5	22.7	33.1	100
IV	3.7	10.0	13.9	22.6	49.8	100
V	2.7	7.8	12.3	23.5	53.7	100
VI	2.0	4.9	10.5	20.7	61.9	100
VII	1.5	3.9	6.9	17.2	70.4	100
VIII	0.6	4.8	5.5	15.9	73.2	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 6.1% cannot even read letters, 15.5% can read letters but not words or higher, 22.5% can read words but not Std I level text or higher, 22.7% can read Std I level text but not Std II level text, and 33.1% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
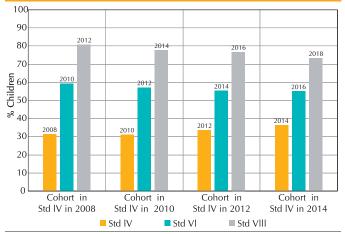
Reading Tool (Gujarati)

Std II level text

શિયાળો આવે એટલે ઠંડી લાગે અને ઊનનાં કપડાં પહેરવાં ગમે. રાતે તાપણું કરી તેની ફરતે ગોળ બેસી વાતો કરવી ગમે. ઉનાળો આવે ત્યારે ગરમી શરૂ થઈ જાય. પાતળાં કપડાં પહેરવાં ગમે અને પંખામાં સૂવું ગમે. ચોમાસું આવે એટલે ખૂબ વરસાદ પડે. નદીમાં પૂર આવે અને ખેતરમાં અનાજ ઊગી નીકળે. બહાર જતાં છત્રી સાથે રાખવી પડે.

Std I level text

રમણ વાડીએ ચાલ.
મામાની વાડીએ જઈએ.
મામાની વાડીમાં જઈએ અને જામફળ ખાઈએ.
જામફળ ખાવાની મજા આવશે.

Letters

દ ક ચ
બ લ
ચ હ ત
મ ખ

Words

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	19.5	34.2	20.9
2014	17.6	41.8	20.3
2016	21.6	36.7	23.0
2018	32.3	39.3	33.3

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	46.3	66.3	47.7	80.2	86.2	80.9
2014	44.6	64.1	46.6	76.4	84.2	77.6
2016	52.3	59.1	52.9	75.7	85.7	76.6
2018	52.0	68.1	53.8	72.5	84.4	73.3

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

Std IV   Std VI   Std VIII

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 31.5% and in Std VI (in 2010) was 59.2%. When the cohort reached Std VIII in 2012, this figure was 80.9%. The progress of each of these cohorts can be understood in the same way.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	33.5	51.2	10.7	2.6	2.0	100
II	13.8	45.1	33.6	6.5	1.0	100
III	5.8	26.1	42.5	23.3	2.3	100
IV	4.9	17.8	35.4	27.8	14.1	100
V	2.3	12.5	34.4	30.7	20.1	100
VI	2.2	10.1	28.0	32.3	27.4	100
VII	1.8	5.8	26.4	31.6	34.3	100
VIII	0.8	7.7	23.3	32.5	35.6	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 5.8% cannot even recognize numbers 1-9, 26.1% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 42.5% can recognize numbers up to 99 but cannot do subtraction, 23.3% can do subtraction but cannot do division, and 2.3% can do division. For each grade, the total of these exclusive categories is 100%.
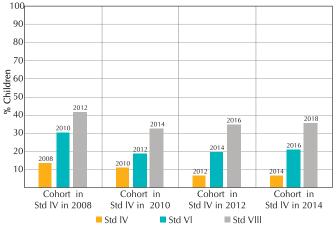
Arithmetic Tool (Gujarati)

Table 8: Trends over time Arithmetic in Std III by school type 2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	12.0	33.6	14.0
2014	12.4	35.2	14.9
2016	18.3	31.9	19.6
2018	22.8	43.1	25.7

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time Arithmetic in Std V and Std VIII by school type 2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	12.4	34.0	13.9	39.2	58.2	41.4
2014	13.9	34.8	16.1	29.3	50.4	32.6
2016	14.5	32.2	16.1	33.9	44.4	34.8
2018	18.4	34.2	20.2	35.8	32.4	35.6

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time % Children who can do division Cohorts of children in Std IV in 2008, 2010, 2012 and 2014
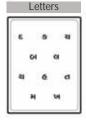

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 13.2% and in Std VI (in 2010) was 30.4%. When the cohort reached Std VIII in 2012, this figure was 41.4%. The progress of each of these cohorts can be understood in the same way.

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Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
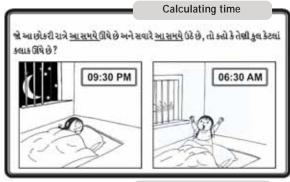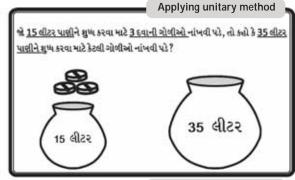
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	41.9	48.1	44.9
Age 11-13	64.8	72.0	68.4
Age 14-16	77.7	77.8	77.7
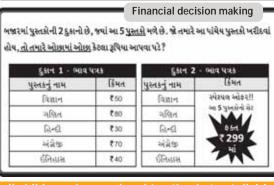
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	37.9	38.5	38.2	12.7	10.5	11.6
Age 11-13	63.9	65.4	64.7	30.3	33.6	32.0
Age 14-16	62.8	65.1	64.0	38.9	39.1	39.0
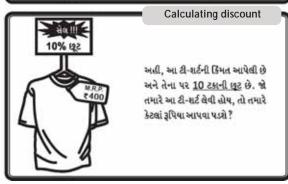
Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

Applying unitary method

Financial decision making

Calculating discount

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	19.5	18.2	18.7	35.3	17.7	24.4	22.1	15.8	18.2	16.5	4.9	9.3
Age 15	22.6	34.7	29.4	29.6	27.6	28.5	6.0	12.6	9.7	10.9	6.8	8.6
Age 16	27.3	26.0	26.7	34.4	37.2	35.7	13.7	15.4	14.5	23.5	1.5	13.2
Age 14-16	22.9	26.5	24.9	32.7	25.5	28.7	13.2	14.4	13.9	16.2	5.0	9.9

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	34.1	28.2	30.9	48.5	45.2	46.8	25.2	27.1	26.2	20.4	14.7	17.4
Age 15	43.1	33.8	38.4	48.9	51.3	50.1	22.3	21.4	21.8	19.6	8.2	13.8
Age 16	36.5	36.3	36.4	36.4	39.6	38.0	13.3	24.5	18.8	17.0	11.5	14.3
Age 14-16	37.7	32.2	34.9	44.9	45.5	45.2	20.7	24.6	22.7	19.1	11.8	15.4

Gujarat RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 26 OUT OF 26 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	66	67	82	105
Upper primary schools (Std I-VII/VIII)	557	653	562	539
Total schools visited	623	720	644	644

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	87.4	85.5	89.4	89.1
% Teachers present (Average)	94.7	94.1	91.6	89.1
Upper primary schools (Std I-VII/VIII)	**2010**	**2014**	**2016**	**2018**
% Enrolled children present (Average)	84.4	82.5	83.0	84.9
% Teachers present (Average)	95.9	93.5	90.8	92.9

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	56.1	77.3	89.0	71.4
% Schools where Std IV children were observed sitting with one or more other classes	51.7	69.4	88.5	70.6
Upper primary schools (Std I-VII/VIII)	**2010**	**2014**	**2016**	**2018**
% Schools where Std II children were observed sitting with one or more other classes	33.6	45.2	47.4	46.9
% Schools where Std IV children were observed sitting with one or more other classes	30.7	37.5	43.6	40.4

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	88.3	90.0	91.9	90.4
	Mid-day meal served in school on day of visit	96.2	94.2	95.4	94.1
Drinking water	No facility for drinking water	14.2	8.5	9.7	6.4
	Facility but no drinking water available	6.5	4.5	5.8	5.6
	Drinking water available	79.4	87.0	84.6	88.0
	Total	100	100	100	100
Toilet	No toilet facility	2.6	1.7	0.3	0.2
	Facility but toilet not useable	32.6	13.5	16.8	8.5
	Toilet useable	64.8	84.8	82.9	91.3
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	12.7	5.8	2.4	2.6
	Separate provision but locked	20.7	5.6	6.5	1.1
	Separate provision, unlocked but not useable	16.7	7.2	10.0	8.8
	Separate provision, unlocked and useable	49.9	81.4	81.1	87.4
	Total	100	100	100	100
Library	No library	16.2	7.7	12.2	14.7
	Library but no books being used by children on day of visit	35.2	54.0	45.5	44.8
	Library books being used by children on day of visit	48.5	38.3	42.3	40.5
	Total	100	100	100	100
Electricity	Electricity connection			99.2	99.4
	Of schools with electricity connection, % schools with electricity available on day of visit			94.0	96.5
Computer	No computer available for children to use	47.8	18.7	24.8	33.1
	Available but not being used by children on day of visit	24.3	52.8	43.7	42.9
	Computer being used by children on day of visit	27.9	28.5	31.5	24.0
	Total	100	100	100	100

Gujarat RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	33.3	43.3	68.4	52.4
Upper primary schools (Std I-VII/VIII)	1.3	2.8	4.0	5.0

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	68.4	72.6	72.0
	No physical education period but dedicated time allotted	23.2	23.7	23.6
	No physical education period and no dedicated time allotted	8.4	3.7	4.5
	Total	100	100	100
Physical education teacher	Separate physical education teacher	34.7	28.8	29.7
	Other physical education teacher	51.0	56.9	56.0
	No physical education teacher	14.3	14.3	14.3
	Total	100	100	100
Playground	Playground inside the school premises	78.8	83.0	82.4
	Playground outside the school premises	6.1	8.9	8.4
	No accessible playground	15.2	8.1	9.2
	Total	100	100	100
Availability of any sports equipment		63.6	84.4	81.0
Supervised physical education activity observed on day of visit		48.5	44.0	44.7

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	99.2	98.9	98.9

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	8.0	8.1	2.5
Between July and September	88.9	72.6	96.7
After September	3.1	19.4	0.8

Haryana RURAL
ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 21 OUT OF 21 DISTRICTS
Data is not presented where sample size is insufficient.
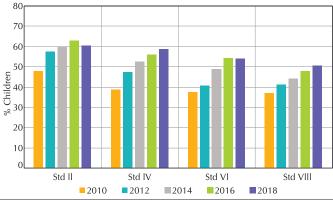
Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	42.6	55.3	0.4	1.7	100
Age 7-16: All	43.4	53.8	0.4	2.5	100
Age 7-10: All	39.7	58.7	0.4	1.2	100
Age 7-10: Boys	35.1	63.6	0.3	0.9	100
Age 7-10: Girls	45.3	52.7	0.5	1.5	100
Age 11-14: All	45.8	51.7	0.4	2.2	100
Age 11-14: Boys	39.6	58.0	0.3	2.1	100
Age 11-14: Girls	52.8	44.5	0.4	2.3	100
Age 15-16: All	47.0	46.0	0.3	6.8	100
Age 15-16: Boys	40.4	52.7	0.2	6.7	100
Age 15-16: Girls	54.1	38.8	0.4	6.8	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 19.4% in 2006, 9.3% in 2012, and 6.8% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 60.6% as compared to 50.8% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	40.3	33.7	17.8	5.0	3.2								100
II		7.2	22.7	38.3	23.0	5.8	3.0						100
III			4.8	21.6	38.9	22.2	8.9	3.6					100
IV				5.6	22.9	37.3	23.9	6.1	4.2				100
V					5.3	20.5	43.9	19.9	6.8	3.6			100
VI						4.8	22.5	37.5	26.8	6.0	2.4		100
VII							5.2	19.7	44.6	22.3	5.4	2.9	100
VIII								4.9	27.3	38.2	21.7	5.9 2.0	100

This table shows the age distribution for each grade. For example, of all children in Std III, 38.9% children are 8 years old but there are also 21.6% who are 7, 22.2% who are 9, 8.9% who are 10, and 3.6% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	34.7	2.1	36.2	1.9	2.7	0.1	22.4	100
Age 4	15.0	3.8	54.2	8.3	7.8	0.3	10.7	100
Age 5	4.0	2.1	46.9	20.7	22.0	0.1	4.4	100
Age 6	1.2	0.8	21.3	31.3	43.4	0.3	1.7	100
Age 7	0.5	0.2	5.2	35.0	57.4	0.3	1.3	100
Age 8	0.2	0.1	1.4	39.3	57.4	0.4	1.3	100

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	23.0	29.3	27.4	10.5	9.8	100
II	8.2	20.9	23.1	20.9	26.9	100
III	4.2	9.7	17.1	22.7	46.2	100
IV	2.9	6.0	11.0	18.7	61.4	100
V	2.1	4.8	7.6	16.4	69.1	100
VI	1.0	2.6	4.7	13.2	78.6	100
VII	1.2	2.9	3.9	10.7	81.4	100
VIII	1.5	2.7	3.5	11.1	81.2	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 4.2% cannot even read letters, 9.7% can read letters but not words or higher, 17.1% can read words but not Std I level text or higher, 22.7% can read Std I level text but not Std II level text, and 46.2% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
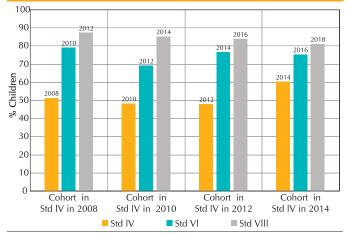
Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	14.7	52.4	34.1
2014	21.7	61.5	45.4
2016	25.1	61.0	46.2
2018	33.5	56.1	46.4

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Reading Tool (Hindi)

Std II level text

रामपुर में एक मैदान था। वहाँ कुछ नहीं उगता था। वहाँ कोई खेलने नहीं जाता था। एक दिन कुछ लोग आए। उन्होंने गाँव के लोगों को बुलाया। सबने मिलकर तय किया कि यहाँ बगीचा बनाया जाए। खाद मंगाकर तरह-तरह के पौधे लगाए गए। सही समय पर पानी दिया गया। आज वहाँ एक सुंदर बगीचा है। इसलिए वहाँ सभी खेलने जाते हैं।

Std I level text

रूपा बाहर खेल रही थी। खेलते-खेलते रात हो गई। रूपा अपने घर चली गई। वह खाना खाकर सो गई।

Letters

द क च
ल ब
ह थ त
म ख

Words

नाक तोता
कूड़ा
खुश मैना
मौका सेब
पीला
झोला दिन

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	43.5	79.2	59.7	82.3	94.5	87.4
2014	53.9	81.3	68.2	78.4	93.5	85.2
2016	54.6	79.1	68.3	76.4	91.6	83.8
2018	58.1	78.3	69.3	73.4	88.7	81.3

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

Legend: Std IV, Std VI, Std VIII

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 51.4% and in Std VI (in 2010) was 79%. When the cohort reached Std VIII in 2012, this figure was 87.4%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	17.3	29.3	44.2	7.6	1.6	100
II	5.3	22.5	39.7	27.1	5.4	100
III	2.7	12.8	30.8	34.3	19.4	100
IV	1.6	8.0	23.2	26.7	40.6	100
V	1.3	5.4	16.3	26.1	50.9	100
VI	0.6	3.6	16.6	19.5	59.8	100
VII	1.1	4.3	15.2	18.9	60.5	100
VIII	1.2	3.4	13.3	19.0	63.2	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 2.7% cannot even recognize numbers 1-9, 12.8% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 30.8% can recognize numbers up to 99 but cannot do subtraction, 34.3% can do subtraction but cannot do division, and 19.4% can do division. For each grade, the total of these exclusive categories is 100%.
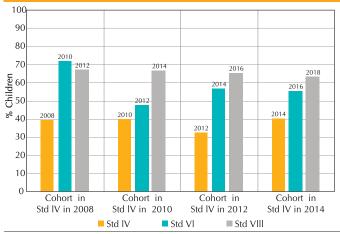
Arithmetic Tool (Hindi)

Table 8: Trends over time Arithmetic in Std III by school type 2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	20.0	70.8	46.0
2014	24.0	74.7	54.1
2016	27.7	73.7	54.8
2018	31.6	70.7	53.9

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time Arithmetic in Std V and Std VIII by school type 2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	25.4	63.7	42.9	56.0	82.6	67.2
2014	30.8	71.0	51.9	50.7	86.1	66.7
2016	30.1	63.8	48.9	53.4	78.0	65.3
2018	34.4	64.5	51.0	49.1	76.8	63.3

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time % Children who can do division Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 39.6% and in Std VI (in 2010) was 71.8%. When the cohort reached Std VIII in 2012, this figure was 67.2%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
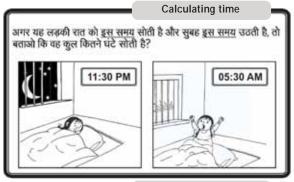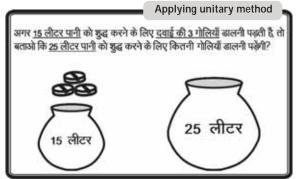
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	52.4	61.4	56.6
Age 11-13	78.1	80.1	79.0
Age 14-16	86.9	87.4	87.1
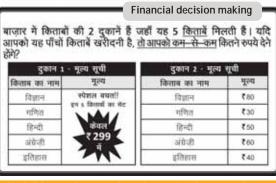
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	62.5	63.7	63.0	32.6	37.1	34.7
Age 11-13	80.6	78.4	79.6	61.8	58.4	60.2
Age 14-16	81.8	82.1	82.0	66.5	66.7	66.6
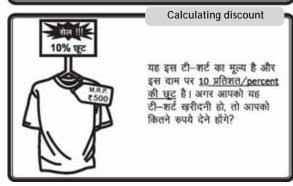
Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

अगर यह लड़की रात को इस समय सोती है और सुबह इस समय उठती है, तो बताओ कि वह कुल कितने घंटे सोती है?

11:30 PM   05:30 AM

Applying unitary method

अगर 15 लीटर पानी को शुद्ध करने के लिए दवाई की 3 गोलियाँ डालनी पड़ती है तो बताओ कि 25 लीटर पानी को शुद्ध करने के लिए कितनी गोलियाँ डालनी पड़ेंगी?

15 लीटर   25 लीटर

Financial decision making

बाज़ार में किताबों की 2 दुकानें हैं जहाँ यह 5 किताबें मिलती है। यदि आपको यह पाँचों किताबें खरीदनी है, तो आपको कम-से-कम कितने रुपये देने होंगे?

दुकान 1 - मूल्य सूची
किताब का नाम	मूल्य
विज्ञान	स्पेशल बचत!! इन 5 किताबों का सेट
गणित	
हिन्दी	केवल
अंग्रेजी	₹ 299 में
इतिहास	

दुकान 2 - मूल्य सूची
किताब का नाम	मूल्य
विज्ञान	₹80
गणित	₹30
हिन्दी	₹50
अंग्रेजी	₹60
इतिहास	₹40

Calculating discount

सेल !!! 10% छूट
M.R.P ₹500

यह इस टी-शर्ट का मूल्य है और इस दाम पर 10 प्रतिशत/percent की छूट है। अगर आपको यह टी-शर्ट खरीदनी हो, तो आपको कितने रुपये देने होंगे?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018
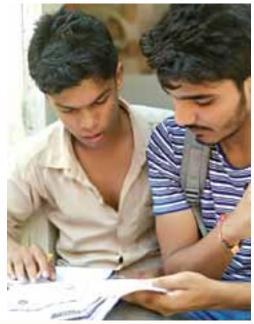
Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	30.3	41.6	35.8	48.2	46.5	47.4	40.4	33.9	37.2	22.1	10.5	16.5
Age 15	22.9	42.2	35.4	48.5	36.8	41.0	30.7	24.1	26.4	15.3	6.1	9.3
Age 16	44.1	32.0	38.2	39.0	38.6	38.8	40.9	42.8	41.8	13.8	10.5	12.2
Age 14-16	31.9	39.9	36.2	46.0	40.9	43.2	38.0	31.7	34.6	18.2	8.7	13.1

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	48.6	48.7	48.6	57.3	56.1	56.7	43.2	43.7	43.4	35.3	25.8	30.6
Age 15	52.5	53.1	52.8	63.6	54.2	58.7	43.2	46.3	44.8	39.9	27.2	33.3
Age 16	56.3	54.6	55.4	62.7	57.2	60.0	43.1	43.8	43.4	39.0	25.9	32.6
Age 14-16	52.1	51.9	52.0	61.0	55.7	58.3	43.2	44.6	43.9	37.9	26.3	32.1

Haryana RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 21 OUT OF 21 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	302	445	439	392
Upper primary schools (Std I-VII/VIII)	226	132	154	221
Total schools visited	528	577	593	613

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	82.9	78.7	82.3	77.7
% Teachers present (Average)	89.8	85.8	85.3	87.0
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	81.7	79.6	83.8	77.6
% Teachers present (Average)	87.8	86.1	85.8	88.5

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	33.0	34.0	43.3	40.9
% Schools where Std IV children were observed sitting with one or more other classes	30.1	27.4	32.9	36.2
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	31.3	35.2	53.6	42.9
% Schools where Std IV children were observed sitting with one or more other classes	28.9	27.3	54.7	40.6

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	51.0	75.8	82.0	88.2
	Mid-day meal served in school on day of visit	93.7	91.7	92.5	85.3
Drinking water	No facility for drinking water	17.7	15.5	16.6	11.6
	Facility but no drinking water available	7.7	8.4	7.6	6.4
	Drinking water available	74.6	76.2	75.8	82.0
	Total	100	100	100	100
Toilet	No toilet facility	2.0	2.4	0.5	0.7
	Facility but toilet not useable	30.1	15.8	14.0	8.5
	Toilet useable	67.9	81.8	85.5	90.8
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	10.0	4.6	2.9	4.8
	Separate provision but locked	13.4	3.3	3.4	2.3
	Separate provision, unlocked but not useable	23.9	12.5	11.4	8.5
	Separate provision, unlocked and useable	52.8	79.6	82.3	84.4
	Total	100	100	100	100
Library	No library	35.4	15.8	16.8	16.0
	Library but no books being used by children on day of visit	33.0	48.2	42.3	44.8
	Library books being used by children on day of visit	31.6	36.0	40.9	39.1
	Total	100	100	100	100
Electricity	Electricity connection			96.2	95.7
	Of schools with electricity connection, % schools with electricity available on day of visit			49.5	70.8
Computer	No computer available for children to use	82.6	88.5	89.4	81.7
	Available but not being used by children on day of visit	10.5	7.9	8.2	13.3
	Computer being used by children on day of visit	6.9	3.7	2.4	5.1
	Total	100	100	100	100

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	10.3	12.4	18.9	25.3
Upper primary schools (Std I-VII/VIII)	1.4	1.5	5.2	4.1

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	30.8	67.9	44.6
	No physical education period but dedicated time allotted	47.3	22.0	37.9
	No physical education period and no dedicated time allotted	21.9	10.1	17.5
	Total	100	100	100
Physical education teacher	Separate physical education teacher	9.7	63.4	29.2
	Other physical education teacher	65.1	25.5	50.8
	No physical education teacher	25.2	11.1	20.1
	Total	100	100	100
Playground	Playground inside the school premises	82.0	88.1	84.3
	Playground outside the school premises	9.4	8.7	9.1
	No accessible playground	8.6	3.2	6.6
	Total	100	100	100
Availability of any sports equipment		59.3	64.7	61.2
Supervised physical education activity observed on day of visit		30.6	36.6	32.8

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	98.9	96.6	99.0

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	4.0	5.7	2.3
Between July and September	72.6	83.3	58.9
After September	23.4	11.0	38.8

Himachal Pradesh RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 12 OUT OF 12 DISTRICTS
Data is not presented where sample size is insufficient.
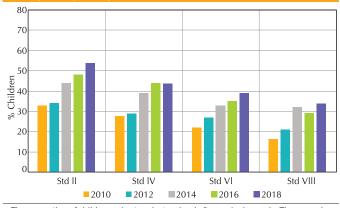
School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	58.9	40.7	0.0	0.4	100
Age 7-16: All	63.2	36.1	0.1	0.7	100
Age 7-10: All	54.7	45.0	0.1	0.2	100
Age 7-10: Boys	51.8	48.1	0.0	0.1	100
Age 7-10: Girls	57.6	41.8	0.2	0.4	100
Age 11-14: All	65.4	34.1	0.0	0.6	100
Age 11-14: Boys	62.4	36.9	0.0	0.7	100
Age 11-14: Girls	68.5	31.0	0.0	0.5	100
Age 15-16: All	79.5	18.2	0.1	2.2	100
Age 15-16: Boys	76.4	21.0	0.3	2.4	100
Age 15-16: Girls	82.9	15.2	0.0	2.0	100
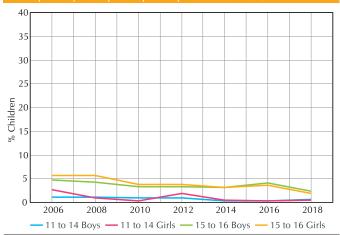
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 5.6% in 2006, 3.8% in 2012, and 2% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 53.7% as compared to 33.5% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	33.2	53.2	11.6	2.0									100
II	2.6	25.2	57.1	12.7	2.5								100
III	1.4		21.9	57.9	16.7	2.2							100
IV	2.4			29.5	51.1	13.6	3.4						100
V	2.9				28.8	51.9	14.1	2.3					100
VI	2.7					33.0	50.9	12.3	1.1				100
VII	3.7						28.2	52.4	14.1	1.7			100
VIII	3.6							40.2	46.1	8.7	1.4		100

This table shows the age distribution for each grade. For example, of all children in Std III, 57.9% children are 8 years old but there are also 21.9% who are 7, 16.7% who are 9, and 2.2% who are 10 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	57.6	2.6	30.6	1.6	1.0	0.0	6.6	100
Age 4	37.4	3.4	51.4	3.3	1.3	0.0	3.1	100
Age 5	15.8	5.9	36.3	21.4	18.9	0.0	1.7	100
Age 6	1.2	0.5	6.0	41.5	50.4	0.0	0.3	100
Age 7	0.1	0.4	1.8	48.8	48.2	0.3	0.4	100
Age 8	0.3	0.0	0.3	56.3	42.7	0.1	0.3	100

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	18.3	43.8	24.6	7.4	5.8	100
II	4.0	20.8	22.7	26.4	26.0	100
III	2.0	9.2	15.7	25.4	47.8	100
IV	2.7	5.9	6.8	14.1	70.7	100
V	1.8	3.1	4.7	13.4	76.9	100
VI	0.5	3.0	4.8	10.0	81.6	100
VII	0.3	1.9	3.9	6.2	87.8	100
VIII	0.4	2.2	3.0	4.5	89.9	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 2% cannot even read letters, 9.2% can read letters but not words or higher, 15.7% can read words but not Std I level text or higher, 25.4% can read Std I level text but not Std II level text, and 47.8% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
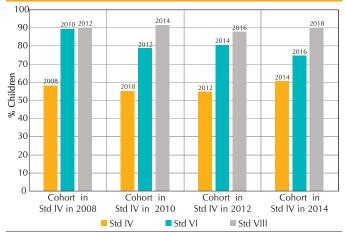
Reading Tool (Hindi)

Std II level text	Std I level text
नगमा समझदार लड़की थी। मगर उसका छोटा भाई अमन बहुत नटखट था। एक दिन दोनों बाज़ार में घूम रहे थे। अमन ने रास्ते में पकौड़े देखे। उसे पकौड़े बहुत पसंद थे। माँ उसके लिए पकौड़े बनाती थी। नगमा ने कहा यह पकौड़े तीखे होंगे। मगर अमन नहीं माना। अमन ने पकौड़े खाए और उसकी आँखों से आँसू निकलने लगे।	रात हो गई है। चाँद दिख रहा है। तारे भी चमक रहे हैं। सब लोग सो गए हैं।

Letters	Words
न प म च स थ ग द र ल	आग सोच ताला गिर पानी मौका धुन देश पैसा बूढ़ा

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	32.8	51.0	38.7
2014	43.6	51.3	46.6
2016	45.0	49.0	47.0
2018	47.4	48.0	47.7

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	71.2	76.9	72.8	88.9	94.6	90.1
2014	71.5	82.5	75.3	90.5	94.8	91.9
2016	65.3	78.0	70.5	84.9	94.9	87.9
2018	74.5	80.4	76.9	87.4	95.4	89.9

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

Bar chart showing % Children (y-axis 0–100) by cohort:
- Cohort in Std IV in 2008: Std IV (2008) 58, Std VI (2010) 89, Std VIII (2012) 90
- Cohort in Std IV in 2010: Std IV (2010) 55, Std VI (2012) 79, Std VIII (2014) 91
- Cohort in Std IV in 2012: Std IV (2012) 55, Std VI (2014) 81, Std VIII (2016) 88
- Cohort in Std IV in 2014: Std IV (2014) 60, Std VI (2016) 75, Std VIII (2018) 90

Legend: ■ Std IV ■ Std VI ■ Std VIII

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 58.1% and in Std VI (in 2010) was 89.4%. When the cohort reached Std VIII in 2012, this figure was 90.1%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	13.1	34.3	48.2	4.0	0.3	100
II	1.7	18.0	48.7	28.9	2.7	100
III	0.7	9.7	39.5	33.1	17.0	100
IV	1.2	4.9	23.4	29.7	40.9	100
V	0.6	5.6	14.8	22.4	56.6	100
VI	0.3	2.5	17.1	27.3	52.8	100
VII	0.0	0.7	16.8	24.2	58.3	100
VIII	0.3	1.8	16.5	20.4	61.0	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 0.7% cannot even recognize numbers 1-9, 9.7% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 39.5% can recognize numbers up to 99 but cannot do subtraction, 33.1% can do subtraction but cannot do division, and 17% can do division. For each grade, the total of these exclusive categories is 100%.
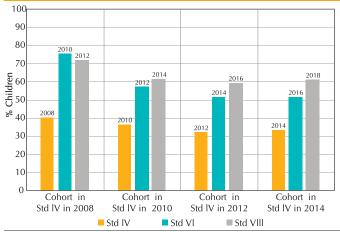
Arithmetic Tool (Hindi)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	39.5	72.6	50.3
2014	40.6	70.6	52.4
2016	48.4	66.7	57.4
2018	42.4	58.7	50.1

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	40.7	70.3	48.7	67.7	86.8	71.8
2014	37.9	63.9	46.9	55.9	74.2	61.8
2016	47.4	63.0	53.7	50.4	79.5	59.2
2018	51.5	64.0	56.6	54.7	74.4	61.0

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 40.3% and in Std VI (in 2010) was 75.5%. When the cohort reached Std VIII in 2012, this figure was 71.7%. The progress of each of these cohorts can be understood in the same way.

Himachal Pradesh RURAL

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
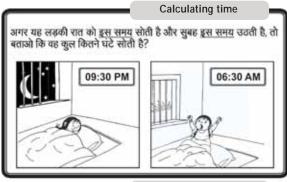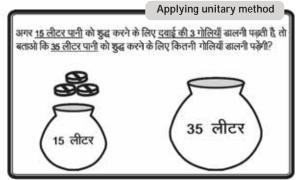
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	59.3	70.3	64.8
Age 11-13	84.7	89.2	87.0
Age 14-16	90.4	95.4	93.0
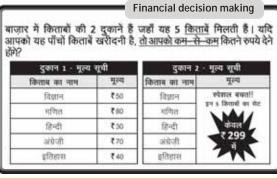
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	65.7	66.1	65.9	36.6	39.4	38.0
Age 11-13	80.3	83.2	81.8	56.5	62.5	59.5
Age 14-16	83.4	84.5	84.0	60.7	65.2	63.0

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

Applying unitary method

Financial decision making

Calculating discount

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	36.7	29.9	33.9	52.7	32.2	44.2	37.0	43.0	39.5	18.2	15.8	17.2
Age 15	30.3	42.2	36.1	49.4	48.1	48.8	39.7	38.6	39.2	20.1	6.1	13.3
Age 16	34.6	35.9	35.3	65.2	36.0	48.3	46.7	29.2	36.5	26.7	0.9	11.7
Age 14-16	33.8	36.5	35.1	53.7	39.6	46.9	39.9	37.4	38.7	20.5	7.8	14.4

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	49.0	46.9	47.9	68.1	58.5	63.0	46.4	51.1	48.9	36.3	26.6	31.2
Age 15	50.4	53.0	51.8	71.9	53.8	62.7	48.9	51.5	50.2	39.7	28.5	34.0
Age 16	42.1	58.8	51.4	72.0	65.5	68.4	45.2	46.9	46.1	46.2	40.7	43.2
Age 14-16	48.2	51.8	50.1	70.3	58.4	64.1	47.1	50.3	48.8	39.6	30.5	34.8

Himachal Pradesh RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 12 OUT OF 12 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	195	250	260	284
Upper primary schools (Std I-VII/VIII)	66	27	23	9
Total schools visited	261	277	283	293

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	90.0	86.3	85.8	83.4
% Teachers present (Average)	88.0	76.7	82.6	75.8

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	58.6	74.1	73.7	80.8
% Schools where Std IV children were observed sitting with one or more other classes	52.8	73.0	70.7	74.3

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	82.5	97.1	97.5	99.3
	Mid-day meal served in school on day of visit	98.0	93.8	98.9	93.1
Drinking water	No facility for drinking water	12.5	5.4	8.9	5.5
	Facility but no drinking water available	4.3	6.9	6.4	5.1
	Drinking water available	83.2	87.7	84.7	89.4
	Total	100	100	100	100
Toilet	No toilet facility	10.8	0.4	1.8	0.3
	Facility but toilet not useable	33.2	12.0	14.2	5.5
	Toilet useable	56.0	87.6	84.0	94.2
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	31.1	1.6	6.0	5.5
	Separate provision but locked	10.6	3.6	6.0	2.1
	Separate provision, unlocked but not useable	19.6	8.5	8.6	6.2
	Separate provision, unlocked and useable	38.7	86.2	79.5	86.3
	Total	100	100	100	100
Library	No library	19.7	4.4	5.4	2.7
	Library but no books being used by children on day of visit	39.0	55.1	62.1	73.0
	Library books being used by children on day of visit	41.3	40.6	32.5	24.3
	Total	100	100	100	100
Electricity	Electricity connection			92.1	94.5
	Of schools with electricity connection, % schools with electricity available on day of visit			92.6	86.0
Computer	No computer available for children to use	93.3	94.6	92.2	93.5
	Available but not being used by children on day of visit	3.5	2.2	6.1	4.5
	Computer being used by children on day of visit	3.2	3.3	1.8	2.1
	Total	100	100	100	100

Himachal Pradesh RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
All schools (Std I-IV/V and Std I-VII/VIII)	48.6	71.3	80.8	83.1

Table 19: Physical education and sports in schools 2018

% Schools with		All schools (Std I-IV/V and Std I-VII/VIII)
Dedicated time for physical education	Physical education period in the timetable	46.1
	No physical education period but dedicated time allotted	39.6
	No physical education period and no dedicated time allotted	14.3
	Total	100
Physical education teacher	Separate physical education teacher	2.8
	Other physical education teacher	74.2
	No physical education teacher	23.0
	Total	100
Playground	Playground inside the school premises	82.6
	Playground outside the school premises	10.8
	No accessible playground	6.6
	Total	100
Availability of any sports equipment		69.9
Supervised physical education activity observed on day of visit		17.3

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	99.6	98.9	99.7
Of all schools that have an SMC, % schools that had the last SMC meeting			
Before July	8.2	7.8	5.5
Between July and September	83.3	74.4	84.5
After September	8.6	17.8	10.0

Jammu and Kashmir RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 14 OUT OF 22 DISTRICTS
Data is not presented where sample size is insufficient.

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	58.3	40.1	0.4	1.3	100
Age 7-16: All	59.6	37.3	0.4	2.7	100
Age 7-10: All	54.9	44.3	0.3	0.6	100
Age 7-10: Boys	50.1	49.3	0.2	0.4	100
Age 7-10: Girls	59.8	39.1	0.3	0.8	100
Age 11-14: All	61.0	36.8	0.5	1.8	100
Age 11-14: Boys	58.5	39.9	0.5	1.2	100
Age 11-14: Girls	63.4	33.7	0.4	2.4	100
Age 15-16: All	67.4	22.5	0.3	9.9	100
Age 15-16: Boys	66.2	26.6	0.1	7.1	100
Age 15-16: Girls	68.5	18.6	0.4	12.5	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Age / Std	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	23.3	30.3	25.6	13.4				7.5					100
II	5.9	13.6	25.2	35.2	12.1	5.1			2.9				100
III		3.5		13.9	26.9	34.7	15.0			6.0			100
IV			4.5		14.3	23.6	39.4	9.9	6.3		2.0		100
V			5.2			10.6	32.9	27.9	16.9		6.5		100
VI				3.8			13.6	27.5	39.6	10.0		5.6	100
VII					5.8			9.9	31.0	37.9	10.9	4.5	100
VIII						3.4			15.8	30.6	37.5	8.5 / 4.2	100

This table shows the age distribution for each grade. For example, of all children in Std III, 26.9% children are 8 years old but there are also 13.9% who are 7, 34.7% who are 9, 15% who are 10, and 6% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	56.6	3.5	12.0	2.8	0.8	0.0	24.2	100
Age 4	31.8	10.1	31.6	7.9	2.9	0.1	15.5	100
Age 5	9.7	13.4	42.3	18.8	9.8	0.0	6.1	100
Age 6	2.9	10.8	30.2	34.9	19.3	0.3	1.8	100
Age 7	0.3	3.2	15.1	44.5	35.9	0.1	0.9	100
Age 8	0.4	0.5	5.3	53.3	39.9	0.4	0.3	100

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	17.8	38.1	28.6	10.5	5.1	100
II	8.1	31.0	35.1	16.0	9.8	100
III	3.2	19.8	34.3	20.5	22.3	100
IV	1.6	17.0	31.4	23.0	27.0	100
V	1.1	11.2	24.5	21.2	41.9	100
VI	1.1	7.3	17.6	23.3	50.6	100
VII	0.4	6.9	15.4	24.4	52.9	100
VIII	1.1	4.6	8.5	21.0	64.8	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 3.2% cannot even read letters, 19.8% can read letters but not words or higher, 34.3% can read words but not Std I level text or higher, 20.5% can read Std I level text but not Std II level text, and 22.3% can read Std II level text. For each grade, the total of these exclusive categories is 100%.

Reading Tool (English)

Std II level text

Gita is a little girl. Her mother gave her a book. It had lots of stories and nice pictures. Gita read it every morning on her way to school. She learned many words. That made her teacher happy. The teacher gave Gita another book. It had more stories. She showed it to all her friends.

Std I level text

Amar goes to the market.
It is very far away.
He takes the bus.
The bus takes four hours.

Letters

m t z
f k
i a r
v p

Words

both step
cup
out rope
dog hat
key
wish doll

Table 5: Trends over time
Reading in Std III by school type
2012, 2014 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	10.9	44.1	26.3
2014	10.0	29.9	20.0
2016			
2018	5.4	42.0	22.1

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	24.6	64.1	41.2	54.3	84.7	64.5
2014	21.0	58.8	38.7	54.4	76.5	63.9
2016						
2018	24.3	69.1	42.0	55.5	83.0	65.0

* This is the weighted average for children in government and private schools only.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	16.5	33.3	41.3	7.8	1.1	100
II	6.8	24.4	48.1	18.4	2.3	100
III	2.3	16.3	45.2	30.2	6.0	100
IV	1.7	13.1	40.8	30.4	14.1	100
V	1.2	7.2	35.8	30.7	25.1	100
VI	0.7	6.1	34.4	32.4	26.4	100
VII	0.3	5.8	32.0	33.8	28.1	100
VIII	0.3	3.4	30.3	33.1	32.9	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 2.3% cannot even recognize numbers 1-9, 16.3% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 45.2% can recognize numbers up to 99 but cannot do subtraction, 30.2% can do subtraction but cannot do division, and 6% can do division. For each grade, the total of these exclusive categories is 100%.

Arithmetic Tool (English)

Table 8: Trends over time Arithmetic in Std III by school type 2012, 2014 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	18.9	64.2	39.7
2014	22.8	59.2	41.1
2016			
2018	20.2	55.0	36.1

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time Arithmetic in Std V and Std VIII by school type 2012, 2014 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	7.8	39.3	21.2	25.0	60.3	36.9
2014	13.7	38.0	25.0	27.6	55.1	39.3
2016						
2018	13.6	42.6	25.1	25.3	47.3	32.9

* This is the weighted average for children in government and private schools only.

Annual Status of Education Report
असर ASER 2018 RURAL

Facilitated by PRATHAM

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
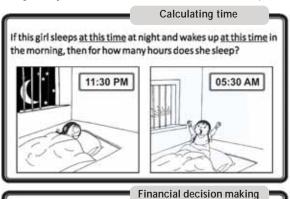
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	24.2	25.0	24.6
Age 11-13	50.5	53.5	52.0
Age 14-16	72.1	69.5	70.7
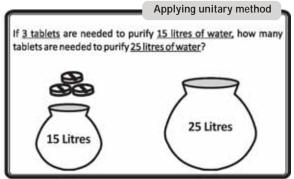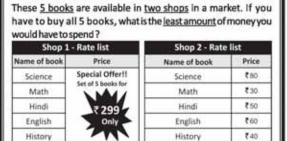
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	39.5	34.6	37.2	11.0	9.5	10.3
Age 11-13	62.8	62.3	62.6	29.5	25.5	27.5
Age 14-16	71.9	68.0	69.8	41.2	35.2	37.9
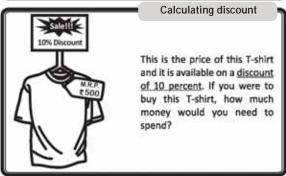
Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

If this girl sleeps at this time at night and wakes up at this time in the morning, then for how many hours does she sleep?

11:30 PM   05:30 AM

Applying unitary method

If 3 tablets are needed to purify 15 litres of water, how many tablets are needed to purify 25 litres of water?

15 Litres   25 Litres

Financial decision making

These 5 books are available in two shops in a market. If you have to buy all 5 books, what is the least amount of money you would have to spend?

Shop 1 - Rate list

Name of book	Price
Science	Special Offer!! Set of 5 books for ₹299 Only
Math	
Hindi	
English	
History	

Shop 2 - Rate list

Name of book	Price
Science	₹80
Math	₹30
Hindi	₹50
English	₹60
History	₹40

Calculating discount

Sale!! 10% Discount

M.R.P. ₹500

This is the price of this T-shirt and it is available on a discount of 10 percent. If you were to buy this T-shirt, how much money would you need to spend?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	32.0	40.7	37.2	40.7	42.6	41.8	16.5	13.3	14.6	14.1	13.1	13.5
Age 15	30.3	42.7	37.6	51.9	38.8	44.1	23.9	17.4	20.1	18.1	11.4	14.2
Age 16	28.3	44.8	37.1	49.2	26.7	37.3	22.4	15.5	18.7	14.5	15.7	15.1
Age 14-16	30.2	42.6	37.3	47.2	36.6	41.1	20.9	15.3	17.7	15.5	13.3	14.2

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	48.1	37.0	42.2	57.5	44.5	50.7	21.6	14.7	18.0	34.0	28.8	31.2
Age 15	52.5	43.6	48.0	44.9	59.1	52.2	22.5	26.7	24.7	27.2	15.0	20.9
Age 16	44.6	49.4	46.9	48.8	41.8	45.4	19.8	22.4	21.1	29.9	24.8	27.4
Age 14-16	48.5	43.0	45.7	50.2	48.9	49.6	21.4	21.3	21.3	30.3	22.7	26.4

Jammu and Kashmir RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 14 OUT OF 22 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2014 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)		92		53
Upper primary schools (Std I-VII/VIII)		251		323
Total schools visited		343		376

Table 15: Trends over time
Student and teacher attendance on the day of visit
2014 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)		73.9		76.9
% Teachers present (Average)		83.2		82.4

Table 16: Trends over time
Multigrade classes
2014 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes		65.9		60.8
% Schools where Std IV children were observed sitting with one or more other classes		61.0		51.7

School facilities

Table 17: Trends over time
% Schools with selected facilities
2014 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal		75.5		86.3
	Mid-day meal served in school on day of visit		74.7		77.3
Drinking water	No facility for drinking water		41.4		36.6
	Facility but no drinking water available		7.0		8.9
	Drinking water available		51.6		54.6
	Total		100		100
Toilet	No toilet facility		17.0		4.6
	Facility but toilet not useable		24.9		22.5
	Toilet useable		58.1		73.0
	Total		100		100
Girls' toilet	No separate provision for girls' toilet		34.4		30.2
	Separate provision but locked		10.0		7.4
	Separate provision, unlocked but not useable		8.9		14.3
	Separate provision, unlocked and useable		46.7		48.2
	Total		100		100
Library	No library		45.6		41.1
	Library but no books being used by children on day of visit		26.3		32.3
	Library books being used by children on day of visit		28.1		26.6
	Total		100		100
Electricity	Electricity connection				31.2
	Of schools with electricity connection, % schools with electricity available on day of visit				58.7
Computer	No computer available for children to use		91.2		82.8
	Available but not being used by children on day of visit		6.2		12.6
	Computer being used by children on day of visit		2.6		4.6
	Total		100		100

Jammu and Kashmir RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2014 and 2018

	2010	2014	2016	2018
All schools (Std I-IV/V and Std I-VII/VIII)		55.9		52.4

Table 19: Physical education and sports in schools 2018

% Schools with		All schools (Std I-IV/V and Std I-VII/VIII)
Dedicated time for physical education	Physical education period in the timetable	41.0
	No physical education period but dedicated time allotted	27.0
	No physical education period and no dedicated time allotted	32.0
	Total	100
Physical education teacher	Separate physical education teacher	23.4
	Other physical education teacher	30.1
	No physical education teacher	46.5
	Total	100
Playground	Playground inside the school premises	56.6
	Playground outside the school premises	16.1
	No accessible playground	27.3
	Total	100
Availability of any sports equipment		76.2
Supervised physical education activity observed on day of visit		24.1

Table 20: School Management Committee (SMC) in schools
2014 and 2018

	2014	2016	2018
% Schools which reported having an SMC	84.4		85.2

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	19.3		22.2
Between July and September	41.3		65.3
After September	39.4		12.5

Jharkhand RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 24 OUT OF 24 DISTRICTS
Data is not presented where sample size is insufficient.
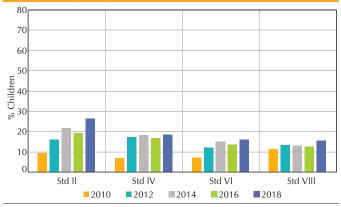
School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	78.0	19.0	0.4	2.7	100
Age 7-16: All	76.1	19.4	0.3	4.2	100
Age 7-10: All	79.0	19.2	0.3	1.5	100
Age 7-10: Boys	75.8	22.2	0.2	1.8	100
Age 7-10: Girls	82.1	16.1	0.4	1.3	100
Age 11-14: All	76.1	19.7	0.4	3.8	100
Age 11-14: Boys	73.0	22.5	0.4	4.1	100
Age 11-14: Girls	79.3	16.9	0.4	3.4	100
Age 15-16: All	67.2	19.6	0.0	13.2	100
Age 15-16: Boys	64.8	20.0	0.0	15.3	100
Age 15-16: Girls	69.4	19.3	0.1	11.2	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 29.2% in 2006, 15.5% in 2012, and 11.2% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 26.2% as compared to 15.3% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	34.6	32.9	16.2	8.7	7.7								100
II	8.9	19.4	28.4	23.7	7.4	6.9	5.4						100
III		6.6	16.3	34.0	18.5	14.3	10.3						100
IV		2.2	5.1	18.4	22.9	30.9	8.1	8.6	3.8				100
V			2.3	7.4	10.0	36.1	19.0	15.9	5.4	3.9			100
VI			3.0	5.0	18.8	21.6	32.4	12.1	7.2				100
VII			1.5	6.3	10.3	38.2	25.7	11.7	6.3				100
VIII			6.0		17.3	30.1	26.4	13.7	6.4				100

This table shows the age distribution for each grade. For example, of all children in Std III, 34% children are 8 years old but there are also 16.3% who are 7, 18.5% who are 9, 14.3% who are 10, and 10.3% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	72.0	1.3	4.5	4.2	0.7	0.0	17.3	100
Age 4	59.1	3.0	13.0	11.7	2.7	0.1	10.4	100
Age 5	28.2	5.0	15.2	38.1	7.7	0.3	5.5	100
Age 6	6.7	2.6	12.4	63.9	11.8	0.3	2.3	100
Age 7	1.4	0.7	7.4	72.4	16.8	0.3	1.1	100
Age 8	0.5	0.4	3.4	76.8	17.3	0.4	1.3	100

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	53.1	27.5	9.1	4.6	5.7	100
II	32.2	35.1	15.0	8.8	8.9	100
III	17.1	29.6	21.9	12.7	18.8	100
IV	9.7	25.2	19.6	16.9	28.6	100
V	8.0	18.6	18.0	21.1	34.3	100
VI	4.9	13.4	13.8	20.6	47.3	100
VII	2.3	8.5	8.9	20.7	59.6	100
VIII	1.8	5.6	9.1	17.1	66.4	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 17.1% cannot even read letters, 29.6% can read letters but not words or higher, 21.9% can read words but not Std I level text or higher, 12.7% can read Std I level text but not Std II level text, and 18.8% can read Std II level text. For each grade, the total of these exclusive categories is 100%.

Reading Tool (Hindi)

Std II level text	Std I level text
सावन का महीना था। आसमान में बहुत काले-काले बादल छाए थे। ठंडी-ठंडी हवा चल रही थी। मुझे झूला झूलने का मन किया। बड़े भैया एक मोटी सी रस्सी लेकर बाहर आए। भैया ने रस्सी को पेड़ से लटकाकर झूला बनाया। सब ने मिलकर खूब झूला झूला। बाकी बच्चे भी आकर मज़े से झूलने लगे। झूलते-झूलते रात हो गई।	बगीचे में एक पेड़ है। पेड़ पर एक तोता रहता है। तोते का रंग हरा है। वह लाल टमाटर खाता है।

Letters	Words
ल प स क ग ड ब म ट झ	लाल दूध तेल किला मोर जूता कुल पानी मौका पैर

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018
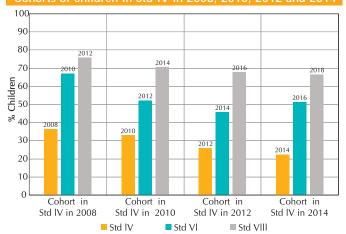
Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	10.0	42.2	14.5
2014	8.7	38.5	14.2
2016	10.7	44.7	16.2
2018	11.0	47.0	18.7

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	32.5	75.4	37.7	73.2	93.5	75.8
2014	29.1	64.0	34.4	68.2	84.9	70.4
2016	31.4	64.9	36.3	66.1	80.9	67.7
2018	29.4	63.5	34.3	64.4	79.2	66.6

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

Chart 3 data (% Children, with Std IV, Std VI, Std VIII bars):
- Cohort in Std IV in 2008: 2008 = 36 (Std IV), 2010 = 67 (Std VI), 2012 = 76 (Std VIII)
- Cohort in Std IV in 2010: 2010 = 33 (Std IV), 2012 = 52 (Std VI), 2014 = 70 (Std VIII)
- Cohort in Std IV in 2012: 2012 = 26 (Std IV), 2014 = 46 (Std VI), 2016 = 68 (Std VIII)
- Cohort in Std IV in 2014: 2014 = 22 (Std IV), 2016 = 51 (Std VI), 2018 = 67 (Std VIII)

Legend: Std IV, Std VI, Std VIII

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 36.4% and in Std VI (in 2010) was 67.1%. When the cohort reached Std VIII in 2012, this figure was 75.8%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	45.4	33.4	15.2	4.4	1.6	100
II	23.6	41.8	23.1	8.6	2.9	100
III	12.0	35.1	30.4	13.8	8.7	100
IV	6.0	27.1	34.6	17.7	14.7	100
V	4.6	18.7	34.5	23.2	19.1	100
VI	3.4	11.3	31.6	26.2	27.4	100
VII	1.5	8.7	28.5	25.0	36.4	100
VIII	1.2	5.2	25.4	24.2	44.0	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 12% cannot even recognize numbers 1-9, 35.1% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 30.4% can recognize numbers up to 99 but cannot do subtraction, 13.8% can do subtraction but cannot do division, and 8.7% can do division. For each grade, the total of these exclusive categories is 100%.
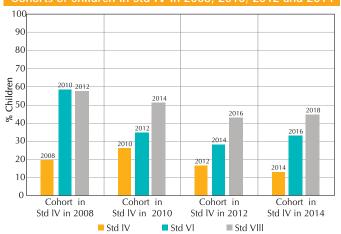
Arithmetic Tool (Hindi)

Table 8: Trends over time Arithmetic in Std III by school type 2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	19.3	54.7	24.3
2014	12.1	51.9	19.5
2016	13.4	55.6	20.3
2018	14.8	50.9	22.6

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time Arithmetic in Std V and Std VIII by school type 2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	20.1	54.6	24.3	54.8	75.9	57.5
2014	17.6	42.7	21.4	48.0	71.0	51.0
2016	20.0	44.1	23.6	42.3	49.3	43.0
2018	15.6	39.6	19.0	42.2	57.0	44.4

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time % Children who can do division Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 19.3% and in Std VI (in 2010) was 58.2%. When the cohort reached Std VIII in 2012, this figure was 57.5%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
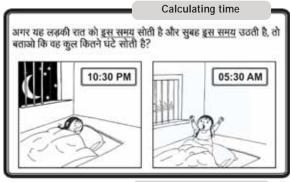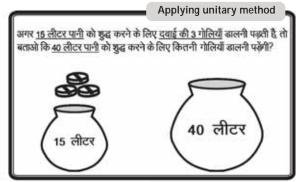
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	23.6	24.6	24.1
Age 11-13	53.2	51.0	52.1
Age 14-16	72.2	72.7	72.4
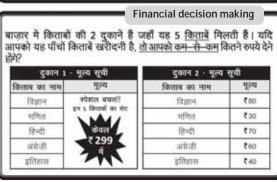
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	30.3	27.4	28.9	13.1	10.2	11.7
Age 11-13	58.8	53.4	56.1	35.8	28.7	32.2
Age 14-16	73.6	67.8	70.5	55.4	45.8	50.3
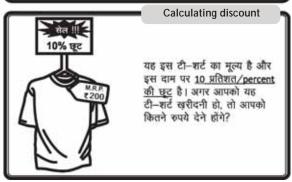
Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

अगर यह लड़की रात को इस समय सोती है और सुबह इस समय उठती है, तो बताओ कि वह कुल कितने घंटे सोती है?

10:30 PM   05:30 AM

Applying unitary method

अगर 15 लीटर पानी को शुद्ध करने के लिए दवाई की 3 गोलियाँ डालनी पड़ती है तो बताओ कि 40 लीटर पानी को शुद्ध करने के लिए कितनी गोलियाँ डालनी पड़ेंगी?

15 लीटर   40 लीटर

Financial decision making

बाज़ार में किताबों की 2 दुकानें हैं जहाँ यह 5 किताबें मिलती हैं। यदि आपको यह पाँचों किताबें खरीदनी है, तो आपको कम-से-कम कितने रुपये देने होंगे?

दुकान 1 - मूल्य सूची
किताब का नाम	मूल्य
विज्ञान	स्पेशल बचत!! इन 5 किताबों का सेट केवल ₹ 299 में
गणित	
हिन्दी	
अंग्रेजी	
इतिहास	

दुकान 2 - मूल्य सूची
किताब का नाम	मूल्य
विज्ञान	₹80
गणित	₹30
हिन्दी	₹70
अंग्रेजी	₹60
इतिहास	₹40

Calculating discount

सेल !!! 10% छूट

M.R.P ₹200

यह इस टी-शर्ट का मूल्य है और इस दाम पर 10 प्रतिशत/percent की छूट है। अगर आपको यह टी-शर्ट खरीदनी हो, तो आपको कितने रुपये देने होंगे?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	19.3	35.0	28.3	32.5	26.2	28.9	18.6	17.1	17.8	7.6	10.9	9.5
Age 15	42.1	27.5	33.0	41.8	17.0	26.3	19.9	11.6	14.7	10.9	9.7	10.1
Age 16	45.0	27.0	33.4	27.7	28.5	28.2	18.4	18.9	18.7	20.4	10.1	13.7
Age 14-16	31.0	30.7	30.8	34.0	24.1	28.0	18.9	16.0	17.1	11.3	10.3	10.7

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	43.6	39.9	41.8	53.5	41.5	47.8	28.8	25.8	27.4	28.8	22.3	25.8
Age 15	42.5	38.5	40.5	49.3	40.7	45.0	30.4	27.4	28.9	27.5	22.4	24.9
Age 16	55.4	45.0	50.3	52.9	44.9	49.0	34.9	30.3	32.6	32.6	24.0	28.3
Age 14-16	46.6	40.9	43.8	51.9	42.2	47.2	31.1	27.7	29.4	29.4	22.8	26.2

Jharkhand RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 24 OUT OF 24 DISTRICTS
Data is not presented where sample size is insufficient.

Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	188	209	193	228
Upper primary schools (Std I-VII/VIII)	359	416	383	446
Total schools visited	547	625	576	674

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	62.3	61.7	66.0	65.5
% Teachers present (Average)	89.4	91.0	84.6	92.0
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	58.7	56.5	60.9	60.1
% Teachers present (Average)	81.8	87.6	70.1	89.7

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	76.9	86.5	88.4	89.0
% Schools where Std IV children were observed sitting with one or more other classes	75.3	83.6	86.6	85.3
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	59.7	71.4	72.8	72.6
% Schools where Std IV children were observed sitting with one or more other classes	52.4	66.8	63.6	61.4

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	73.5	83.9	88.4	88.7
	Mid-day meal served in school on day of visit	92.6	78.6	80.7	79.0
Drinking water	No facility for drinking water	15.8	9.5	8.3	6.6
	Facility but no drinking water available	10.4	10.3	10.2	10.9
	Drinking water available	73.8	80.2	81.5	82.6
	Total	100	100	100	100
Toilet	No toilet facility	18.0	10.9	1.9	2.4
	Facility but toilet not useable	55.2	36.2	35.3	22.7
	Toilet useable	26.8	52.9	62.8	74.9
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	29.7	17.4	3.3	5.6
	Separate provision but locked	24.6	13.6	11.2	8.6
	Separate provision, unlocked but not useable	24.8	21.0	24.1	13.3
	Separate provision, unlocked and useable	20.9	48.0	61.4	72.5
	Total	100	100	100	100
Library	No library	38.4	10.3	18.9	12.9
	Library but no books being used by children on day of visit	33.2	29.0	31.5	36.6
	Library books being used by children on day of visit	28.4	60.7	49.7	50.5
	Total	100	100	100	100
Electricity	Electricity connection			22.7	78.4
	Of schools with electricity connection, % schools with electricity available on day of visit			55.7	56.3
Computer	No computer available for children to use	93.0	96.0	95.7	93.4
	Available but not being used by children on day of visit	2.9	2.7	3.2	5.5
	Computer being used by children on day of visit	4.1	1.3	1.1	1.1
	Total	100	100	100	100

Jharkhand RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	20.0	42.5	52.1	50.9
Upper primary schools (Std I-VII/VIII)	1.2	2.7	3.2	2.5

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	34.8	49.3	44.4
	No physical education period but dedicated time allotted	33.0	30.8	31.6
	No physical education period and no dedicated time allotted	32.1	19.9	24.0
	Total	100	100	100
Physical education teacher	Separate physical education teacher	2.7	5.3	4.4
	Other physical education teacher	56.5	66.4	63.0
	No physical education teacher	40.8	28.3	32.6
	Total	100	100	100
Playground	Playground inside the school premises	36.2	42.0	40.0
	Playground outside the school premises	38.4	33.3	35.1
	No accessible playground	25.5	24.7	25.0
	Total	100	100	100
Availability of any sports equipment		58.2	72.3	67.5
Supervised physical education activity observed on day of visit		20.4	26.9	24.7

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	94.7	97.3	98.8
Of all schools that have an SMC, % schools that had the last SMC meeting			
Before July	9.3	11.0	13.3
Between July and September	90.3	55.4	83.8
After September	0.4	33.7	2.9

Karnataka, Kerala

Madhya Pradesh, Maharashtra

Manipur, Meghalaya

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 30 OUT OF 30 DISTRICTS
Data is not presented where sample size is insufficient.

Annual Status of Education Report
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School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	69.9	29.1	0.3	0.7	100
Age 7-16: All	69.7	28.4	0.2	1.7	100
Age 7-10: All	67.7	31.8	0.3	0.2	100
Age 7-10: Boys	63.2	36.5	0.2	0.2	100
Age 7-10: Girls	72.1	27.2	0.5	0.3	100
Age 11-14: All	72.8	25.8	0.2	1.3	100
Age 11-14: Boys	68.2	30.3	0.1	1.4	100
Age 11-14: Girls	77.1	21.5	0.3	1.2	100
Age 15-16: All	66.5	26.0	0.1	7.4	100
Age 15-16: Boys	65.9	27.0	0.1	7.0	100
Age 15-16: Girls	66.9	25.1	0.1	7.8	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 17.4% in 2006, 11.2% in 2012, and 7.8% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 37.8% as compared to 26.4% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	6.7	57.3	33.0	3.1									100
II		5.7	39.1	50.3	4.9								100
III			5.2	37.2	52.9	4.7							100
IV			0.8	6.4	33.9	53.5	5.4						100
V				6.1	37.2	51.1	5.6						100
VI				1.3	5.4	31.3	56.6	5.5					100
VII					1.8	5.5	33.7	52.4	6.2	0.5			100
VIII						1.2	8.2	40.1	47.4	3.1			100

This table shows the age distribution for each grade. For example, of all children in Std III, 37.2% children are 8 years old but there are also 5.2% who are 7 or younger, 52.9% who are 9, and 4.7% who are 10 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	82.6	1.2	7.2	1.3	0.0	0.0	7.8	100
Age 4	65.7	1.4	29.9	0.8	0.5	0.0	1.8	100
Age 5	44.6	2.2	43.7	5.5	3.4	0.1	0.6	100
Age 6	10.0	0.9	16.2	48.0	24.3	0.3	0.3	100
Age 7	0.8	0.1	2.0	58.8	37.8	0.4	0.2	100
Age 8	0.2	0.0	0.2	65.9	33.1	0.4	0.1	100

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	40.3	39.9	15.4	2.5	1.9	100
II	17.2	31.7	30.6	13.0	7.6	100
III	9.2	19.8	30.3	21.5	19.2	100
IV	5.1	13.5	23.4	24.8	33.2	100
V	4.5	8.7	16.9	23.8	46.0	100
VI	4.2	6.7	12.8	20.5	55.8	100
VII	2.5	6.3	12.2	18.0	61.2	100
VIII	2.0	4.9	6.9	15.9	70.3	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 9.2% cannot even read letters, 19.8% can read letters but not words or higher, 30.3% can read words but not Std I level text or higher, 21.5% can read Std I level text but not Std II level text, and 19.2% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
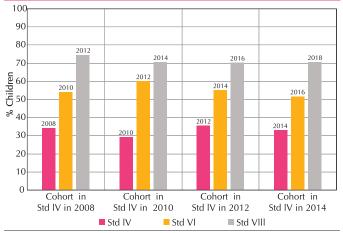
Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	21.2	28.1	22.7
2014	16.4	23.3	18.4
2016	19.0	22.1	19.8
2018	19.4	19.0	19.3

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Reading Tool (Kannada)

Std II level text	Std I level text

Letters	Words

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	47.2	54.6	48.5	71.6	82.4	74.6
2014	45.7	53.5	47.3	70.1	72.2	70.6
2016	41.9	42.8	42.1	69.7	71.2	70.1
2018	47.6	41.8	46.1	70.1	71.5	70.5

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 34.1% and in Std VI (in 2010) was 54.2%. When the cohort reached Std VIII in 2012, this figure was 74.6%. The progress of each of these cohorts can be understood in the same way.

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Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	29.7	38.2	30.3	1.5	0.4	100
II	10.9	24.5	54.7	9.3	0.6	100
III	4.9	13.9	54.9	23.3	3.0	100
IV	2.9	7.3	48.2	29.5	12.1	100
V	2.3	5.1	38.0	34.1	20.5	100
VI	2.4	3.3	34.7	30.0	29.6	100
VII	1.1	2.1	36.1	27.2	33.6	100
VIII	1.0	1.3	32.0	26.6	39.0	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 4.9% cannot even recognize numbers 1-9, 13.9% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 54.9% can recognize numbers up to 99 but cannot do subtraction, 23.3% can do subtraction but cannot do division, and 3% can do division. For each grade, the total of these exclusive categories is 100%.
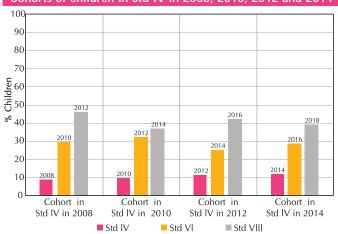
Arithmetic Tool (Kannada)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	26.6	46.3	30.8
2014	21.9	38.2	26.4
2016	25.5	38.7	28.9
2018	23.5	32.8	26.4

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	17.4	31.3	19.9	42.0	56.6	46.1
2014	16.7	33.2	20.2	34.9	43.3	37.0
2016	17.2	28.1	19.7	39.9	49.2	42.2
2018	19.6	23.0	20.5	36.1	47.4	39.0

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 8.5% and in Std VI (in 2010) was 29.6%. When the cohort reached Std VIII in 2012, this figure was 46.1%. The progress of each of these cohorts can be understood in the same way.

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Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
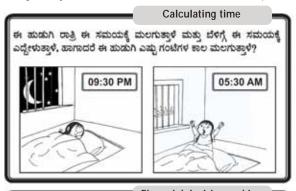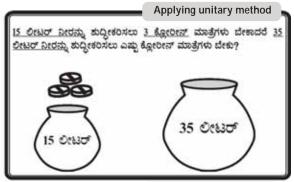
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	23.2	31.0	27.2
Age 11-13	50.0	62.1	56.3
Age 14-16	72.5	80.4	76.8

Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	32.3	35.2	33.8	8.4	9.7	9.1
Age 11-13	56.4	61.6	59.1	26.9	32.8	30.0
Age 14-16	67.1	70.0	68.7	40.8	45.0	43.1
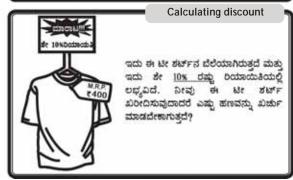
Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

Applying unitary method

Financial decision making

Calculating discount

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	29.7	34.0	31.9	36.7	35.7	36.1	26.2	25.9	26.0	15.3	12.0	13.6
Age 15	36.8	33.9	35.2	35.1	31.5	33.2	31.3	25.8	28.3	22.4	14.2	17.9
Age 16	35.5	37.0	36.3	35.9	26.6	30.7	25.4	27.0	26.3	11.1	13.3	12.3
Age 14-16	33.3	34.9	34.1	36.0	31.8	33.7	27.5	26.2	26.8	16.3	13.0	14.5

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	45.6	44.5	44.9	53.0	46.2	49.0	36.9	39.9	38.7	27.7	25.7	26.5
Age 15	52.7	44.1	47.7	48.2	44.2	45.9	38.7	41.2	40.2	28.5	24.0	25.9
Age 16	38.0	49.9	44.3	47.6	47.5	47.5	33.0	42.1	37.9	27.3	20.3	23.6
Age 14-16	45.7	45.7	45.7	49.7	45.9	47.5	36.3	40.9	39.0	27.9	23.7	25.5

Karnataka RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 30 OUT OF 30 DISTRICTS
Data is not presented where sample size is insufficient.

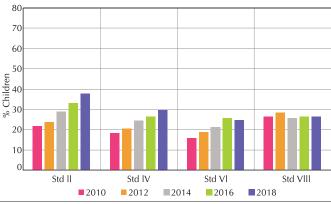## School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018
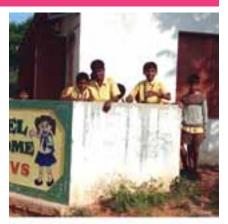
	2010	2014	2016	2018
Primary schools (Std I-IV/V)	113	121	138	134
Upper primary schools (Std I-VII/VIII)	656	591	670	714
Total schools visited	769	712	808	848

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	81.7	88.9	89.8	90.0
% Teachers present (Average)	92.9	89.5	91.2	89.6
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	70.9	84.6	87.9	83.1
% Teachers present (Average)	88.9	90.9	92.7	89.9

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	85.9	86.6	94.1	87.5
% Schools where Std IV children were observed sitting with one or more other classes	71.7	73.1	82.0	76.6
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	73.5	79.1	74.8	82.9
% Schools where Std IV children were observed sitting with one or more other classes	31.2	32.1	36.3	38.3

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	92.9	93.0	95.1	93.0
	Mid-day meal served in school on day of visit	96.0	98.9	98.8	97.5
Drinking water	No facility for drinking water	17.3	12.7	15.0	13.4
	Facility but no drinking water available	7.0	6.1	9.7	9.9
	Drinking water available	75.8	81.2	75.3	76.8
	Total	100	100	100	100
Toilet	No toilet facility	5.6	1.6	3.1	3.3
	Facility but toilet not useable	56.0	38.2	33.8	25.9
	Toilet useable	38.4	60.2	63.1	70.8
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	18.2	6.2	7.7	7.6
	Separate provision but locked	31.1	30.3	21.5	18.8
	Separate provision, unlocked but not useable	18.9	8.4	11.6	7.1
	Separate provision, unlocked and useable	31.8	55.1	59.3	66.4
	Total	100	100	100	100
Library	No library	7.6	8.2	8.4	17.0
	Library but no books being used by children on day of visit	27.6	37.5	41.3	46.8
	Library books being used by children on day of visit	64.8	54.3	50.4	36.1
	Total	100	100	100	100
Electricity	Electricity connection			94.9	95.3
	Of schools with electricity connection, % schools with electricity available on day of visit			80.5	87.5
Computer	No computer available for children to use	70.6	60.5	55.0	58.2
	Available but not being used by children on day of visit	16.0	23.6	30.4	31.9
	Computer being used by children on day of visit	13.4	15.9	14.6	9.9
	Total	100	100	100	100

Karnataka RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	84.6	82.5	80.4	83.5
Upper primary schools (Std I-VII/VIII)	6.3	10.0	14.3	15.5

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	66.4	79.9	78.0
	No physical education period but dedicated time allotted	20.7	12.9	14.0
	No physical education period and no dedicated time allotted	12.9	7.2	8.0
	Total	100	100	100
Physical education teacher	Separate physical education teacher	1.6	42.3	36.0
	Other physical education teacher	63.0	44.7	47.5
	No physical education teacher	35.4	13.0	16.4
	Total	100	100	100
Playground	Playground inside the school premises	57.4	84.8	80.7
	Playground outside the school premises	15.6	8.6	9.6
	No accessible playground	27.1	6.7	9.7
	Total	100	100	100
Availability of any sports equipment		51.9	76.4	72.5
Supervised physical education activity observed on day of visit		21.5	35.0	32.9

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	92.1	90.5	93.7

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	8.8	5.3	4.8
Between July and September	88.3	78.1	88.5
After September	2.9	16.6	6.7

Kerala RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 12 OUT OF 14 DISTRICTS
Data is not presented where sample size is insufficient.

Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	48.1	46.9	5.0	0.1	100
Age 7-16: All	50.3	44.2	5.3	0.3	100
Age 7-10: All	44.8	51.1	4.1	0.0	100
Age 7-10: Boys	41.9	54.1	4.0	0.0	100
Age 7-10: Girls	47.6	48.3	4.1	0.0	100
Age 11-14: All	52.1	41.8	5.8	0.2	100
Age 11-14: Boys	50.7	43.7	5.6	0.0	100
Age 11-14: Girls	53.5	40.0	6.1	0.5	100
Age 15-16: All	58.1	34.2	6.8	0.9	100
Age 15-16: Boys	58.5	34.3	6.1	1.2	100
Age 15-16: Girls	57.7	34.2	7.5	0.6	100
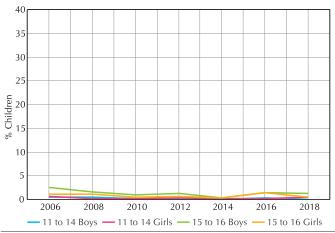
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 1.1% in 2006, 0.7% in 2012, and 0.6% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 55.1% as compared to 39.6% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	9.4	59.1	15.5	15.9									100
II	2.0	9.0	64.5	20.5	4.0								100
III		0.7	8.7	66.9	20.2	3.5							100
IV		1.3		10.1	66.8	21.3	0.6						100
V		0.8			8.3	73.0	16.3	1.7					100
VI		0.4				8.5	62.7	25.4	3.0				100
VII		1.8					12.3	62.9	21.8	1.3			100
VIII		1.3						13.1	68.5	16.0	1.1		100

This table shows the age distribution for each grade. For example, of all children in Std III, 66.9% children are 8 years old but there are also 8.7% who are 7, 20.2% who are 9, and 3.5% who are 10 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	60.0	9.9	11.8	2.4	1.0	0.0	15.0	100
Age 4	20.9	20.1	53.0	0.6	1.2	0.2	3.9	100
Age 5	3.8	22.7	60.3	7.8	3.5	1.2	0.7	100
Age 6	0.3	5.8	11.3	37.1	41.2	4.3	0.0	100
Age 7	0.0	0.3	0.5	41.6	54.5	3.2	0.0	100
Age 8	0.2	0.2	0.0	43.1	52.9	3.6	0.0	100

Kerala RURAL

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	5.5	33.1	39.8	4.4	17.3	100
II	1.8	13.6	32.7	16.2	35.8	100
III	0.7	9.7	19.7	17.4	52.5	100
IV	0.4	3.1	9.8	14.7	72.0	100
V	1.3	1.9	7.6	12.0	77.2	100
VI	0.5	1.8	4.5	12.0	81.2	100
VII	1.7	2.5	3.9	5.0	86.8	100
VIII	0.3	1.2	2.4	6.5	89.6	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 0.7% cannot even read letters, 9.7% can read letters but not words or higher, 19.7% can read words but not Std I level text or higher, 17.4% can read Std I level text but not Std II level text, and 52.5% can read Std II level text. For each grade, the total of these exclusive categories is 100%.

Reading Tool (Malayalam)

Std II level text	Std I level text
കണ്ണൻ മാനത്തേക്ക് നോക്കി. മാനത്ത് അതാ മഴവില്ല്! എന്ത് രസകാ മഴവില്ല് കാണാൻ. മഴവില്ലിന് ഏഴു നിറമാ. കണ്ണനറിയാം. മഴവില്ല് മാഞ്ഞാൽ മാനം കറുക്കും. പിന്നെ മഴ പെയ്യും. മുറ്റത്ത് വെള്ളം നിറയും. മഴവെള്ളത്തിൽ കടലാസു തോണി ഒഴുക്കി കളിക്കാം. അമ്മ കണ്ടാൽ വഴക്കു പറയും. മഴ നനഞ്ഞാൽ പനി വരും, എന്നാ അമ്മ പറയണത്.	മനുവിന്റെ സ്കൂൾ വലുതാണ്. അവിടെ വലിയ മുറ്റം ഉണ്ട്. മുറ്റത്ത് ധാരാളം മരങ്ങളുണ്ട്. മരത്തിൽ നിറയെ പൂക്കളും ഉണ്ട്.

Letters	Words
ക ണ്ണ ത മ വ സ ശ മ ച ഠ	ആമ കല പൂ മാൻ ഓടാം കിളി തിര കാമം വാൽ മീൻ

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	38.1	43.2	41.2
2014	36.6	40.3	39.0
2016	38.0	51.5	45.7
2018	43.8	60.2	52.2

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	59.9	69.0	65.2	83.9	84.6	84.3
2014	61.3	70.7	66.6	89.2	88.1	88.5
2016	63.3	74.5	69.4	83.0	87.7	85.3
2018	73.1	81.8	77.5	87.0	91.9	89.1

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 63.1% and in Std VI (in 2010) was 82.9%. When the cohort reached Std VIII in 2012, this figure was 84.3%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	4.0	24.4	59.6	2.0	9.9	100
II	2.0	6.0	71.6	17.5	2.9	100
III	0.8	3.1	48.2	42.7	5.2	100
IV	0.0	2.7	35.4	46.5	15.5	100
V	0.3	1.5	28.7	25.8	43.7	100
VI	0.3	0.7	25.3	22.4	51.3	100
VII	0.8	0.8	21.0	28.2	49.1	100
VIII	0.3	0.0	21.2	26.7	51.8	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 0.8% cannot even recognize numbers 1-9, 3.1% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 48.2% can recognize numbers up to 99 but cannot do subtraction, 42.7% can do subtraction but cannot do division, and 5.2% can do division. For each grade, the total of these exclusive categories is 100%.
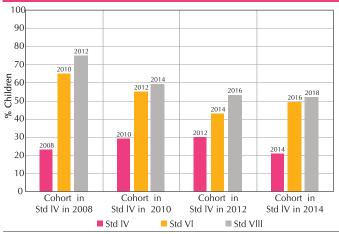
Arithmetic Tool (Malayalam)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	43.4	58.5	52.7
2014	36.0	51.7	46.1
2016	35.9	53.2	45.7
2018	44.7	52.4	48.7

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	38.0	51.5	45.9	74.7	75.2	75.0
2014	25.6	49.7	39.3	52.2	64.3	59.4
2016	27.1	48.5	38.7	49.1	57.8	53.2
2018	33.5	52.5	43.2	43.3	63.5	51.8

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 23% and in Std VI (in 2010) was 65.1%. When the cohort reached Std VIII in 2012, this figure was 75%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
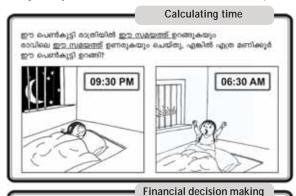
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	56.2	74.2	65.4
Age 11-13	81.0	89.1	85.3
Age 14-16	90.0	92.7	91.4

Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	54.4	61.2	57.9	19.3	21.5	20.4
Age 11-13	73.3	79.0	76.3	48.1	51.3	49.8
Age 14-16	81.8	80.9	81.4	62.1	67.7	64.9

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

Applying unitary method

Financial decision making

Calculating discount

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	43.6	39.5	41.6	58.4	35.3	47.1	41.7	58.0	49.7	26.0	13.1	19.7
Age 15	74.6	31.9	56.6	47.1	43.3	45.5	32.9	27.8	30.7	46.1	17.2	33.9
Age 16	56.4	36.0	50.4	51.5	44.3	49.4	22.7	21.1	22.2	22.2	12.0	19.2
Age 14-16	57.7	36.2	49.1	52.4	40.0	47.4	31.6	39.5	34.8	30.4	14.1	23.9

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	76.4	71.5	73.8	61.5	64.0	62.8	58.7	67.4	63.3	44.0	28.8	35.9
Age 15	82.7	71.7	76.6	66.3	57.8	61.5	60.2	58.3	59.1	55.3	40.8	47.2
Age 16	70.3	75.2	73.0	56.5	69.9	63.8	55.8	62.1	59.2	46.9	46.0	46.4
Age 14-16	76.3	72.8	74.4	61.3	64.0	62.8	58.2	62.5	60.5	48.6	38.8	43.3

Kerala RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 12 OUT OF 14 DISTRICTS
Data is not presented where sample size is insufficient.

Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	176	145	160	138
Upper primary schools (Std I-VII/VIII)	99	120	168	141
Total schools visited	275	265	328	279

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	93.1	90.6	91.3	82.7
% Teachers present (Average)	94.0	89.9	91.1	85.8
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	91.2	89.9	92.4	83.8
% Teachers present (Average)	90.2	89.9	89.4	84.1

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	7.9	11.2	12.5	16.2
% Schools where Std IV children were observed sitting with one or more other classes	7.1	9.8	11.3	19.9
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	6.3	12.1	13.9	18.8
% Schools where Std IV children were observed sitting with one or more other classes	2.2	9.5	10.3	22.0

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	98.1	98.8	98.1	99.2
	Mid-day meal served in school on day of visit	100.0	74.6	94.1	96.1
Drinking water	No facility for drinking water	2.6	4.2	5.3	2.2
	Facility but no drinking water available	11.7	12.8	14.2	44.9
	Drinking water available	85.7	83.0	80.5	52.9
	Total	100	100	100	100
Toilet	No toilet facility	0.4	0.0	0.0	0.0
	Facility but toilet not useable	41.4	15.2	18.0	10.6
	Toilet useable	58.2	84.8	82.0	89.4
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	5.1	1.9	1.5	3.3
	Separate provision but locked	8.7	4.6	3.1	8.5
	Separate provision, unlocked but not useable	42.3	13.3	16.6	4.8
	Separate provision, unlocked and useable	43.9	80.2	78.8	83.4
	Total	100	100	100	100
Library	No library	16.9	5.3	6.4	10.0
	Library but no books being used by children on day of visit	20.7	12.5	12.2	59.5
	Library books being used by children on day of visit	62.4	82.2	81.4	30.5
	Total	100	100	100	100
Electricity	Electricity connection			93.5	99.6
	Of schools with electricity connection, % schools with electricity available on day of visit			80.4	96.1
Computer	No computer available for children to use	17.2	10.2	11.0	24.6
	Available but not being used by children on day of visit	16.1	48.7	19.0	52.9
	Computer being used by children on day of visit	66.7	41.1	69.9	22.4
	Total	100	100	100	100

Kerala RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	29.0	43.4	31.7	37.2
Upper primary schools (Std I-VII/VIII)	4.1	14.7	10.2	10.9

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	69.8	94.9	82.8
	No physical education period but dedicated time allotted	20.2	5.1	12.4
	No physical education period and no dedicated time allotted	10.1	0.0	4.9
	Total	100	100	100
Physical education teacher	Separate physical education teacher	14.8	62.0	38.6
	Other physical education teacher	54.1	27.0	40.4
	No physical education teacher	31.1	11.0	21.0
	Total	100	100	100
Playground	Playground inside the school premises	67.2	72.8	70.0
	Playground outside the school premises	9.0	11.8	10.4
	No accessible playground	23.9	15.4	19.6
	Total	100	100	100
Availability of any sports equipment		56.0	75.5	65.9
Supervised physical education activity observed on day of visit		11.9	23.9	18.0
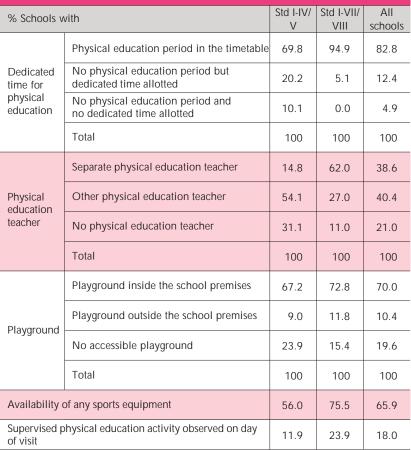
Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	99.2	96.6	98.2
Of all schools that have an SMC, % schools that had the last SMC meeting			
Before July	1.2	3.0	0.0
Between July and September	23.2	33.1	30.9
After September	75.6	63.9	69.1

Madhya Pradesh RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 50 OUT OF 50 DISTRICTS
Data is not presented where sample size is insufficient.
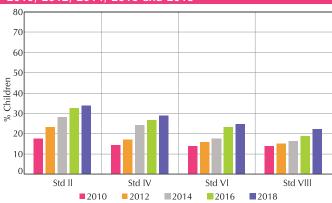
School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	69.6	26.1	0.1	4.2	100
Age 7-16: All	68.0	24.2	0.1	7.7	100
Age 7-10: All	68.7	29.1	0.1	2.2	100
Age 7-10: Boys	64.7	33.2	0.1	1.9	100
Age 7-10: Girls	72.7	24.7	0.1	2.4	100
Age 11-14: All	70.7	22.8	0.1	6.5	100
Age 11-14: Boys	67.4	27.2	0.1	5.3	100
Age 11-14: Girls	74.2	18.0	0.1	7.7	100
Age 15-16: All	60.2	16.3	0.1	23.4	100
Age 15-16: Boys	59.4	20.3	0.1	20.2	100
Age 15-16: Girls	61.0	12.1	0.1	26.8	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 23.4% in 2006, 18.6% in 2012, and 26.8% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 33.7% as compared to 22.2% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	36.6	39.1	15.9	5.6	2.9								100
II		4.9	18.1	46.1	22.5	8.3							100
III			4.6	18.7	49.5	17.3	7.2	2.8					100
IV				5.5	20.0	40.3	24.8	5.6	3.8				100
V				1.8	6.0	12.6	48.5	19.2	8.3	3.7			100
VI					5.9		18.3	39.6	27.1	5.8	3.3		100
VII					1.6		6.1	14.3	48.0	21.7	6.0	2.4	100
VIII					6.1			18.6	42.2	22.1	7.6	3.5	100

This table shows the age distribution for each grade. For example, of all children in Std III, 49.5% children are 8 years old but there are also 18.7% who are 7, 17.3% who are 9, 7.2% who are 10, and 2.8% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	72.6	0.3	11.3	1.4	0.6	0.0	13.7	100
Age 4	61.4	0.4	21.5	5.3	3.0	0.0	8.4	100
Age 5	24.4	0.4	23.3	32.0	13.0	0.1	6.7	100
Age 6	5.0	0.3	13.4	56.3	22.1	0.1	2.9	100
Age 7	1.1	0.1	3.5	63.9	29.4	0.1	2.0	100
Age 8	0.5	0.1	1.1	66.6	29.8	0.1	1.9	100

Madhya Pradesh RURAL

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	53.5	33.9	6.4	2.8	3.5	100
II	28.7	42.4	13.4	6.4	9.1	100
III	15.3	36.4	17.3	13.4	17.6	100
IV	9.8	25.5	16.4	16.2	32.2	100
V	7.2	19.2	15.1	16.9	41.6	100
VI	5.2	14.7	10.4	16.1	53.6	100
VII	3.9	12.0	9.6	15.1	59.3	100
VIII	2.4	10.5	8.3	14.5	64.4	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 15.3% cannot even read letters, 36.4% can read letters but not words or higher, 17.3% can read words but not Std I level text or higher, 13.4% can read Std I level text but not Std II level text, and 17.6% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
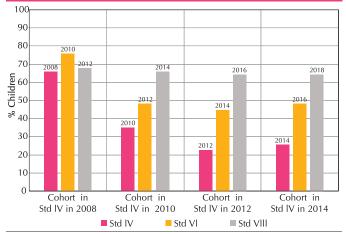
Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	7.0	32.9	12.1
2014	8.1	33.4	14.1
2016	10.3	33.1	16.6
2018	10.4	33.6	17.6

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Reading Tool (Hindi)

Std II level text

राजू नाम का एक लड़का था। उसकी एक बड़ी बहन य एक छोटा भाई था। उसका भाई गाँव के पास के विद्यालय में पढ़ने जाता था। वह खूब मेहनत करता था। उसकी बहन बहुत अच्छी खिलाड़ी थी। उसे लंबी दौड़ लगाना अच्छा लगता था। वे तीनों रोज़ साथ-साथ मौज-मस्ती करते थे।

Std I level text

हर रविवार नानी घर आती है। हमारे लिए मिठाई लाती है। मैं नानी के साथ सोता हूँ। वह मुझे कहानी सुनाती है।

Letters

ह च ट
ल न
फ म र
स त

Words

कुल बड़ा
रोटी
पानी चूना
चलो हीरा
पैर
देर कौन

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	27.5	64.5	33.1	64.6	85.9	67.8
2014	27.5	58.9	34.1	61.5	87.1	65.8
2016	31.4	63.3	38.8	59.4	85.4	64.3
2018	34.4	63.1	41.6	57.9	86.3	64.4

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 65.9% and in Std VI (in 2010) was 75.9%. When the cohort reached Std VIII in 2012, this figure was 67.8%. The progress of each of these cohorts can be understood in the same way.

Madhya Pradesh RURAL

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	48.6	35.8	13.5	1.5	0.7	100
II	23.7	46.4	24.7	3.9	1.3	100
III	11.8	40.7	33.6	9.8	4.1	100
IV	6.2	31.7	34.7	16.9	10.5	100
V	4.5	23.4	34.7	17.7	19.8	100
VI	3.3	17.3	32.1	19.9	27.4	100
VII	2.3	15.3	29.7	19.9	32.9	100
VIII	1.3	10.6	30.8	20.8	36.6	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 11.8% cannot even recognize numbers 1-9, 40.7% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 33.6% can recognize numbers up to 99 but cannot do subtraction, 9.8% can do subtraction but cannot do division, and 4.1% can do division. For each grade, the total of these exclusive categories is 100%.
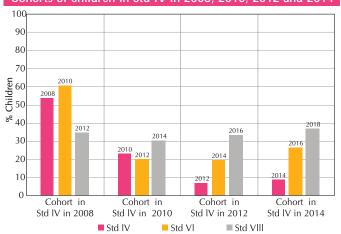
Arithmetic Tool (Hindi)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	6.8	31.7	11.7
2014	5.5	27.1	10.6
2016	8.4	27.9	13.8
2018	8.5	25.6	13.9

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	8.9	31.2	12.3	30.5	58.8	34.7
2014	10.0	28.9	13.9	24.8	58.0	30.4
2016	15.3	33.0	19.4	29.2	51.5	33.4
2018	16.5	29.5	19.8	32.1	52.0	36.6

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 53.6% and in Std VI (in 2010) was 60.5%. When the cohort reached Std VIII in 2012, this figure was 34.7%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
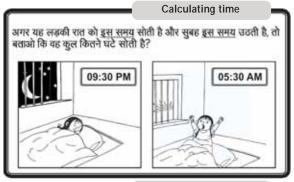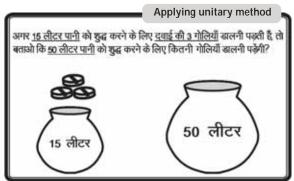
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	27.8	31.1	29.5
Age 11-13	58.1	55.4	56.8
Age 14-16	74.6	70.1	72.3

Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	24.5	24.8	24.6	10.8	10.8	10.8
Age 11-13	52.8	47.4	50.1	32.5	27.3	29.9
Age 14-16	62.8	53.3	57.9	44.5	33.6	38.9

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

अगर यह लड़की रात को इस समय सोती है और सुबह इस समय उठती है, तो बताओ कि वह कुल कितने घंटे सोती है?

09:30 PM   05:30 AM

Applying unitary method

अगर 15 लीटर पानी को शुद्ध करने के लिए दवाई की 3 गोलियाँ डालनी पड़ती हैं तो बताओ कि 50 लीटर पानी को शुद्ध करने के लिए कितनी गोलियाँ डालनी पड़ेंगी?

15 लीटर   50 लीटर

Financial decision making

बाज़ार में किताबों की 2 दुकानें हैं जहाँ यह 5 किताबें मिलती हैं। यदि आपको यह पाँचों किताबें खरीदनी है, तो आपको कम-से-कम कितने रुपये देने होंगे?

दुकान 1 - मूल्य सूची	
किताब का नाम	मूल्य
विज्ञान	₹60
गणित	₹80
हिन्दी	₹30
अंग्रेजी	₹70
इतिहास	₹50

दुकान 2 - मूल्य सूची	
किताब का नाम	मूल्य
विज्ञान	स्पेशल बचत!! इन 5 किताबों का सेट
गणित	
हिन्दी	
अंग्रेजी	केवल ₹299 में
इतिहास	

Calculating discount

सेल !!! 10% छूट

M.R.P ₹300

यह इस टी-शर्ट का मूल्य है और इस दाम पर 10 प्रतिशत/percent की छूट है। अगर आपको यह टी-शर्ट खरीदनी हो, तो आपको कितने रुपये देने होंगे?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	30.3	30.3	30.3	44.0	32.7	38.2	21.5	23.2	22.4	14.7	5.3	9.8
Age 15	36.7	32.7	34.7	46.0	28.8	37.3	31.7	19.7	25.6	14.9	8.4	11.6
Age 16	30.6	28.0	29.1	42.4	33.2	37.2	35.7	23.3	28.7	11.2	12.0	11.6
Age 14-16	32.4	30.2	31.2	44.2	31.8	37.6	28.8	22.2	25.3	13.8	8.4	10.9

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	42.5	36.9	40.2	51.0	42.6	47.5	33.7	33.5	33.6	21.1	16.2	19.1
Age 15	45.2	40.3	43.0	54.4	48.7	51.9	31.9	36.4	33.9	26.9	21.7	24.6
Age 16	53.1	37.0	45.5	56.8	50.5	53.8	38.4	37.3	37.9	32.1	23.4	28.0
Age 14-16	46.3	38.1	42.7	53.7	47.1	50.8	34.4	35.7	34.9	26.1	20.3	23.5

Madhya Pradesh RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 50 OUT OF 50 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018
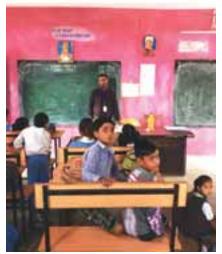
	2010	2014	2016	2018
Primary schools (Std I-IV/V)	709	902	1085	922
Upper primary schools (Std I-VII/VIII)	510	355	373	529
Total schools visited	1219	1257	1458	1451

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	65.9	62.5	58.5	57.1
% Teachers present (Average)	88.5	84.4	83.5	85.6
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	67.6	57.5	54.8	53.4
% Teachers present (Average)	87.1	84.7	82.2	85.9

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	68.9	78.5	78.9	85.0
% Schools where Std IV children were observed sitting with one or more other classes	59.9	70.5	71.5	78.4
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	63.8	76.3	76.6	78.4
% Schools where Std IV children were observed sitting with one or more other classes	53.9	66.6	70.1	68.8

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	89.9	89.8	85.7	85.7
	Mid-day meal served in school on day of visit	94.7	88.3	88.4	82.9
Drinking water	No facility for drinking water	13.4	12.7	15.6	16.8
	Facility but no drinking water available	8.1	12.0	11.4	12.2
	Drinking water available	78.5	75.3	73.0	71.0
	Total	100	100	100	100
Toilet	No toilet facility	20.0	8.7	5.6	5.2
	Facility but toilet not useable	29.8	36.3	35.9	26.5
	Toilet useable	50.3	55.1	58.5	68.3
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	50.8	33.5	23.4	18.6
	Separate provision but locked	8.5	10.5	11.0	7.9
	Separate provision, unlocked but not useable	11.8	15.8	19.6	17.0
	Separate provision, unlocked and useable	28.9	40.3	45.9	56.5
	Total	100	100	100	100
Library	No library	43.7	16.0	20.5	16.0
	Library but no books being used by children on day of visit	27.3	40.3	39.5	40.3
	Library books being used by children on day of visit	29.1	43.7	40.0	43.8
	Total	100	100	100	100
Electricity	Electricity connection			26.2	40.8
	Of schools with electricity connection, % schools with electricity available on day of visit			47.0	59.4
Computer	No computer available for children to use	92.6	95.9	97.5	96.2
	Available but not being used by children on day of visit	5.7	3.3	2.2	3.1
	Computer being used by children on day of visit	1.7	0.9	0.3	0.7
	Total	100	100	100	100

Madhya Pradesh RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	17.8	35.8	40.6	49.6
Upper primary schools (Std I-VII/VIII)	0.2	1.7	5.7	6.2

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	56.8	65.1	59.8
	No physical education period but dedicated time allotted	19.1	15.1	17.6
	No physical education period and no dedicated time allotted	24.1	19.8	22.5
	Total	100	100	100
Physical education teacher	Separate physical education teacher	5.5	9.6	7.0
	Other physical education teacher	59.1	58.2	58.7
	No physical education teacher	35.4	32.3	34.3
	Total	100	100	100
Playground	Playground inside the school premises	65.7	77.9	70.2
	Playground outside the school premises	14.8	8.1	12.3
	No accessible playground	19.5	14.0	17.5
	Total	100	100	100
Availability of any sports equipment		53.5	64.2	57.4
Supervised physical education activity observed on day of visit		20.7	24.5	22.1

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	98.1	97.7	97.8

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	5.0	4.3	4.6
Between July and September	69.6	60.6	82.9
After September	25.4	35.1	12.5

Maharashtra RURAL
ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 33 OUT OF 33 DISTRICTS
Data is not presented where sample size is insufficient.

Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018
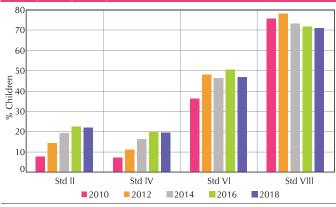
Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	61.6	37.6	0.1	0.8	100
Age 7-16: All	54.0	44.7	0.1	1.3	100
Age 7-10: All	76.5	23.1	0.1	0.3	100
Age 7-10: Boys	73.6	26.0	0.1	0.3	100
Age 7-10: Girls	79.7	19.9	0.1	0.3	100
Age 11-14: All	44.9	53.8	0.1	1.2	100
Age 11-14: Boys	42.9	56.2	0.1	0.8	100
Age 11-14: Girls	46.9	51.3	0.1	1.6	100
Age 15-16: All	20.2	75.5	0.0	4.3	100
Age 15-16: Boys	20.8	75.7	0.1	3.4	100
Age 15-16: Girls	19.6	75.4	0.0	5.1	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

— 11 to 14 Boys — 11 to 14 Girls — 15 to 16 Boys — 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 16.4% in 2006, 8.5% in 2012, and 5.1% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

■ 2010 ■ 2012 ■ 2014 ■ 2016 ■ 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 22% as compared to 70.9% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	8.1	57.5	31.4	3.1									100
II	5.8		36.8	52.9	4.5								100
III		4.8		33.8	55.8	5.5							100
IV		4.1			30.1	60.0	5.8						100
V			4.1			31.0	59.7	5.3					100
VI			5.5				28.0	60.8	5.6				100
VII			5.0					33.2	54.4	6.4	1.0		100
VIII			1.1						5.6	36.3	51.9	5.1	100

This table shows the age distribution for each grade. For example, of all children in Std III, 33.8% children are 8 years old but there are also 4.8% who are 7 or younger, 55.8% who are 9, and 5.5% who are 10 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	77.9	1.7	10.5	0.7	0.5	0.0	8.7	100
Age 4	72.4	2.9	20.8	0.7	0.5	0.0	2.7	100
Age 5	56.2	3.7	27.4	7.7	3.6	0.1	1.5	100
Age 6	13.0	0.9	9.0	59.0	17.3	0.1	0.8	100
Age 7	1.2	0.1	1.4	73.1	23.8	0.2	0.2	100
Age 8	0.2	0.2	0.7	77.1	21.6	0.1	0.2	100

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	29.5	45.4	17.0	5.7	2.6	100
II	11.8	23.6	21.4	22.1	21.2	100
III	5.4	13.0	16.3	23.3	42.0	100
IV	2.8	7.1	11.7	19.8	58.6	100
V	2.7	5.6	7.0	18.4	66.4	100
VI	2.1	3.6	5.6	14.5	74.3	100
VII	1.5	3.7	4.5	12.1	78.3	100
VIII	1.8	2.7	4.3	11.0	80.2	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 5.4% cannot even read letters, 13% can read letters but not words or higher, 16.3% can read words but not Std I level text or higher, 23.3% can read Std I level text but not Std II level text, and 42% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
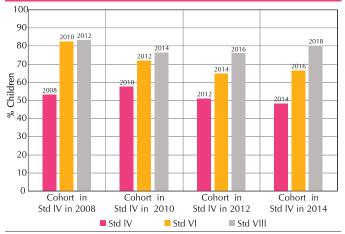
Reading Tool (Marathi)

Std II level text

एक होती आजी. एकदा तिला तिच्या बहिणीचे पत्र आले. आजीला तिने आपल्या घरी पूजेला बोलाविले होते. आजीने आपल्या सामानाचे गाठोडे बांधले. निघताना तिने घराला कुलूप लावले. ती प्रवासाला पायी निघाली. वाटेत आजीला झरा दिसला. चालून चालून थकल्याने ती झऱ्याकाठी बसली. थोडे खाऊन ती थंड पाणी प्यायली आणि झोपी गेली. काही वेळाने समोरून एक टांगा आला. टांग्यातील माणसाने तिला बहिणीकडे सोडले. आजीने त्याचे आभार मानले आणि ती घरात गेली.

Std I level text

फुगेवाला आला. लाल, निळे फुगे आणले. मुलांनी फुगे घेतले. हातातून ते सुटून गेले.

Letters

बस, समई, गरम, कैरी, दिवा, मोती, किरण, चिमटा, लूप, मौज

Words

श, स, प, ड, य, ज, ह, म, त

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	34.9	37.6	35.3
2014	33.1	37.0	33.8
2016	41.1	38.5	40.6
2018	44.2	33.6	42.1

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	55.3	62.2	58.3	81.4	83.7	83.3
2014	51.7	56.2	53.5	71.6	78.3	76.5
2016	63.1	62.6	62.9	75.2	76.1	75.9
2018	66.0	67.1	66.5	79.4	80.4	80.1

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

Std IV · Std VI · Std VIII

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 53% and in Std VI (in 2010) was 82.6%. When the cohort reached Std VIII in 2012, this figure was 83.3%. The progress of each of these cohorts can be understood in the same way.

Maharashtra RURAL

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	28.8	51.1	18.9	0.8	0.4	100
II	10.1	39.1	44.4	5.9	0.4	100
III	5.2	21.6	46.2	23.7	3.4	100
IV	2.8	11.7	36.5	31.6	17.6	100
V	1.8	9.5	29.7	28.8	30.2	100
VI	1.8	7.3	29.6	25.0	36.3	100
VII	1.8	6.2	30.4	23.5	38.2	100
VIII	1.6	5.3	32.0	20.5	40.5	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 5.2% cannot even recognize numbers 1-9, 21.6% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 46.2% can recognize numbers up to 99 but cannot do subtraction, 23.7% can do subtraction but cannot do division, and 3.4% can do division. For each grade, the total of these exclusive categories is 100%.
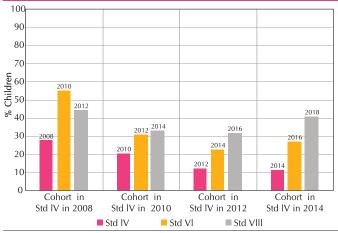
Arithmetic Tool (Marathi)

Table 8: Trends over time Arithmetic in Std III by school type 2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	22.5	34.1	24.0
2014	17.9	22.6	18.7
2016	22.4	29.0	23.8
2018	28.1	23.3	27.1

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time Arithmetic in Std V and Std VIII by school type 2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	20.2	25.8	22.6	45.1	44.2	44.4
2014	16.6	22.2	18.9	30.8	33.6	32.9
2016	19.7	21.7	20.5	32.4	31.0	31.4
2018	31.7	28.0	30.2	41.4	40.4	40.7

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time % Children who can do division Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 27.5% and in Std VI (in 2010) was 55%. When the cohort reached Std VIII in 2012, this figure was 44.3%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
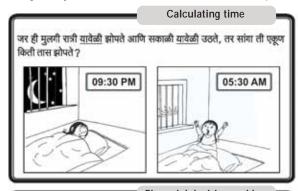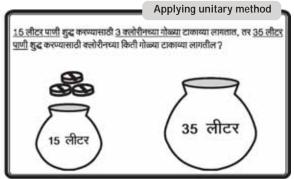
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	42.5	51.7	47.0
Age 11-13	71.3	77.7	74.5
Age 14-16	79.7	84.3	82.1

Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	35.0	35.3	35.1	11.2	11.4	11.3
Age 11-13	58.1	62.7	60.4	33.8	37.6	35.6
Age 14-16	58.2	59.9	59.1	38.5	40.6	39.6
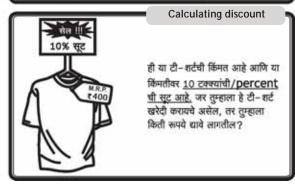
Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

जर ही मुलगी रात्री यावेळी झोपते आणि सकाळी यावेळी उठते, तर सांगा ती एकूण किती तास झोपते?

09:30 PM   05:30 AM

Applying unitary method

15 लीटर पाणी शुद्ध करण्यासाठी 3 क्लोरीनच्या गोळ्या टाकाव्या लागतात, तर 35 लीटर पाणी शुद्ध करण्यासाठी क्लोरीनच्या किती गोळ्या टाकाव्या लागतील?

15 लीटर   35 लीटर

Financial decision making

बाजारात पुस्तकांची 2 दुकाने आहेत जिथे ही 5 पुस्तके मिळतात. जर तुम्हाला ही पाचही पुस्तके खरेदी करायची असतील, तर तुम्हाला कमीत कमी किती रुपये द्यावे लागतील?

दुकान 1 – किंमतींची यादी
पुस्तकाचे नाव	किंमत
विज्ञान	₹50
गणित	₹80
हिंदी	₹30
इंग्रजी	₹70
इतिहास	₹40

दुकान 2 – किंमतींची यादी
पुस्तकाचे नाव	किंमत
विज्ञान	स्पेशल बचत!!
गणित	ह्या 5 पुस्तकांचा संच
हिंदी	फक्त ₹299 मध्ये
इंग्रजी	
इतिहास	

Calculating discount

सेल !!!
10% सूट

M.R.P. ₹400

ही या टी-शर्टची किंमत आहे आणि या किंमतीवर 10 टक्क्यांची/percent ची सूट आहे. जर तुम्हाला हे टी-शर्ट खरेदी करायचे असेल, तर तुम्हाला किती रुपये द्यावे लागतील?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	40.3	20.0	29.6	53.1	37.9	45.1	38.6	24.1	31.0	16.0	10.3	13.0
Age 15	42.2	37.0	39.5	48.9	39.7	44.1	44.1	30.5	37.0	29.9	9.1	19.1
Age 16	32.2	28.4	30.3	53.8	40.5	47.3	36.0	20.4	28.4	20.2	19.6	19.9
Age 14-16	38.6	27.6	33.0	51.9	39.1	45.4	39.6	25.3	32.2	21.6	12.2	16.8

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	43.2	37.9	40.5	63.4	54.8	59.1	43.2	38.7	40.9	32.1	23.9	28.0
Age 15	41.4	47.7	44.8	56.8	57.1	57.0	42.6	44.3	43.5	40.3	25.2	32.2
Age 16	54.9	45.4	49.3	67.3	58.5	62.1	38.2	37.0	37.5	37.5	29.0	32.5
Age 14-16	45.6	43.5	44.4	62.2	56.7	59.2	41.7	40.0	40.8	36.2	25.9	30.7

Maharashtra RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 33 OUT OF 33 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	435	409	354	419
Upper primary schools (Std I-VII/VIII)	467	466	427	508
Total schools visited	902	875	781	927

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	91.5	85.1	85.1	86.5
% Teachers present (Average)	93.8	90.8	91.8	88.3
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	92.4	86.9	86.9	86.2
% Teachers present (Average)	91.7	91.8	91.5	90.3

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	47.5	53.2	55.6	56.9
% Schools where Std IV children were observed sitting with one or more other classes	46.8	49.4	51.9	52.7
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	34.3	38.9	45.5	44.0
% Schools where Std IV children were observed sitting with one or more other classes	26.9	32.1	40.9	37.9

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	78.2	92.0	95.6	94.9
	Mid-day meal served in school on day of visit	90.7	94.8	94.5	94.7
Drinking water	No facility for drinking water	18.7	15.9	14.6	15.7
	Facility but no drinking water available	12.3	13.7	18.4	13.4
	Drinking water available	69.0	70.5	67.1	70.9
	Total	100	100	100	100
Toilet	No toilet facility	2.9	2.9	3.1	1.7
	Facility but toilet not useable	44.1	30.9	29.0	28.2
	Toilet useable	53.0	66.3	67.9	70.1
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	13.7	9.8	7.8	6.6
	Separate provision but locked	32.3	18.2	12.1	14.6
	Separate provision, unlocked but not useable	10.8	13.0	17.7	14.9
	Separate provision, unlocked and useable	43.2	59.1	62.4	63.9
	Total	100	100	100	100
Library	No library	14.0	17.4	16.3	11.6
	Library but no books being used by children on day of visit	19.6	46.2	37.8	51.5
	Library books being used by children on day of visit	66.5	36.4	45.9	36.9
	Total	100	100	100	100
Electricity	Electricity connection			92.0	91.8
	Of schools with electricity connection, % schools with electricity available on day of visit			78.3	78.9
Computer	No computer available for children to use	66.7	53.7	44.9	35.4
	Available but not being used by children on day of visit	13.5	31.6	37.2	45.5
	Computer being used by children on day of visit	19.8	14.7	17.8	19.0
	Total	100	100	100	100

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	33.0	39.5	44.0	45.4
Upper primary schools (Std I-VII/VIII)	1.3	5.0	10.6	10.7

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/ V	Std I-VII/ VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	91.0	94.4	92.9
	No physical education period but dedicated time allotted	7.5	4.0	5.6
	No physical education period and no dedicated time allotted	1.5	1.6	1.5
	Total	100	100	100
Physical education teacher	Separate physical education teacher	6.2	16.4	11.8
	Other physical education teacher	88.8	77.9	82.8
	No physical education teacher	5.0	5.7	5.4
	Total	100	100	100
Playground	Playground inside the school premises	83.6	89.9	87.0
	Playground outside the school premises	8.0	5.8	6.8
	No accessible playground	8.5	4.4	6.2
	Total	100	100	100
Availability of any sports equipment		68.8	78.7	74.2
Supervised physical education activity observed on day of visit		24.2	30.2	27.5

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	98.7	98.8	98.9
Of all schools that have an SMC, % schools that had the last SMC meeting			
Before July	5.1	4.9	2.9
Between July and September	85.9	71.9	77.2
After September	9.1	23.2	19.9

Manipur RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 9 OUT OF 9 DISTRICTS
Data is not presented where sample size is insufficient.

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018
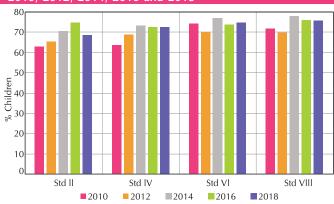
Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	28.0	70.4	0.3	1.3	100
Age 7-16: All	27.6	70.3	0.3	1.9	100
Age 7-10: All	27.0	71.8	0.2	0.9	100
Age 7-10: Boys	27.4	71.6	0.0	1.0	100
Age 7-10: Girls	26.9	71.7	0.5	0.9	100
Age 11-14: All	28.0	70.1	0.4	1.6	100
Age 11-14: Boys	25.9	72.0	0.5	1.6	100
Age 11-14: Girls	29.9	68.3	0.2	1.6	100
Age 15-16: All	28.2	65.6	0.1	6.1	100
Age 15-16: Boys	25.9	67.1	0.0	7.0	100
Age 15-16: Girls	30.1	64.3	0.2	5.4	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Legend: 11 to 14 Boys, 11 to 14 Girls, 15 to 16 Boys, 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 14.5% in 2006, 9.7% in 2012, and 5.4% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

Legend: 2010, 2012, 2014, 2016, 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 68.7% as compared to 75.7% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	11.4	30.1	38.0	14.7	5.8								100
II	3.1	10.3	31.9	32.2	12.8	6.8	3.0						100
III	1.7		8.9	27.0	28.5	20.7	8.3	5.0					100
IV	1.4			7.9	22.9	35.5	17.4	10.0	5.0				100
V	2.3				6.5	27.3	31.0	20.4	9.1	3.6			100
VI	1.7					10.0	28.4	36.1	15.7	6.1	2.0		100
VII	2.2						10.5	32.1	31.3	16.7	7.3		100
VIII	1.5							13.5	30.4	33.4	16.7	4.6	100

This table shows the age distribution for each grade. For example, of all children in Std III, 27% children are 8 years old but there are also 8.9% who are 7, 28.5% who are 9, 20.7% who are 10, 8.3% who are 11, and 5% who are 12 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	16.2	15.2	21.9	0.0	0.8	0.0	46.0	100
Age 4	11.4	22.6	41.7	2.3	2.0	0.0	19.9	100
Age 5	5.6	22.7	59.3	4.6	4.3	0.0	3.5	100
Age 6	9.4	10.7	41.6	14.1	23.4	0.2	0.7	100
Age 7	8.3	5.4	15.9	17.9	51.7	0.1	0.7	100
Age 8	4.0	2.8	7.9	22.9	61.1	0.5	0.7	100

Manipur RURAL

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	4.1	34.8	45.2	11.8	4.1	100
II	2.1	22.3	31.4	25.0	19.2	100
III	0.9	12.3	20.5	30.5	35.8	100
IV	0.2	6.8	11.4	21.2	60.5	100
V	0.0	6.4	9.5	16.6	67.5	100
VI	0.2	2.9	8.2	12.7	75.9	100
VII	0.7	2.1	5.5	10.4	81.4	100
VIII	0.0	1.8	3.0	8.7	86.5	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 0.9% cannot even read letters, 12.3% can read letters but not words or higher, 20.5% can read words but not Std I level text or higher, 30.5% can read Std I level text but not Std II level text, and 35.8% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
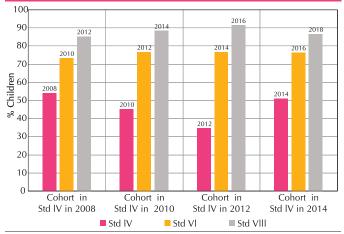
Reading Tool (English)

Std II level text

A big tree stood in a garden. It was alone and lonely. One day a bird came and sat on it. The bird held a seed in its beak. It dropped the seed near the tree. A small plant grew there. Soon there was another tree. The big tree was happy.

Std I level text

Rani likes her school. Her class is in a big room. Rani has a bag and a book. She also has a pen.

Letters

e d w
s c
g h z
i q

Words

hand star
bus
cat book
day few
old
sing bold

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	21.1	36.4	31.2
2014	17.3	40.2	34.5
2016	21.9	37.5	32.2
2018	24.5	42.2	35.8

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	46.9	71.0	63.6	68.1	92.6	85.3
2014	43.1	74.7	66.6	72.2	92.9	88.3
2016	64.7	73.5	70.7	82.4	94.2	91.4
2018	50.6	74.0	67.6	72.5	90.9	86.5

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 54.2% and in Std VI (in 2010) was 73.4%. When the cohort reached Std VIII in 2012, this figure was 85.3%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Annual Status of Education Report
असर ASER 2018 RURAL
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Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	2.0	11.6	75.1	7.2	4.1	100
II	1.4	5.1	56.6	27.7	9.3	100
III	0.3	1.9	39.3	35.5	23.1	100
IV	0.2	1.0	24.7	30.4	43.8	100
V	0.0	0.4	22.6	26.5	50.5	100
VI	0.2	0.0	16.9	24.3	58.6	100
VII	0.7	0.5	14.8	20.8	63.2	100
VIII	0.0	0.1	11.3	16.1	72.5	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 0.3% cannot even recognize numbers 1-9, 1.9% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 39.3% can recognize numbers up to 99 but cannot do subtraction, 35.5% can do subtraction but cannot do division, and 23.1% can do division. For each grade, the total of these exclusive categories is 100%.
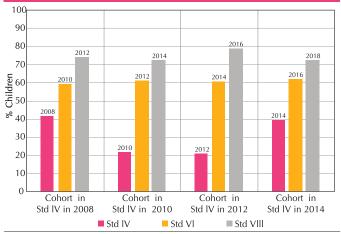
Arithmetic Tool (English)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	38.4	61.1	53.3
2014	52.0	61.9	59.4
2016	53.2	63.0	59.7
2018	53.5	61.5	58.6

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	26.5	52.9	44.7	58.1	80.5	73.9
2014	43.1	58.7	54.7	48.3	79.2	72.5
2016	46.9	55.1	52.5	67.3	82.1	78.6
2018	38.4	55.2	50.6	62.3	75.7	72.5

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 41.7% and in Std VI (in 2010) was 59.2%. When the cohort reached Std VIII in 2012, this figure was 73.9%. The progress of each of these cohorts can be understood in the same way.

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Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
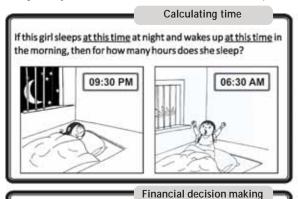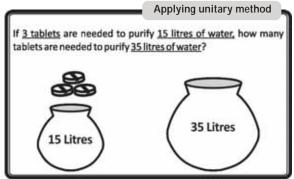
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	39.6	41.4	40.5
Age 11-13	71.5	70.3	70.9
Age 14-16	82.7	89.1	86.1
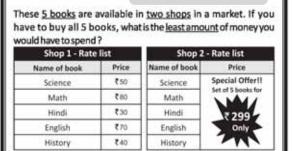
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	57.4	56.2	56.8	29.1	27.1	28.1
Age 11-13	81.0	76.6	78.8	57.6	54.2	55.9
Age 14-16	83.4	85.6	84.6	67.6	69.1	68.4

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

If this girl sleeps at this time at night and wakes up at this time in the morning, then for how many hours does she sleep?

09:30 PM   06:30 AM

Applying unitary method

If 3 tablets are needed to purify 15 litres of water, how many tablets are needed to purify 35 litres of water?

15 Litres   35 Litres

Financial decision making

These 5 books are available in two shops in a market. If you have to buy all 5 books, what is the least amount of money you would have to spend?

Shop 1 - Rate list	
Name of book	Price
Science	₹50
Math	₹80
Hindi	₹30
English	₹70
History	₹40

Shop 2 - Rate list	
Name of book	Price
Science	Special Offer!! Set of 5 books for ₹299 Only
Math	
Hindi	
English	
History	

Calculating discount

Sale!!! 10% Discount
M.R.P ₹400

This is the price of this T-shirt and it is available on a discount of 10 percent. If you were to buy this T-shirt, how much money would you need to spend?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	33.7	40.5	37.7	34.8	30.1	32.1	7.5	8.8	8.3	16.1	20.2	18.5
Age 15	38.6	38.8	38.7	55.9	22.1	40.5	14.2	2.7	8.9	16.0	21.9	18.7
Age 16	55.6	43.5	47.3	19.7	15.8	17.0	5.4	0.0	1.7	13.6	4.7	7.5
Age 14-16	39.4	40.9	40.2	40.9	24.1	31.3	9.9	4.8	7.0	15.6	16.3	16.0

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	40.9	48.0	44.9	51.8	47.0	49.1	8.7	9.7	9.2	30.0	32.7	31.5
Age 15	41.9	40.4	41.1	60.7	47.4	53.7	11.8	9.9	10.8	30.5	31.1	30.8
Age 16	55.6	38.7	45.7	40.7	47.9	44.9	9.2	16.6	13.5	37.2	29.2	32.5
Age 14-16	43.7	43.9	43.8	53.1	47.3	49.9	9.9	11.1	10.5	31.4	31.6	31.5

Manipur RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 9 OUT OF 9 DISTRICTS
Data is not presented where sample size is insufficient.

Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018
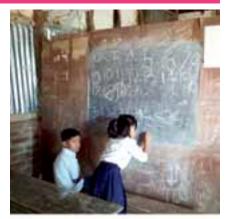
	2010	2014	2016	2018
Primary schools (Std I-IV/V)	97	100	107	89
Upper primary schools (Std I-VII/VIII)	28	79	73	69
Total schools visited	125	179	180	158

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	66.1	57.0	56.7	57.8
% Teachers present (Average)	70.8	63.5	65.2	66.9
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	71.3	52.6	53.9	56.1
% Teachers present (Average)	75.1	70.6	71.2	70.0

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	40.7	39.3	49.5	50.0
% Schools where Std IV children were observed sitting with one or more other classes	35.2	38.5	50.0	42.9
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	28.0	25.7	36.7	36.5
% Schools where Std IV children were observed sitting with one or more other classes	20.0	23.2	29.5	32.8

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	58.4	52.8	51.5	61.6
	Mid-day meal served in school on day of visit	47.8	34.5	49.4	46.4
Drinking water	No facility for drinking water	84.6	75.8	80.8	88.9
	Facility but no drinking water available	10.3	8.4	4.0	4.6
	Drinking water available	5.1	15.7	15.3	6.5
	Total	100	100	100	100
Toilet	No toilet facility	21.4	15.6	9.0	14.7
	Facility but toilet not useable	38.5	31.3	47.2	40.4
	Toilet useable	40.2	53.1	43.8	44.9
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	78.5	64.3	50.3	64.0
	Separate provision but locked	4.7	10.8	17.9	15.4
	Separate provision, unlocked but not useable	8.4	5.1	7.3	5.2
	Separate provision, unlocked and useable	8.4	19.8	24.5	15.4
	Total	100	100	100	100
Library	No library	90.8	82.0	88.3	91.0
	Library but no books being used by children on day of visit	3.4	15.2	8.3	5.8
	Library books being used by children on day of visit	5.9	2.8	3.3	3.2
	Total	100	100	100	100
Electricity	Electricity connection			36.3	55.6
	Of schools with electricity connection, % schools with electricity available on day of visit			59.0	74.7
Computer	No computer available for children to use	91.5	83.7	85.0	91.0
	Available but not being used by children on day of visit	5.9	11.2	10.6	5.8
	Computer being used by children on day of visit	2.5	5.1	4.4	3.2
	Total	100	100	100	100

Manipur RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	40.4	74.5	73.3	78.2
Upper primary schools (Std I-VII/VIII)	17.9	25.3	34.8	44.8

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	3.7	15.2	8.8
	No physical education period but dedicated time allotted	13.6	22.7	17.7
	No physical education period and no dedicated time allotted	82.7	62.1	73.5
	Total	100	100	100
Physical education teacher	Separate physical education teacher	2.5	6.2	4.1
	Other physical education teacher	17.5	13.9	15.9
	No physical education teacher	80.0	80.0	80.0
	Total	100	100	100
Playground	Playground inside the school premises	50.0	73.1	60.1
	Playground outside the school premises	20.9	11.9	17.0
	No accessible playground	29.1	14.9	22.9
	Total	100	100	100
Availability of any sports equipment		41.2	58.5	48.7
Supervised physical education activity observed on day of visit		9.4	13.2	11.1

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	87.6	94.2	97.5

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	35.5	33.1	23.8
Between July and September	59.7	38.6	58.0
After September	4.8	28.4	18.2

Meghalaya RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 7 OUT OF 7 DISTRICTS
Data is not presented where sample size is insufficient.
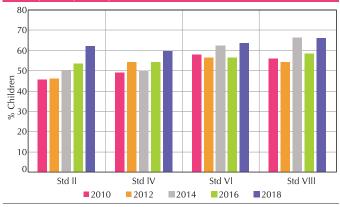
School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	35.7	58.6	0.5	5.3	100
Age 7-16: All	35.5	58.0	0.5	6.0	100
Age 7-10: All	31.1	64.0	0.4	4.5	100
Age 7-10: Boys	31.0	62.8	0.5	5.7	100
Age 7-10: Girls	31.4	64.9	0.3	3.5	100
Age 11-14: All	40.3	54.6	0.6	4.6	100
Age 11-14: Boys	39.0	53.2	0.5	7.3	100
Age 11-14: Girls	41.5	55.9	0.7	2.0	100
Age 15-16: All	32.3	55.0	0.4	12.3	100
Age 15-16: Boys	31.8	52.2	0.2	15.9	100
Age 15-16: Girls	32.3	57.9	0.6	9.2	100
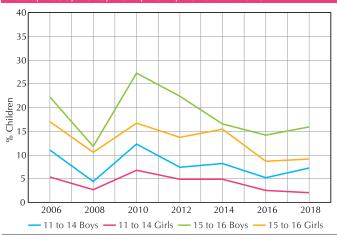
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 17.1% in 2006, 13.7% in 2012, and 9.2% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 62% as compared to 66.3% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std / Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	10.6	25.3	27.5	12.6	10.8	5.8	7.4						100
II	3.7	5.3	17.5	27.8	15.5	14.5	8.3	7.4					100
III	1.7		5.9	16.1	24.7	19.7	13.0	10.3	8.7				100
IV	5.8			15.6	22.1	19.3	16.5	10.7	6.1	3.9			100
V	5.6				15.6	21.2	21.6	18.5	11.0	6.6			100
VI	1.2					6.1	15.1	20.8	25.9	16.1	8.0	6.9	100
VII	3.2							13.1	24.7	25.0	18.7	15.3	100
VIII	4.8								21.3	27.9	28.9	17.1	100

This table shows the age distribution for each grade. For example, of all children in Std III, 16.1% children are 8 years old but there are also 5.9% who are 7, 24.7% who are 9, 19.7% who are 10, 13% who are 11, 10.3% who are 12, and 8.7% who are 13 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	9.1	8.3	16.5	0.4	0.4	0.0	65.4	100
Age 4	9.5	19.6	41.1	0.3	3.1	0.0	26.4	100
Age 5	7.9	25.3	49.6	3.8	4.4	0.0	8.9	100
Age 6	13.6	22.1	34.7	6.8	16.9	0.0	6.0	100
Age 7	16.8	13.5	21.4	13.9	30.9	0.1	3.3	100
Age 8	11.9	13.7	11.6	16.9	41.7	0.0	4.1	100

Meghalaya RURAL

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	12.3	47.9	29.6	7.2	3.0	100
II	5.9	33.5	32.6	16.5	11.7	100
III	1.9	19.0	29.6	24.9	24.6	100
IV	0.9	14.6	21.7	25.7	37.2	100
V	0.2	6.9	17.0	25.9	50.1	100
VI	0.2	3.6	9.3	25.1	61.8	100
VII	0.2	3.6	8.3	18.3	69.6	100
VIII	0.4	2.2	6.0	8.7	82.8	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 1.9% cannot even read letters, 19% can read letters but not words or higher, 29.6% can read words but not Std I level text or higher, 24.9% can read Std I level text but not Std II level text, and 24.6% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
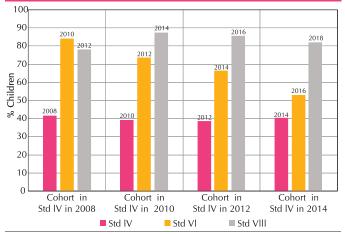
Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	23.9	38.7	30.1
2014	23.2	25.2	24.3
2016	16.9	22.1	19.6
2018	19.6	28.0	24.7

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Reading Tool (English)

Std II level text

Salma is a little girl. She had a pretty doll. She loved playing with her doll. One day the doll fell from her hand to the floor. It broke into many pieces. Salma was very sad. She cried a lot. Her mother gave her another doll. Now she is happy again.

Std I level text

Ravi is a boy.
He has many friends.
He loves to draw.
He does not like to sing.

Letters

b s o
k m
y r h
t x

Words

ring bad
      ball
cold king
clap foot
      fan
girl crow

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	58.4	69.3	64.5	69.0	86.6	78.4
2014	46.1	69.1	58.3	86.8	88.6	88.0
2016	41.3	53.0	47.6	84.5	87.2	86.0
2018	38.9	58.1	50.2	76.9	85.5	82.5

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 42% and in Std VI (in 2010) was 84.5%. When the cohort reached Std VIII in 2012, this figure was 78.6%. The progress of each of these cohorts can be understood in the same way.

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Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	11.1	39.9	47.7	1.1	0.2	100
II	4.3	21.8	66.3	7.2	0.4	100
III	2.8	11.3	66.8	18.1	1.2	100
IV	1.7	7.3	58.8	26.2	6.0	100
V	0.2	3.5	53.0	36.2	7.2	100
VI	0.6	1.7	45.1	39.2	13.3	100
VII	0.3	1.3	37.1	42.9	18.5	100
VIII	0.4	1.2	32.9	37.5	28.1	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 2.8% cannot even recognize numbers 1-9, 11.3% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 66.8% can recognize numbers up to 99 but cannot do subtraction, 18.1% can do subtraction but cannot do division, and 1.2% can do division. For each grade, the total of these exclusive categories is 100%.
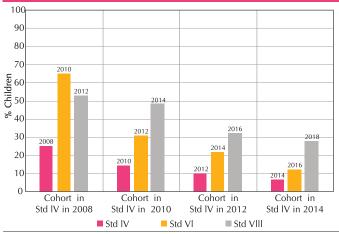
Arithmetic Tool (English)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	27.7	32.7	29.9
2014	23.1	33.8	28.8
2016	21.6	23.0	22.3
2018	14.2	22.6	19.3

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	17.3	20.1	18.8	37.5	65.0	52.5
2014	5.9	15.4	10.9	45.8	49.6	48.3
2016	11.4	10.0	10.6	30.2	33.9	32.2
2018	4.7	8.8	7.1	23.3	30.3	27.9

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 24.9% and in Std VI (in 2010) was 65.1%. When the cohort reached Std VIII in 2012, this figure was 52.8%. The progress of each of these cohorts can be understood in the same way.

Meghalaya RURAL

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
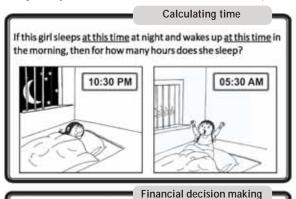
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	18.9	24.9	21.9
Age 11-13	41.2	53.6	47.6
Age 14-16	63.3	72.3	68.0
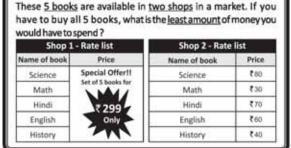
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	15.3	19.8	17.5	1.9	4.3	3.1
Age 11-13	39.8	42.7	41.3	7.5	11.8	9.7
Age 14-16	54.4	59.6	57.1	17.2	23.1	20.2

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

If this girl sleeps at this time at night and wakes up at this time in the morning, then for how many hours does she sleep?

10:30 PM   05:30 AM

Applying unitary method

If 3 tablets are needed to purify 15 litres of water, how many tablets are needed to purify 40 litres of water?

15 Litres   40 Litres

Financial decision making

These 5 books are available in two shops in a market. If you have to buy all 5 books, what is the least amount of money you would have to spend?

Shop 1 - Rate list	
Name of book	Price
Science	Special Offer!! Set of 5 books for
Math	
Hindi	₹299 Only
English	
History	

Shop 2 - Rate list	
Name of book	Price
Science	₹80
Math	₹30
Hindi	₹70
English	₹60
History	₹40

Calculating discount

Sale!!! 10% Discount

M.R.P ₹200

This is the price of this T-shirt and it is available on a discount of 10 percent. If you were to buy this T-shirt, how much money would you need to spend?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018
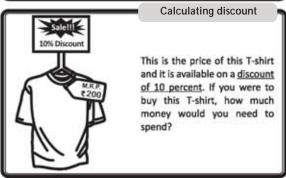
Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	20.6	41.2	28.9	25.7	19.6	23.2	14.4	25.4	19.6	7.0	0.0	4.2
Age 15	33.9	27.2	30.0	35.1	23.1	28.1	10.1	19.6	14.8	14.9	8.4	11.1
Age 16	37.4	18.0	27.6	42.9	35.5	39.2	45.8	46.0	45.9	1.4	5.4	3.5
Age 14-16	29.2	28.3	28.8	33.6	26.4	30.1	21.6	30.5	26.1	7.0	4.8	5.9

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	29.5	50.5	42.8	27.5	38.2	34.2	83.3	27.0	47.0	8.8	14.9	12.6
Age 15	29.8	46.7	38.8	30.2	45.2	38.2	33.7	14.4	23.2	18.7	15.0	16.8
Age 16	56.4	51.8	53.8	50.9	35.4	42.2	29.7	43.6	39.0	17.4	5.6	10.8
Age 14-16	39.6	49.8	45.4	37.2	39.4	38.5	48.4	31.4	37.7	15.7	11.6	13.4

Meghalaya RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 7 OUT OF 7 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	101	114	118	127
Upper primary schools (Std I-VII/VIII)	9	15	11	16
Total schools visited	110	129	129	143

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	75.5	73.8	74.8	74.9
% Teachers present (Average)	93.0	88.3	83.0	86.6

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	64.7	66.9	59.8	76.8
% Schools where Std IV children were observed sitting with one or more other classes	61.3	60.7	59.0	75.0

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	60.6	83.3	86.7	84.5
	Mid-day meal served in school on day of visit	51.9	40.7	47.9	47.9
Drinking water	No facility for drinking water	70.6	71.7	72.2	76.1
	Facility but no drinking water available	5.5	11.8	7.9	8.5
	Drinking water available	23.9	16.5	19.8	15.5
	Total	100	100	100	100
Toilet	No toilet facility	34.9	20.2	2.3	7.0
	Facility but toilet not useable	40.6	41.1	45.7	48.3
	Toilet useable	24.5	38.8	51.9	44.8
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	64.8	52.5	29.4	37.3
	Separate provision but locked	9.1	19.8	24.8	20.9
	Separate provision, unlocked but not useable	11.4	10.9	7.3	11.9
	Separate provision, unlocked and useable	14.8	16.8	38.5	29.9
	Total	100	100	100	100
Library	No library	78.0	76.4	71.3	89.4
	Library but no books being used by children on day of visit	6.4	1.6	6.2	7.8
	Library books being used by children on day of visit	15.6	22.1	22.5	2.8
	Total	100	100	100	100
Electricity	Electricity connection			16.8	15.9
	Of schools with electricity connection, % schools with electricity available on day of visit			38.9	80.0
Computer	No computer available for children to use	97.3	98.5	98.3	97.9
	Available but not being used by children on day of visit	1.8	0.8	0.9	1.4
	Computer being used by children on day of visit	0.9	0.8	0.9	0.7
	Total	100	100	100	100

Meghalaya RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
All schools (Std I-IV/V and Std I-VII/VIII)	71.0	68.6	69.9	69.0

Table 19: Physical education and sports in schools 2018

% Schools with		All schools (Std I-IV/V and Std I-VII/VIII)
Dedicated time for physical education	Physical education period in the timetable	22.0
	No physical education period but dedicated time allotted	18.2
	No physical education period and no dedicated time allotted	59.9
	Total	100
Physical education teacher	Separate physical education teacher	6.8
	Other physical education teacher	15.8
	No physical education teacher	77.4
	Total	100
Playground	Playground inside the school premises	54.3
	Playground outside the school premises	13.6
	No accessible playground	32.1
	Total	100
Availability of any sports equipment		19.7
Supervised physical education activity observed on day of visit		8.6

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	91.3	78.9	90.1
Of all schools that have an SMC, % schools that had the last SMC meeting			
Before July	56.1	48.2	32.5
Between July and September	41.1	39.5	48.8
After September	2.8	12.4	18.7

Mizoram, Nagaland

Odisha, Punjab

Rajasthan, Sikkim

Mizoram RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 8 OUT OF 8 DISTRICTS
Data is not presented where sample size is insufficient.
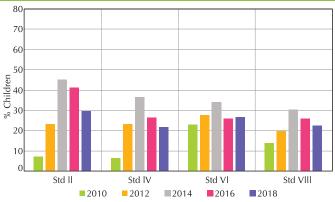
Annual Status of Education Report
असर ASER 2018 RURAL
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School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	72.4	27.2	0.0	0.4	100
Age 7-16: All	72.9	26.1	0.0	1.0	100
Age 7-10: All	70.3	29.4	0.0	0.3	100
Age 7-10: Boys	71.6	28.0	0.0	0.4	100
Age 7-10: Girls	68.9	31.0	0.0	0.1	100
Age 11-14: All	75.8	23.7	0.0	0.5	100
Age 11-14: Boys	76.9	22.4	0.0	0.7	100
Age 11-14: Girls	74.5	25.3	0.0	0.2	100
Age 15-16: All	72.8	21.7	0.2	5.3	100
Age 15-16: Boys	71.7	21.0	0.5	6.9	100
Age 15-16: Girls	73.8	22.5	0.0	3.7	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

11 to 14 Boys — 11 to 14 Girls — 15 to 16 Boys — 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 18.9% in 2006, 12.9% in 2012, and 3.7% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

2010 2012 2014 2016 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 29.7% as compared to 22.5% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	23.5	36.5	28.0	9.0	3.0								100
II		4.9	12.0	27.2	34.0	11.4	5.7	4.9					100
III	3.7		9.0	23.4	32.5	15.4	7.1	6.1	2.9				100
IV	3.7			9.2	17.8	29.8	14.4	14.2	7.7	3.3			100
V	1.9			6.8	7.8	30.0	22.9	21.1	7.4	2.1			100
VI	4.4					10.4	23.6	33.8	16.2	7.1	4.4		100
VII	1.6					5.8	5.0	27.4	37.6	12.9	9.8		100
VIII	1.8							8.0	41.0	35.3	9.1	4.8	100

This table shows the age distribution for each grade. For example, of all children in Std III, 23.4% children are 8 years old but there are also 9% who are 7, 32.5% who are 9, 15.4% who are 10, 7.1% who are 11, 6.1% who are 12, and 2.9% who are 13 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	96.7	0.2	2.1	1.0	0.0	0.0	0.0	100
Age 4	74.5	1.9	14.4	7.1	1.7	0.0	0.4	100
Age 5	34.8	4.0	26.3	24.5	10.1	0.0	0.3	100
Age 6	13.3	6.3	17.6	42.0	20.8	0.0	0.0	100
Age 7	4.7	5.1	4.9	57.6	27.6	0.0	0.3	100
Age 8	1.9	3.2	2.4	65.4	26.9	0.0	0.2	100

Mizoram RURAL

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	23.4	29.8	32.1	11.9	2.8	100
II	6.3	18.9	38.3	25.3	11.2	100
III	1.0	4.0	33.2	36.2	25.6	100
IV	0.6	2.0	15.9	34.1	47.4	100
V	0.6	1.2	8.0	25.9	64.3	100
VI	0.0	1.9	4.4	19.4	74.4	100
VII	0.3	0.8	2.1	11.8	85.0	100
VIII	0.0	0.3	2.1	8.3	89.4	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 1% cannot even read letters, 4% can read letters but not words or higher, 33.2% can read words but not Std I level text or higher, 36.2% can read Std I level text but not Std II level text, and 25.6% can read Std II level text. For each grade, the total of these exclusive categories is 100%.

Reading Tool (Mizo)

Std II level text

Ka thian tha ber chu Laldika ani a Kan kawmthlangah an awm. A felin lehkha a thiam thei a, kan in kawmngeih hle thin. Nitinin sikul kan kal rual thin a pawlli zirlai kan ni a. Kan khaw sikul ah kan kal thin. Zirtirtu ten a fel em avangin an duhsak thin hle. Laldika chuan sikul kalloh a hreh thin hle. Tulloa sikul thulh a duh ngai lo. Laldika chu Tlai tin a nuin lehkha a zirtir thin a, zanah a zir ziah thin bawk. Laldika chuan mi tanpui nuam a ti hle a. A theih ang chin chinah mi a tanpui fo thin. Pathian thu awih tak ani a, a inkhawm ziah bawk. Vanram kai loh a hlau hle.

Std I level text

Ka nu inah a awm thin a
Ka pa pawh inah a awm.
Min hmangaih hle a ni.
Hlim takin kan chengho thin.

Letters

e   aw   o
k   m
z   r   h
t   p

Words

nula   tho
sava
sai   kel
khaw   hlim
thi
dar   ran

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	19.2	31.5	22.4
2014	14.8	25.8	19.0
2016	7.2	18.0	10.5
2018	25.2	26.8	25.6

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	55.2	71.5	59.6	95.6	89.2	94.3
2014	47.1	60.9	52.1	83.6	81.0	82.8
2016	41.0	61.2	46.6	81.9	88.4	83.5
2018	58.6	74.2	64.3	86.7	98.5	89.3

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 68.1% and in Std VI (in 2010) was 85.6%. When the cohort reached Std VIII in 2012, this figure was 94.3%. The progress of each of these cohorts can be understood in the same way.

Mizoram RURAL

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	21.4	27.3	41.6	9.0	0.8	100
II	6.4	14.1	46.2	29.4	3.9	100
III	1.0	5.3	34.9	50.3	8.6	100
IV	0.2	2.6	18.3	54.9	24.0	100
V	0.3	0.9	11.4	47.2	40.2	100
VI	0.0	1.2	7.6	40.0	51.2	100
VII	0.3	0.1	2.7	26.4	70.4	100
VIII	0.0	0.0	5.5	23.5	71.0	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 1% cannot even recognize numbers 1-9, 5.3% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 34.9% can recognize numbers up to 99 but cannot do subtraction, 50.3% can do subtraction but cannot do division, and 8.6% can do division. For each grade, the total of these exclusive categories is 100%.
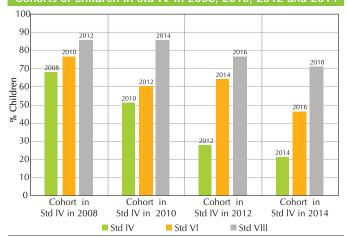
Arithmetic Tool (English)

Table 8: Trends over time Arithmetic in Std III by school type 2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	58.1	69.4	61.0
2014	63.9	67.7	65.3
2016	33.1	45.9	37.0
2018	57.4	62.7	58.8

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time Arithmetic in Std V and Std VIII by school type 2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	41.6	49.0	43.6	86.0	84.8	85.7
2014	37.1	45.1	40.0	84.2	88.5	85.5
2016	25.3	35.3	28.1	76.7	76.9	76.7
2018	35.8	48.0	40.2	67.5	82.8	71.0

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time % Children who can do division Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

Std IV   Std VI   Std VIII

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 67.9% and in Std VI (in 2010) was 76.4%. When the cohort reached Std VIII in 2012, this figure was 85.7%. The progress of each of these cohorts can be understood in the same way.

Mizoram RURAL

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
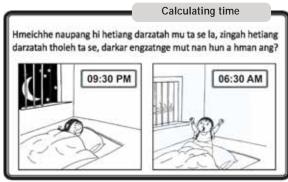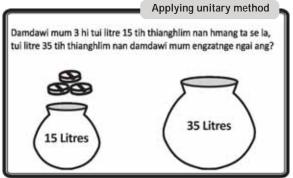
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	34.4	34.2	34.3
Age 11-13	66.3	71.3	68.7
Age 14-16	88.7	89.1	88.9
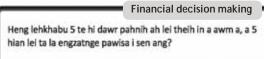
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	62.2	61.3	61.8	16.6	15.4	16.0
Age 11-13	86.0	88.5	87.2	48.8	48.7	48.7
Age 14-16	94.0	95.2	94.6	79.6	79.9	79.7

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

Hmeichhe naupang hi hetiang darzatah mu ta se la, zingah hetiang darzatah tholeh ta se, darkar engzatnge mut nan hun a hman ang?

09:30 PM   06:30 AM

Applying unitary method

Damdawi mum 3 hi tui litre 15 tih thianghlim nan hmang ta se la, tui litre 35 tih thianghlim nan damdawi mum engzatnge ngai ang?

15 Litres   35 Litres

Financial decision making

Heng lehkhabu 5 te hi dawr pahnih ah lei theih in a awm a, a 5 hian lei ta la engzatnge pawisa i sen ang?

Shop 1 - Rate list

Name of book	Price
Science	₹50
Math	₹80
Hindi	₹30
English	₹70
History	₹40

Shop 2 - Rate list

Name of book	Price
Science	Special Offer!! Set of 5 books for ₹299 Only
Math	
Hindi	
English	
History	

Calculating discount

Sale!!! 10% Discount

M.R.P. ₹400

He T –shirt hi Rs 400 man a ni a, 10% in an discount a, lei dawn ta la cheng engzatin nge T-shirt hi i lei theih ang?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	27.9	14.8	21.8	30.9	27.2	29.1	19.6	37.2	27.8	6.4	3.9	5.2
Age 15	70.7	29.3	47.9	41.1	8.4	23.0	44.1	30.2	36.4	0.0	9.3	5.1
Age 16	33.6	30.4	31.4	33.6	38.3	36.8	66.4	38.3	47.4	32.9	9.2	16.9
Age 14-16	38.0	21.9	29.5	33.4	25.0	29.0	30.5	35.7	33.2	8.1	6.4	7.2

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	47.9	50.9	49.4	34.6	38.1	36.4	46.3	44.7	45.5	20.1	18.9	19.5
Age 15	42.8	58.7	50.7	37.9	42.1	40.0	43.8	51.7	47.8	23.6	28.1	25.8
Age 16	55.4	45.5	50.7	40.2	39.5	39.9	38.0	34.9	36.5	17.7	16.7	17.2
Age 14-16	48.6	51.7	50.1	37.2	39.6	38.4	43.2	44.1	43.6	20.4	21.0	20.7

Mizoram RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 8 OUT OF 8 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	166	184	218	228
Upper primary schools (Std I-VII/VIII)	8	3	4	5
Total schools visited	174	187	222	233

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	85.8	86.8	86.2	83.4
% Teachers present (Average)	94.4	88.7	89.4	83.2

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	31.8	25.3	28.5	2.2
% Schools where Std IV children were observed sitting with one or more other classes	29.9	25.1	28.4	1.7

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	96.2	94.0	93.6	96.1
	Mid-day meal served in school on day of visit	94.0	72.0	91.7	89.2
Drinking water	No facility for drinking water	47.3	24.5	31.2	39.6
	Facility but no drinking water available	4.1	7.1	4.1	3.0
	Drinking water available	48.5	68.5	64.7	57.4
	Total	100	100	100	100
Toilet	No toilet facility	7.1	7.6	5.1	17.6
	Facility but toilet not useable	37.3	58.7	54.9	37.8
	Toilet useable	55.6	33.7	40.0	44.6
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	43.4	21.1	26.2	29.8
	Separate provision but locked	14.5	47.4	41.1	30.7
	Separate provision, unlocked but not useable	11.3	3.5	7.4	4.6
	Separate provision, unlocked and useable	30.8	28.1	25.3	34.9
	Total	100	100	100	100
Library	No library	93.6	83.2	91.0	82.4
	Library but no books being used by children on day of visit	4.7	10.9	5.4	15.0
	Library books being used by children on day of visit	1.7	6.0	3.6	2.6
	Total	100	100	100	100
Electricity	Electricity connection			79.7	77.6
	Of schools with electricity connection, % schools with electricity available on day of visit			89.0	82.2
Computer	No computer available for children to use	92.4	98.4	95.1	90.1
	Available but not being used by children on day of visit	1.8	1.1	4.1	9.5
	Computer being used by children on day of visit	5.9	0.5	0.9	0.4
	Total	100	100	100	100

Mizoram RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
All schools (Std I-IV/V and Std I-VII/VIII)	39.8	63.7	57.3	84.1

Table 19: Physical education and sports in schools 2018

% Schools with		All schools (Std I-IV/V and Std I-VII/VIII)
Dedicated time for physical education	Physical education period in the timetable	47.6
	No physical education period but dedicated time allotted	24.9
	No physical education period and no dedicated time allotted	27.5
	Total	100
Physical education teacher	Separate physical education teacher	15.1
	Other physical education teacher	47.3
	No physical education teacher	37.6
	Total	100
Playground	Playground inside the school premises	65.8
	Playground outside the school premises	18.0
	No accessible playground	16.2
	Total	100
Availability of any sports equipment		75.0
Supervised physical education activity observed on day of visit		14.9

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	95.6	97.7	95.7
Of all schools that have an SMC, % schools that had the last SMC meeting			
Before July	68.9	47.0	39.2
Between July and September	29.9	43.4	43.7
After September	1.2	9.6	17.1

Nagaland RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 11 OUT OF 11 DISTRICTS
Data is not presented where sample size is insufficient.

Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	49.3	48.6	0.0	2.1	100
Age 7-16: All	49.3	47.7	0.0	3.0	100
Age 7-10: All	48.4	50.1	0.0	1.5	100
Age 7-10: Boys	47.2	50.8	0.1	1.9	100
Age 7-10: Girls	49.1	49.9	0.0	1.1	100
Age 11-14: All	50.0	47.5	0.0	2.5	100
Age 11-14: Boys	47.9	49.8	0.0	2.3	100
Age 11-14: Girls	51.8	45.5	0.0	2.6	100
Age 15-16: All	49.6	41.3	0.0	9.2	100
Age 15-16: Boys	45.6	42.4	0.0	12.0	100
Age 15-16: Girls	52.7	40.9	0.0	6.4	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

— 11 to 14 Boys — 11 to 14 Girls — 15 to 16 Boys — 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 17.2% in 2006, 13.3% in 2012, and 6.4% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

■ 2010 ■ 2012 ■ 2014 ■ 2016 ■ 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 43.9% as compared to 53% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	10.2	35.5	32.0	12.1	10.3								100
II		4.2	9.3	32.6	30.2	11.8	7.6	4.3					100
III			2.7	6.3	32.9	28.4	15.4	6.2	8.3				100
IV			1.4		6.2	27.3	33.2	14.4	10.0	5.0	2.5		100
V				1.9		5.1	31.8	30.0	17.2	7.9	6.1		100
VI					1.6		5.0	25.2	36.5	14.9	9.5	5.3	2.1	100
VII					4.4			28.2	32.7	19.4	11.9	3.5	100
VIII					1.1			5.4	26.5	34.1	19.8	13.1	100

This table shows the age distribution for each grade. For example, of all children in Std III, 32.9% children are 8 years old but there are also 6.3% who are 7, 28.4% who are 9, 15.4% who are 10, 6.2% who are 11, and 8.3% who are 12 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

| Age | Pre-school | | | School | | | Not in pre-school or school | Total |
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	22.7	9.6	5.9	1.4	0.6	0.0	59.9	100
Age 4	8.8	35.4	33.6	1.7	1.7	0.2	18.6	100
Age 5	4.4	40.8	40.4	6.5	4.0	0.0	3.9	100
Age 6	11.6	20.0	24.2	22.7	19.6	0.0	1.8	100
Age 7	10.9	8.9	9.2	34.8	35.2	0.0	1.0	100
Age 8	3.2	6.7	5.9	41.3	41.2	0.0	1.6	100

Nagaland RURAL

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	10.8	35.2	42.6	7.8	3.6	100
II	5.9	22.6	44.1	19.8	7.6	100
III	1.9	14.2	36.2	25.1	22.6	100
IV	0.9	7.0	27.3	28.5	36.2	100
V	0.7	3.2	17.3	30.8	48.0	100
VI	0.1	1.0	9.3	28.2	61.4	100
VII	0.0	0.5	6.7	19.1	73.7	100
VIII	0.0	0.0	2.3	14.1	83.6	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 1.9% cannot even read letters, 14.2% can read letters but not words or higher, 36.2% can read words but not Std I level text or higher, 25.1% can read Std I level text but not Std II level text, and 22.6% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
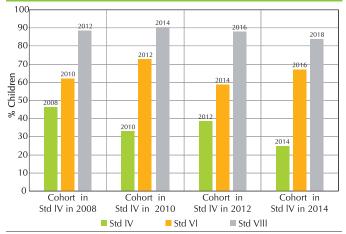
Reading Tool (English)

Std II level text
It was the rainy season. The sky was full of clouds. There was a cool breeze blowing. Asif was eager to play on a swing. His older brother got a thick rope. They tied it on the tree and made a swing. Many children joined them and they all started playing. They played till it got dark.

Std I level text
This is a big monkey. He lives on a tree. He likes to jump. He also likes bananas.

Letters
r o k
d i
f y s
b n

Words
moon like
ant
sun hot
baby dark
net
bus gold

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	12.8	33.7	20.5
2014	4.6	17.6	9.1
2016	7.9	27.1	15.6
2018	7.4	39.0	22.6

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	42.3	68.6	52.5	85.4	92.9	88.6
2014	27.4	60.7	41.6	86.3	95.1	90.3
2016	37.8	64.9	50.1	82.4	93.9	88.0
2018	31.7	67.3	48.1	76.3	90.8	83.8

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 46.2% and in Std VI (in 2010) was 62.1%. When the cohort reached Std VIII in 2012, this figure was 88.5%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	9.3	23.8	57.8	4.8	4.4	100
II	5.1	14.6	62.0	14.6	3.8	100
III	1.8	6.8	54.5	30.3	6.7	100
IV	1.0	3.4	43.1	37.9	14.6	100
V	0.8	1.6	32.0	39.7	25.8	100
VI	0.3	0.7	22.3	47.2	29.5	100
VII	0.0	0.4	22.3	36.5	40.9	100
VIII	0.0	0.0	14.6	34.1	51.3	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 1.8% cannot even recognize numbers 1-9, 6.8% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 54.5% can recognize numbers up to 99 but cannot do subtraction, 30.3% can do subtraction but cannot do division, and 6.7% can do division. For each grade, the total of these exclusive categories is 100%.
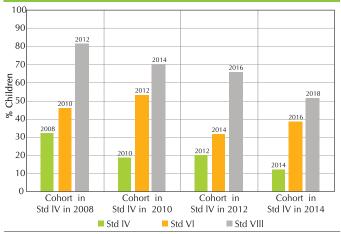
Arithmetic Tool (English)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	44.5	69.0	53.6
2014	35.4	49.3	40.2
2016	39.2	48.1	42.8
2018	26.3	48.5	37.0

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	27.3	46.0	34.6	78.0	86.6	81.6
2014	18.3	35.3	25.6	66.6	74.5	70.2
2016	13.0	31.1	21.2	60.2	71.5	65.7
2018	19.3	33.5	25.8	40.7	61.6	51.5

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 31.9% and in Std VI (in 2010) was 46.1%. When the cohort reached Std VIII in 2012, this figure was 81.6%. The progress of each of these cohorts can be understood in the same way.

Nagaland RURAL

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018

Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	25.5	27.3	26.4
Age 11-13	53.9	55.6	54.7
Age 14-16	74.2	80.0	77.1
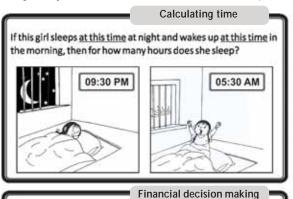
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	40.7	41.1	40.9	9.1	11.3	10.2
Age 11-13	65.8	64.5	65.2	30.9	28.2	29.6
Age 14-16	78.0	79.6	78.8	47.4	52.8	50.1

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

If this girl sleeps at this time at night and wakes up at this time in the morning, then for how many hours does she sleep?

09:30 PM   05:30 AM

Applying unitary method

If 3 tablets are needed to purify 15 litres of water, how many tablets are needed to purify 50 litres of water?

15 Litres   50 Litres

Financial decision making

These 5 books are available in two shops in a market. If you have to buy all 5 books, what is the least amount of money you would have to spend?

Shop 1 - Rate list	
Name of book	Price
Science	₹60
Math	₹80
Hindi	₹30
English	₹70
History	₹50

Shop 2 - Rate list	
Name of book	Price
Science	Special Offer!! Set of 5 books for ₹299 Only
Math	
Hindi	
English	
History	

Calculating discount

Sale!!! 10% Discount

M.R.P. ₹300

This is the price of this T-shirt and it is available on a discount of 10 percent. If you were to buy this T-shirt, how much money would you need to spend?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	43.0	26.6	35.1	23.6	18.5	21.1				16.4	8.6	12.6
Age 15	32.7	19.9	27.3	24.0	25.5	24.7		Data insufficient		22.2	4.4	14.6
Age 16	34.4	32.8	33.5	35.4	26.3	29.9				30.9	10.6	18.8
Age 14-16	36.8	26.1	31.6	26.0	23.2	24.6				21.6	7.7	14.9
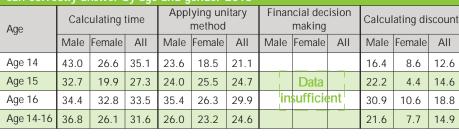
Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	41.2	50.3	45.9	37.1	35.9	36.5				24.5	31.2	28.0
Age 15	43.4	35.7	39.4	46.0	40.1	42.9		Data insufficient		17.8	27.8	23.1
Age 16	52.3	40.8	46.1	37.0	34.3	35.6				27.3	33.4	30.6
Age 14-16	45.0	42.6	43.7	40.1	36.9	38.4				23.0	30.7	27.0

Nagaland RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 11 OUT OF 11 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	202	160	195	159
Upper primary schools (Std I-VII/VIII)	21	95	105	130
Total schools visited	223	255	300	289

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	81.9	81.7	83.1	77.2
% Teachers present (Average)	87.2	86.1	88.6	82.9
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	83.0	81.0	84.5	79.4
% Teachers present (Average)	86.3	84.2	82.5	74.9

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	18.7	18.8	13.0	12.8
% Schools where Std IV children were observed sitting with one or more other classes	17.5	20.0	9.9	12.2
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	28.6	15.1	9.5	9.5
% Schools where Std IV children were observed sitting with one or more other classes	28.6	13.3	11.8	10.9

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	81.7	79.2	84.0	83.0
	Mid-day meal served in school on day of visit	31.9	24.1	24.6	27.4
Drinking water	No facility for drinking water	56.9	73.4	70.7	63.8
	Facility but no drinking water available	6.0	3.2	6.7	8.9
	Drinking water available	37.0	23.4	22.6	27.3
	Total	100	100	100	100
Toilet	No toilet facility	13.8	4.4	4.8	5.9
	Facility but toilet not useable	32.3	27.7	45.2	32.3
	Toilet useable	53.9	68.0	50.0	61.8
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	47.8	31.1	17.4	26.9
	Separate provision but locked	9.4	16.7	31.4	18.1
	Separate provision, unlocked but not useable	12.2	7.2	10.3	8.0
	Separate provision, unlocked and useable	30.6	45.0	40.9	47.0
	Total	100	100	100	100
Library	No library	86.7	85.4	82.6	87.2
	Library but no books being used by children on day of visit	4.1	9.1	9.4	5.9
	Library books being used by children on day of visit	9.2	5.5	8.0	6.9
	Total	100	100	100	100
Electricity	Electricity connection			60.1	72.0
	Of schools with electricity connection, % schools with electricity available on day of visit			82.4	71.2
Computer	No computer available for children to use	85.3	88.6	85.4	86.8
	Available but not being used by children on day of visit	11.1	5.9	11.5	10.8
	Computer being used by children on day of visit	3.7	5.5	3.1	2.4
	Total	100	100	100	100

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	50.3	45.6	67.2	81.8
Upper primary schools (Std I-VII/VIII)	0.0	17.9	26.7	36.9

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	8.1	19.1	13.1
	No physical education period but dedicated time allotted	10.8	20.6	15.3
	No physical education period and no dedicated time allotted	81.1	60.3	71.5
	Total	100	100	100
Physical education teacher	Separate physical education teacher	4.7	24.4	13.7
	Other physical education teacher	8.0	3.9	6.1
	No physical education teacher	87.3	71.7	80.1
	Total	100	100	100
Playground	Playground inside the school premises	42.0	65.1	52.5
	Playground outside the school premises	31.2	22.5	27.3
	No accessible playground	26.8	12.4	20.3
	Total	100	100	100
Availability of any sports equipment		27.5	61.2	42.9
Supervised physical education activity observed on day of visit		4.5	14.8	9.2

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	95.5	97.4	92.2

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	48.6	31.1	30.0
Between July and September	49.5	46.6	52.8
After September	1.8	22.3	17.2

Odisha RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 30 OUT OF 30 DISTRICTS
Data is not presented where sample size is insufficient.

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018
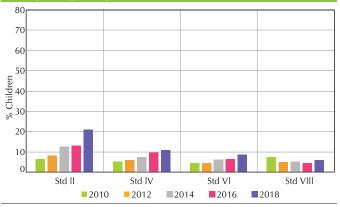
Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	88.0	10.5	0.1	1.5	100
Age 7-16: All	87.3	9.4	0.1	3.2	100
Age 7-10: All	86.0	13.1	0.2	0.8	100
Age 7-10: Boys	83.7	15.2	0.2	0.9	100
Age 7-10: Girls	88.3	10.9	0.1	0.7	100
Age 11-14: All	91.0	6.8	0.1	2.1	100
Age 11-14: Boys	90.2	7.7	0.1	2.1	100
Age 11-14: Girls	91.9	5.8	0.2	2.1	100
Age 15-16: All	80.5	6.6	0.2	12.7	100
Age 15-16: Boys	79.4	7.3	0.1	13.3	100
Age 15-16: Girls	81.5	6.0	0.2	12.3	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

— 11 to 14 Boys — 11 to 14 Girls — 15 to 16 Boys — 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 31.4% in 2006, 28.2% in 2012, and 12.3% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

■ 2010 ■ 2012 ■ 2014 ■ 2016 ■ 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 21.1% as compared to 5.9% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	49.3	35.7	11.4	3.5									100
II	7.9	9.9	61.3	17.6	3.4								100
III	1.7		9.5	65.6	18.7	4.5							100
IV	1.6			11.3	63.9	19.9	3.3						100
V	2.8				6.5	68.7	16.5	5.6					100
VI	2.4					7.1	61.3	25.0	4.1				100
VII	3.4						6.8	69.7	16.8	3.4			100
VIII	3.0							9.6	66.8	16.8	3.9		100

This table shows the age distribution for each grade. For example, of all children in Std III, 65.6% children are 8 years old but there are also 9.5% who are 7, 18.7% who are 9, and 4.5% who are 10 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	57.4	0.1	2.2	31.6	2.4	0.0	6.4	100
Age 4	55.5	0.8	7.1	30.7	4.8	0.0	1.1	100
Age 5	37.5	0.6	7.8	42.1	11.1	0.0	0.9	100
Age 6	7.9	0.3	4.5	71.6	14.3	0.0	1.4	100
Age 7	0.6	0.2	1.2	81.1	16.3	0.0	0.7	100
Age 8	0.2	0.1	0.4	84.7	14.0	0.1	0.6	100

Odisha RURAL

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	39.9	26.7	16.2	7.2	10.1	100
II	18.9	22.2	21.6	13.0	24.3	100
III	8.6	15.7	22.8	14.2	38.7	100
IV	5.9	11.1	17.6	16.2	49.2	100
V	3.3	9.3	13.5	15.4	58.4	100
VI	2.5	6.1	12.6	13.6	65.3	100
VII	1.9	4.6	9.9	14.8	68.9	100
VIII	1.5	3.8	9.4	12.8	72.6	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 8.6% cannot even read letters, 15.7% can read letters but not words or higher, 22.8% can read words but not Std I level text or higher, 14.2% can read Std I level text but not Std II level text, and 38.7% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
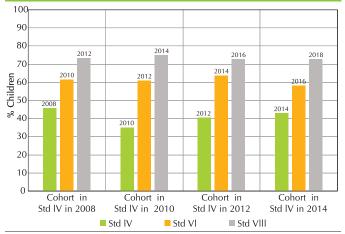
Reading Tool (Odia)

Std II level text
ବରଷା ଦିନ । ଆକାଶରେ କଳା ବାଦଲ ଭାସୁଥିଲା । ଶୀତଳ ପବନ ବୋହୁଥିଲା । କୁନି ଦୋଳି ଖେଳିବା ପାଇଁ ମନ ବଳାଇଲା । ସେ ତାର ବଡ ଭାଇକୁ ଦଉଡି ଆଣିବା ପାଇଁ କହିଲା । ଚେଣ୍ଡୁ ତା ଭାଇ ଗୋଟିଏ ଦଉଡି ଆଣିଲା । କୁନି ତାକୁ ଗଛରେ ଝୁଲାଇ ଦୋଳି ତିଆରି କଲା । ଦୁଳ କଶ ମିଶି ଦୋଳି ଖେଳିଲେ । ଆଜ ବହୁତ ପିଲା ଦୋଳି ଖେଳିବାକୁ ଆସିଲେ । ଖେଳୁ ଖେଳୁ ରାତି ହୋଇଗଲା । କୁନିକୁ ବହୁତ ଡର ଲାଗିଲା । ସେ ତା ଭାଇ ସହିତ ମିଶି ଖୁସି ମନରେ ଘରକୁ ଫେରିଲା ।

Std I level text
ବରଷା ପରେ ଶୀତ ଋତୁ ଆସିଛି । ଏହି ଋତୁରେ ବହୁତ ଶୀତ ହୁଏ । ବାପା ଗରମ ପୋଷାକ ଆଣିଲେ । ଆମେ ତାକୁ ପାଇ ଖୁସି ହେଲୁ ।

Letters	Words
ଷ ଲ ମ ଫ ଚ ଗ ର ଡ ପ ମ	ଗୋଲାପ ଦୁମ୍ବା ପାଣି ବାଦଲ ମୋଟା ଦୁଇ ନେଭଳ ବାଡି ଶାଖା ବୋଇ

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	24.7	53.4	26.5
2014	28.9	70.8	33.0
2016	31.5	69.2	35.5
2018	35.0	64.5	38.7

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	46.1	75.7	47.1	72.8	84.5	73.2
2014	49.1	76.5	50.9	74.5	82.9	74.9
2016	48.8	81.7	51.6	72.0	85.9	72.6
2018	56.2	81.1	58.4	72.3	79.8	72.7

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

Legend: ■ Std IV ■ Std VI ■ Std VIII

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 45.5% and in Std VI (in 2010) was 61.6%. When the cohort reached Std VIII in 2012, this figure was 73.2%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	39.4	32.3	20.9	5.8	1.5	100
II	16.3	32.5	32.2	15.5	3.4	100
III	7.8	24.9	36.5	21.5	9.4	100
IV	4.8	19.2	35.5	24.5	16.1	100
V	3.2	13.8	33.1	24.5	25.4	100
VI	2.6	10.5	31.4	21.9	33.7	100
VII	1.7	8.1	29.7	24.2	36.2	100
VIII	1.0	8.0	28.7	19.8	42.5	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 7.8% cannot even recognize numbers 1-9, 24.9% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 36.5% can recognize numbers up to 99 but cannot do subtraction, 21.5% can do subtraction but cannot do division, and 9.4% can do division. For each grade, the total of these exclusive categories is 100%.

Arithmetic Tool (Odia)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	23.9	59.2	26.2
2014	23.7	62.9	27.6
2016	29.8	69.0	33.9
2018	28.3	49.3	30.9

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	17.2	51.0	18.3	42.3	57.0	42.9
2014	19.9	45.9	21.6	37.5	45.4	37.9
2016	23.8	57.7	26.6	38.7	63.5	39.6
2018	23.8	43.2	25.5	41.7	59.4	42.6

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014
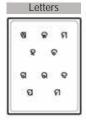

Std IV ■ Std VI ■ Std VIII

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 24.1% and in Std VI (in 2010) was 44.8%. When the cohort reached Std VIII in 2012, this figure was 42.9%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
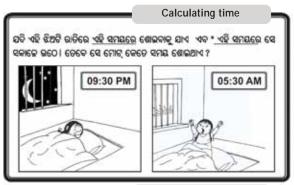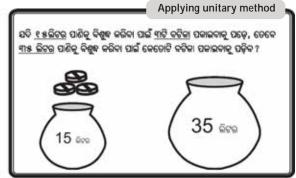
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	45.1	49.0	46.9
Age 11-13	66.7	69.6	68.1
Age 14-16	77.0	77.7	77.4

Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	38.2	39.9	39.0	16.5	14.8	15.7
Age 11-13	58.3	59.0	58.6	36.4	35.9	36.1
Age 14-16	64.1	61.8	62.9	45.5	41.6	43.4
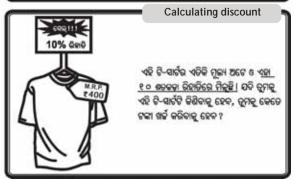
Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

09:30 PM   05:30 AM

Applying unitary method

15 ଲିଟର   35 ଲିଟର

Financial decision making

₹50, ₹80, ₹30, ₹70, ₹40 / ₹299

Calculating discount

10% ଡିସ୍କାଉଣ୍ଟ   M.R.P. ₹400

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	28.3	44.8	37.5	24.6	35.5	30.7	25.6	35.3	31.0	13.5	19.5	16.8
Age 15	25.2	26.2	25.8	35.9	27.9	31.2	30.3	16.9	22.5	15.5	18.6	17.3
Age 16	30.7	36.2	34.0	43.7	32.5	37.0	31.3	20.1	24.5	18.0	21.1	19.9
Age 14-16	27.7	35.2	32.0	33.5	31.7	32.5	28.8	24.0	26.0	15.4	19.6	17.8

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	47.5	47.6	47.5	64.3	49.0	56.6	36.6	32.5	34.5	29.8	25.6	27.7
Age 15	48.5	43.9	46.1	63.9	55.7	59.5	33.6	31.4	32.4	44.5	28.0	35.8
Age 16	46.4	50.8	48.8	58.5	52.7	55.4	26.1	37.4	32.1	48.5	33.4	40.4
Age 14-16	47.6	47.0	47.3	62.9	52.2	57.4	33.4	33.2	33.3	38.6	28.2	33.2

Odisha RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 30 OUT OF 30 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time Number of schools visited 2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	383	378	405	360
Upper primary schools (Std I-VII/VIII)	358	446	435	452
Total schools visited	741	824	840	812

Table 15: Trends over time Student and teacher attendance on the day of visit 2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	71.9	78.5	77.7	82.0
% Teachers present (Average)	89.1	87.0	90.5	94.4
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	72.3	76.3	78.3	80.1
% Teachers present (Average)	83.8	82.7	90.0	92.7

Table 16: Trends over time Multigrade classes 2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	77.0	81.1	82.9	79.2
% Schools where Std IV children were observed sitting with one or more other classes	66.8	72.8	76.7	73.9
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	69.4	74.8	77.3	78.3
% Schools where Std IV children were observed sitting with one or more other classes	58.1	62.0	65.5	66.2

School facilities

Table 17: Trends over time % Schools with selected facilities 2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	74.4	82.8	87.8	89.9
	Mid-day meal served in school on day of visit	88.8	96.8	98.1	98.8
Drinking water	No facility for drinking water	15.2	9.3	9.2	8.0
	Facility but no drinking water available	14.5	9.3	13.1	9.1
	Drinking water available	70.3	81.4	77.7	82.9
	Total	100	100	100	100
Toilet	No toilet facility	15.5	15.7	6.7	3.0
	Facility but toilet not useable	40.1	21.1	17.8	21.4
	Toilet useable	44.4	63.2	75.5	75.7
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	30.3	29.1	17.6	9.6
	Separate provision but locked	19.5	7.9	6.7	5.2
	Separate provision, unlocked but not useable	15.5	9.7	10.0	16.0
	Separate provision, unlocked and useable	34.7	53.3	65.8	69.3
	Total	100	100	100	100
Library	No library	34.7	11.8	17.9	19.7
	Library but no books being used by children on day of visit	18.5	22.6	21.1	26.4
	Library books being used by children on day of visit	46.8	65.6	61.0	54.0
	Total	100	100	100	100
Electricity	Electricity connection			53.0	56.7
	Of schools with electricity connection, % schools with electricity available on day of visit			78.0	80.3
Computer	No computer available for children to use	92.9	86.1	84.5	81.3
	Available but not being used by children on day of visit	2.7	8.1	9.1	12.6
	Computer being used by children on day of visit	4.4	5.8	6.4	6.1
	Total	100	100	100	100

Odisha RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	38.2	46.5	57.8	60.7
Upper primary schools (Std I-VII/VIII)	3.9	4.5	5.6	8.0

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	68.7	83.0	76.7
	No physical education period but dedicated time allotted	20.0	12.8	16.0
	No physical education period and no dedicated time allotted	11.3	4.1	7.3
	Total	100	100	100
Physical education teacher	Separate physical education teacher	3.6	25.9	16.2
	Other physical education teacher	66.8	52.7	58.8
	No physical education teacher	29.6	21.5	25.0
	Total	100	100	100
Playground	Playground inside the school premises	30.5	35.0	33.0
	Playground outside the school premises	29.6	36.6	33.5
	No accessible playground	39.9	28.4	33.5
	Total	100	100	100
Availability of any sports equipment		61.3	77.8	70.5
Supervised physical education activity observed on day of visit		21.3	27.5	24.8

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	89.7	95.1	96.7

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	4.6	4.3	2.9
Between July and September	61.2	43.0	48.9
After September	34.2	52.6	48.2

Punjab RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 20 OUT OF 20 DISTRICTS
Data is not presented where sample size is insufficient.

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	46.7	52.2	0.0	1.0	100
Age 7-16: All	47.9	50.1	0.1	2.0	100
Age 7-10: All	41.7	57.8	0.1	0.5	100
Age 7-10: Boys	39.5	59.8	0.1	0.7	100
Age 7-10: Girls	44.1	55.5	0.1	0.3	100
Age 11-14: All	51.7	46.7	0.0	1.6	100
Age 11-14: Boys	47.9	50.5	0.0	1.6	100
Age 11-14: Girls	56.0	42.4	0.0	1.6	100
Age 15-16: All	52.8	40.9	0.1	6.2	100
Age 15-16: Boys	52.2	41.3	0.2	6.2	100
Age 15-16: Girls	53.4	40.4	0.0	6.2	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Legend: 11 to 14 Boys, 11 to 14 Girls, 15 to 16 Boys, 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 11.7% in 2006, 10.3% in 2012, and 6.2% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

Legend: 2010, 2012, 2014, 2016, 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 61.9% as compared to 41.2% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	26.2	31.7	29.2	7.9	5.0								100
II		5.5	16.2	36.9	29.9	7.9	3.7						100
III			3.6	18.7	38.5	25.0	11.3	2.9					100
IV				5.4	17.4	34.8	31.4	7.9	3.1				100
V					4.7	17.3	39.2	27.6	8.6	2.7			100
VI						4.0	18.7	37.1	29.8	7.1	3.4		100
VII							4.4	16.3	44.8	25.5	7.5	1.5	100
VIII								4.9	23.4	38.1	25.2	6.3	2.2	100

This table shows the age distribution for each grade. For example, of all children in Std III, 38.5% children are 8 years old but there are also 18.7% who are 7, 25% who are 9, 11.3% who are 10, and 2.9% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school Anganwadi	Pre-school Govt LKG/ UKG	Pre-school Pvt LKG/ UKG	School Govt	School Pvt	School Other	Not in pre-school or school	Total
Age 3	32.3	5.4	37.4	1.6	1.2	0.0	22.1	100
Age 4	16.3	11.2	58.9	5.2	4.2	0.0	4.2	100
Age 5	5.4	8.2	57.0	17.0	10.6	0.0	1.8	100
Age 6	1.6	2.5	32.5	28.7	34.5	0.0	0.3	100
Age 7	0.1	0.7	9.3	34.8	54.9	0.1	0.1	100
Age 8	0.1	0.1	1.0	39.2	59.1	0.0	0.5	100

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	25.0	41.1	23.7	5.0	5.3	100
II	10.2	23.9	29.1	15.0	21.7	100
III	7.1	15.5	19.0	19.1	39.4	100
IV	3.5	7.9	7.6	15.2	65.8	100
V	2.4	5.9	7.0	13.2	71.6	100
VI	1.4	3.6	7.7	8.2	79.0	100
VII	1.8	3.7	5.3	6.3	82.9	100
VIII	1.9	3.7	2.8	6.5	85.1	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 7.1% cannot even read letters, 15.5% can read letters but not words or higher, 19% can read words but not Std I level text or higher, 19.1% can read Std I level text but not Std II level text, and 39.4% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
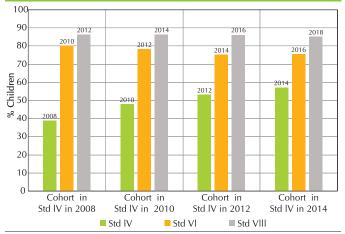
Reading Tool (Punjabi)

Std II level text

ਕੱਲੂ ਬਹੁਤ ਗਰਮੀ ਸੀ। ਸਾਰੇ ਗਰਮੀ ਕਾਰਨ ਪਰੇਸ਼ਾਨ ਸਨ। ਅੱਜ ਸਵੇਰੇ ਅਚਾਨਕ ਕਾਲੇ-ਕਾਲੇ ਬੱਦਲ ਛਾ ਗਏ। ਚਾਰੇ ਪਾਸੇ ਹਨ੍ਹੇਰਾ ਛਾ ਗਿਆ। ਸਾਰੇ ਬਦੱਲ ਦੇਖ ਕੇ ਬਹੁਤ ਖੁਸ਼ ਹੋ ਗਏ। ਠੰਡੀ-ਠੰਡੀ ਹਵਾ ਚੱਲਣ ਲੱਗੀ। ਫਿਰ ਮੀਂਹ ਪੈਣ ਲੱਗਿਆ। ਸਾਰੇ ਮੀਂਹ ਵਿੱਚ ਨਹਾਉਣ ਲੱਗੇ। ਮੈਂ ਵੀ ਮੀਂਹ ਵਿੱਚ ਨਹਾਉਣ ਲੱਗਿਆ। ਨਹਾਉਂਦੇ-ਨਹਾਉਂਦੇ ਮੈਨੂੰ ਠੰਡ ਲੱਗਣ ਲੱਗੀ। ਫਿਰ ਮੈਂ ਘਰ ਆ ਗਿਆ।

Std I level text

ਸਾਡੇ ਘਰ ਇੱਕ ਦਰੱਖਤ ਹੈ। ਉਸ 'ਤੇ ਬੜੇ ਅੰਬ ਲਗਦੇ ਹਨ। ਅਸੀਂ ਮਿੱਠੇ ਅੰਬ ਖਾਂਦੇ ਹਾਂ। ਕੱਚੇ ਅੰਬਾਂ ਦਾ ਅਚਾਰ ਪਾਉਂਦੇ ਹਾਂ।

Letters

ਨ	ਕ	ਤ
ਟ	ਲ	
ੜ	ਥ	ਸ
ਥ	ਝ	

Words

ਚਾਲ	ਦੁਖੀ
	ਸੁੱਕਾ
ਦੂਜਾ	ਫੋਜ
ਖੇਲਾ	ਟੋਪੀ
	ਪੈਰ
ਤੋਰ	ਇਨ

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	33.5	43.7	38.3
2014	24.1	41.4	33.6
2016	30.6	39.2	35.2
2018	36.4	41.8	39.4

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	69.5	73.5	71.2	84.4	90.0	86.3
2014	60.9	73.8	66.6	87.3	84.4	86.2
2016	64.0	73.8	69.1	83.6	90.0	86.3
2018	68.7	74.4	71.6	83.8	87.1	85.1

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

Cohort in Std IV in 2008	Std IV: 2008 (39)	Std VI: 2010 (80)	Std VIII: 2012 (86)
Cohort in Std IV in 2010	Std IV: 2010 (49)	Std VI: 2012 (78)	Std VIII: 2014 (86)
Cohort in Std IV in 2012	Std IV: 2012 (53)	Std VI: 2014 (75)	Std VIII: 2016 (86)
Cohort in Std IV in 2014	Std IV: 2014 (57)	Std VI: 2016 (75)	Std VIII: 2018 (85)

■ Std IV ■ Std VI ■ Std VIII

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 38.7% and in Std VI (in 2010) was 80.1%. When the cohort reached Std VIII in 2012, this figure was 86.3%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Annual Status of Education Report
ASER 2018 RURAL
Facilitated by PRATHAM

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	15.0	28.1	47.2	8.1	1.8	100
II	4.9	18.3	48.4	27.0	1.5	100
III	2.4	12.6	35.3	38.8	10.9	100
IV	1.0	5.9	24.3	34.0	34.8	100
V	1.1	3.2	18.4	24.3	53.0	100
VI	0.6	2.6	15.4	23.9	57.6	100
VII	0.2	2.0	19.8	20.7	57.3	100
VIII	0.9	3.3	13.2	20.2	62.4	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 2.4% cannot even recognize numbers 1-9, 12.6% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 35.3% can recognize numbers up to 99 but cannot do subtraction, 38.8% can do subtraction but cannot do division, and 10.9% can do division. For each grade, the total of these exclusive categories is 100%.
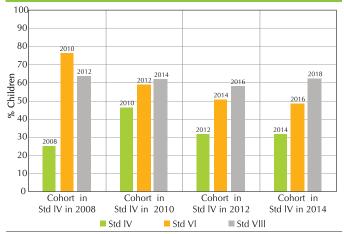
Arithmetic Tool (Punjabi)

Table 8: Trends over time Arithmetic in Std III by school type 2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	40.6	64.8	52.0
2014	32.1	60.6	47.7
2016	36.3	59.4	48.6
2018	40.5	57.1	49.8

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time Arithmetic in Std V and Std VIII by school type 2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	48.6	56.5	52.0	59.9	71.3	63.8
2014	37.1	53.9	44.4	56.4	70.7	61.8
2016	42.4	53.5	48.1	48.0	72.0	58.0
2018	50.1	55.7	52.9	58.4	68.6	62.5

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time % Children who can do division Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 25.1% and in Std VI (in 2010) was 76.2%. When the cohort reached Std VIII in 2012, this figure was 63.8%. The progress of each of these cohorts can be understood in the same way.

Punjab RURAL

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
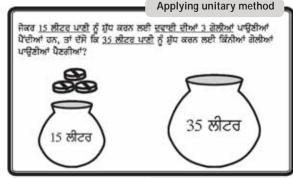
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	47.4	62.5	54.6
Age 11-13	73.8	87.3	80.3
Age 14-16	85.9	92.9	89.4
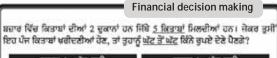
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	55.6	65.2	60.2	25.4	33.3	29.2
Age 11-13	77.5	80.6	79.0	53.9	60.0	56.9
Age 14-16	76.9	80.2	78.5	59.0	64.8	61.9

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

ਜੇਕਰ ਇਹ ਲੜਕੀ ਰਾਤ ਨੂੰ <u>ਇਸ ਸਮੇਂ</u> ਸੌਂਦੀ ਹੈ ਅਤੇ ਸਵੇਰੇ <u>ਇਸ ਸਮੇਂ</u> ਉੱਠਦੀ ਹੈ। ਦੱਸੋ ਕਿ ਉਹ ਕੁੱਲ ਕਿੰਨੇ ਘੰਟੇ ਸੌਂਦੀ ਹੈ?

09:30 PM   06:30 AM

Applying unitary method

ਜੇਕਰ <u>15 ਲੀਟਰ ਪਾਣੀ</u> ਨੂੰ ਸ਼ੁੱਧ ਕਰਨ ਲਈ <u>ਦਵਾਈ ਦੀਆਂ 3 ਗੋਲੀਆਂ</u> ਪਾਉਣੀਆਂ ਪੈਂਦੀਆਂ ਹਨ, ਤਾਂ ਦੱਸੋ ਕਿ <u>35 ਲੀਟਰ ਪਾਣੀ</u> ਨੂੰ ਸ਼ੁੱਧ ਕਰਨ ਲਈ ਕਿੰਨੀਆਂ ਗੋਲੀਆਂ ਪਾਉਣੀਆਂ ਪੈਣਗੀਆਂ?

15 ਲੀਟਰ   35 ਲੀਟਰ

Financial decision making

ਬਜ਼ਾਰ ਵਿੱਚ ਕਿਤਾਬਾਂ ਦੀਆਂ 2 ਦੁਕਾਨਾਂ ਹਨ ਜਿਥੇ <u>5 ਕਿਤਾਬਾਂ</u> ਮਿਲਦੀਆਂ ਹਨ। ਜੇਕਰ ਤੁਸੀਂ ਇਹ ਪੰਜ ਕਿਤਾਬਾਂ ਖਰੀਦਣੀਆਂ ਹੋਣ, ਤਾਂ ਤੁਹਾਨੂੰ ਘੱਟ ਤੋਂ ਘੱਟ ਕਿੰਨੇ ਰੁਪਏ ਦੇਣੇ ਪੈਣਗੇ?

ਦੁਕਾਨ 1- ਮੁੱਲ ਸੂਚੀ

ਕਿਤਾਬ ਦਾ ਨਾਮ	ਮੁੱਲ
ਵਿਗਿਆਨ	₹50
ਗਣਿਤ	₹80
ਹਿੰਦੀ	₹30
ਅੰਗਰੇਜ਼ੀ	₹70
ਇਤਿਹਾਸ	₹40

ਦੁਕਾਨ 1- ਮੁੱਲ ਸੂਚੀ

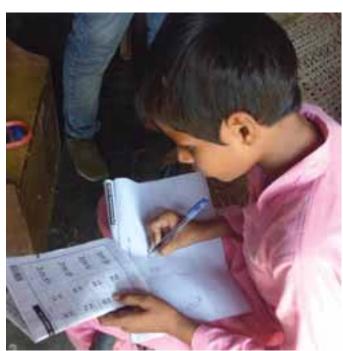| ਕਿਤਾਬ ਦਾ ਨਾਮ	ਮੁੱਲ
ਵਿਗਿਆਨ	
ਗਣਿਤ	
ਹਿੰਦੀ	₹ 299
ਅੰਗਰੇਜ਼ੀ	
ਇਤਿਹਾਸ	

Calculating discount

10% ਛੂਟ

ਇਹ ਇਸ ਟੀ-ਸ਼ਰਟ ਦਾ ਮੁੱਲ ਹੈ ਅਤੇ ਇਸ ਮੁੱਲ 'ਤੇ <u>10 ਪ੍ਰਤੀਸ਼ਤ/percent ਦੀ ਛੂਟ</u> ਹੈ। ਜੇਕਰ ਤੁਸੀਂ ਇਹ ਟੀ-ਸ਼ਰਟ ਖਰੀਦਦੀ ਹੋਵੇ, ਤਾਂ ਤੁਹਾਨੂੰ ਕਿੰਨੇ ਰੁਪਏ ਦੇਣੇ ਪੈਣਗੇ?

M.R.P. ₹400

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	27.1	32.6	29.6	31.9	29.5	30.8	25.6	25.6	25.6	16.4	12.6	14.6
Age 15	20.8	47.9	32.1	55.4	40.3	49.1	37.3	49.4	42.4	25.2	5.3	16.9
Age 16	34.6	26.7	30.6	39.9	29.5	34.6	41.9	33.6	37.7	13.1	15.1	14.1
Age 14-16	27.2	34.7	30.6	41.7	32.4	37.3	33.9	34.6	34.2	18.3	11.5	15.1

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	52.2	44.9	48.6	55.6	40.1	48.0	46.1	39.1	42.7	31.2	22.3	26.8
Age 15	54.9	46.6	50.3	59.5	46.5	52.3	44.6	39.3	41.7	38.1	18.2	27.2
Age 16	57.2	51.1	54.0	69.5	45.7	57.2	52.2	45.8	48.9	41.5	22.7	31.8
Age 14-16	54.5	47.3	50.8	60.9	44.0	52.1	47.5	41.1	44.2	36.3	21.0	28.4

Punjab RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 20 OUT OF 20 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	391	473	523	536
Upper primary schools (Std I-VII/VIII)	58	23	23	18
Total schools visited	449	496	546	554

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	82.7	81.4	79.8	83.0
% Teachers present (Average)	88.5	85.5	84.8	85.5

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	52.5	47.5	55.5	58.4
% Schools where Std IV children were observed sitting with one or more other classes	37.6	42.4	50.4	53.7

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	94.7	94.5	96.9	99.1
	Mid-day meal served in school on day of visit	97.9	92.7	95.2	93.4
Drinking water	No facility for drinking water	8.9	8.3	9.2	7.6
	Facility but no drinking water available	8.0	10.7	8.9	9.6
	Drinking water available	83.1	81.0	81.9	82.7
	Total	100	100	100	100
Toilet	No toilet facility	0.9	1.4	0.2	0.0
	Facility but toilet not useable	37.9	19.4	19.7	10.5
	Toilet useable	61.2	79.2	80.1	89.5
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	7.3	6.5	4.6	3.4
	Separate provision but locked	16.9	5.8	4.2	2.4
	Separate provision, unlocked but not useable	26.5	16.2	15.8	10.3
	Separate provision, unlocked and useable	49.4	71.6	75.4	83.9
	Total	100	100	100	100
Library	No library	4.1	11.3	8.2	11.9
	Library but no books being used by children on day of visit	30.0	49.0	42.5	43.3
	Library books being used by children on day of visit	66.0	39.7	49.4	44.9
	Total	100	100	100	100
Electricity	Electricity connection			98.9	99.6
	Of schools with electricity connection, % schools with electricity available on day of visit			95.0	93.6
Computer	No computer available for children to use	89.3	91.3	91.1	78.5
	Available but not being used by children on day of visit	5.5	6.5	5.7	17.7
	Computer being used by children on day of visit	5.2	2.2	3.2	3.8
	Total	100	100	100	100

Punjab RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
All schools (Std I-IV/V and Std I-VII/VIII)	17.2	25.4	32.7	38.2

Table 19: Physical education and sports in schools 2018

% Schools with		All schools (Std I-IV/V and Std I-VII/VIII)
Dedicated time for physical education	Physical education period in the timetable	55.6
	No physical education period but dedicated time allotted	25.4
	No physical education period and no dedicated time allotted	19.0
	Total	100
Physical education teacher	Separate physical education teacher	5.6
	Other physical education teacher	61.0
	No physical education teacher	33.4
	Total	100
Playground	Playground inside the school premises	72.1
	Playground outside the school premises	16.1
	No accessible playground	11.8
	Total	100
Availability of any sports equipment		58.4
Supervised physical education activity observed on day of visit		24.8

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	96.9	96.1	99.3

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	4.6	3.8	12.9
Between July and September	85.0	79.4	69.2
After September	10.4	16.8	17.9

Rajasthan RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 33 OUT OF 33 DISTRICTS
Data is not presented where sample size is insufficient.

Annual Status of Education Report
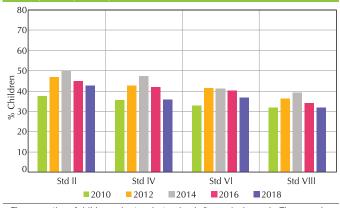असर ASER 2018 RURAL
Facilitated by PRATHAM

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	60.0	35.8	0.4	3.8	100
Age 7-16: All	59.7	34.3	0.3	5.7	100
Age 7-10: All	59.7	37.8	0.5	2.0	100
Age 7-10: Boys	54.6	43.5	0.4	1.5	100
Age 7-10: Girls	65.5	31.4	0.5	2.6	100
Age 11-14: All	60.5	33.9	0.3	5.4	100
Age 11-14: Boys	56.1	40.1	0.3	3.5	100
Age 11-14: Girls	65.2	27.1	0.2	7.4	100
Age 15-16: All	57.6	26.6	0.2	15.7	100
Age 15-16: Boys	56.1	32.1	0.1	11.7	100
Age 15-16: Girls	59.3	20.4	0.2	20.1	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

— 11 to 14 Boys — 11 to 14 Girls — 15 to 16 Boys — 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 37.7% in 2006, 29.8% in 2012, and 20.1% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

■ 2010 ■ 2012 ■ 2014 ■ 2016 ■ 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 42.5% as compared to 31.9% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	46.4	29.9	14.3	5.6	3.8								100
II	14.7	21.6	31.4	20.8	5.4	6.1							100
III	1.7	6.4	22.3	38.0	17.2	9.8	4.7						100
IV	1.9		7.1	22.9	27.2	27.5	7.5	5.9					100
V	2.4			8.2	14.7	39.9	18.6	11.2	5.1				100
VI	2.4				6.0	23.7	29.0	26.6	8.5	3.8			100
VII	2.7					8.7	15.6	37.6	23.8	7.3	4.3		100
VIII	2.9						5.1	23.5	37.4	19.7	8.5	2.9	100

This table shows the age distribution for each grade. For example, of all children in Std III, 38% children are 8 years old but there are also 6.4% who are 6, 22.3% who are 7, 17.2% who are 9, 9.8% who are 10, and 4.7% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school Anganwadi	Pre-school Govt LKG/UKG	Pre-school Pvt LKG/UKG	School Govt	School Pvt	School Other	Not in pre-school or school	Total
Age 3	34.5	0.4	10.3	2.3	2.8	0.2	49.5	100
Age 4	29.4	1.1	21.0	12.2	10.5	0.2	25.7	100
Age 5	11.6	1.0	16.7	39.9	21.6	0.4	8.9	100
Age 6	2.8	0.5	8.2	52.7	31.2	0.5	4.1	100
Age 7	1.0	0.3	3.1	57.4	35.7	0.4	2.1	100
Age 8	0.3	0.0	1.0	57.9	38.0	0.7	2.2	100

Rajasthan RURAL

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	63.8	24.7	5.5	2.9	3.1	100
II	30.7	37.7	14.5	8.7	8.5	100
III	14.1	30.9	18.3	16.3	20.4	100
IV	6.6	21.1	17.1	19.9	35.3	100
V	3.9	12.3	14.1	20.6	49.1	100
VI	2.4	8.4	11.2	17.1	60.9	100
VII	2.1	5.0	7.3	14.6	70.9	100
VIII	1.5	3.8	4.5	11.9	78.3	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 14.1% cannot even read letters, 30.9% can read letters but not words or higher, 18.3% can read words but not Std I level text or higher, 16.3% can read Std I level text but not Std II level text, and 20.4% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
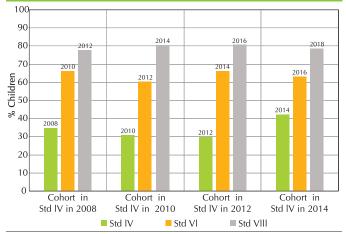
Reading Tool (Hindi)

Std II level text

रामपुर में एक मैदान था। वहाँ कुछ नहीं उगता था। वहाँ कोई खेलने नहीं जाता था। एक दिन कुछ लोग आए। उन्होंने गाँव के लोगों को बुलाया। सबने मिलकर तय किया कि यहाँ बग़ीचा बनाया जाए। खाद मंगाकर तरह-तरह के पौधे लगाए गए। सही समय पर पानी दिया गया। आज वहाँ एक सुंदर बग़ीचा है। इसलिए वहाँ सभी खेलने जाते हैं।

Std I level text

रूपा बाहर खेल रही थी। खेलते-खेलते रात हो गई। रूपा अपने घर चली गई। वह खाना खाकर सो गई।

Letters

द क च
ल ब
ह थ त
म ख

Words

नाथ तोता
कूड़ा
खुश मैना
मौका सेब
पीला
झोला दिन

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	7.1	32.4	17.6
2014	10.7	33.3	21.1
2016	15.1	35.0	23.7
2018	10.3	37.0	20.6

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	33.3	65.0	46.8	71.2	88.6	77.5
2014	34.4	65.4	46.6	74.9	89.4	80.6
2016	42.5	69.8	54.1	77.7	87.1	80.9
2018	39.1	65.8	49.3	74.6	87.0	78.5

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 34.8% and in Std VI (in 2010) was 66.2%. When the cohort reached Std VIII in 2012, this figure was 77.5%. The progress of each of these cohorts can be understood in the same way.

Rajasthan RURAL

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	56.6	30.7	10.4	1.8	0.5	100
II	21.8	46.6	24.1	5.6	1.9	100
III	8.1	40.8	33.8	12.4	5.0	100
IV	4.0	29.5	36.7	18.5	11.3	100
V	2.2	18.8	32.3	23.4	23.3	100
VI	1.5	13.6	31.4	24.7	28.9	100
VII	1.2	9.5	30.2	25.1	34.1	100
VIII	0.8	6.8	29.4	21.3	41.6	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 8.1% cannot even recognize numbers 1-9, 40.8% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 33.8% can recognize numbers up to 99 but cannot do subtraction, 12.4% can do subtraction but cannot do division, and 5% can do division. For each grade, the total of these exclusive categories is 100%.
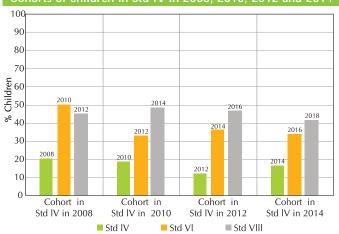
Arithmetic Tool (Hindi)

Table 8: Trends over time Arithmetic in Std III by school type 2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	6.2	36.6	18.8
2014	8.7	36.6	21.5
2016	11.0	35.4	21.5
2018	8.1	32.2	17.4

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time Arithmetic in Std V and Std VIII by school type 2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	9.9	36.4	21.2	35.0	63.1	45.1
2014	12.0	41.3	23.6	38.3	63.7	48.3
2016	15.6	45.5	28.2	39.3	61.2	46.8
2018	14.1	38.1	23.3	34.3	57.8	41.6

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time % Children who can do division Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 20.4% and in Std VI (in 2010) was 50.2%. When the cohort reached Std VIII in 2012, this figure was 45.1%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018

Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	34.7	35.9	35.3
Age 11-13	66.7	65.7	66.2
Age 14-16	83.1	80.4	81.8
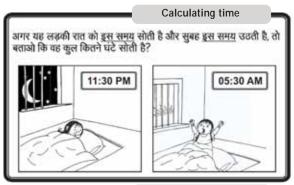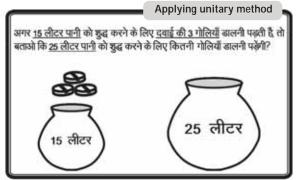
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	32.7	29.4	31.2	14.8	11.8	13.4
Age 11-13	59.0	52.5	56.0	37.1	28.9	33.2
Age 14-16	70.3	62.5	66.5	52.1	43.3	47.8

Beyond basics
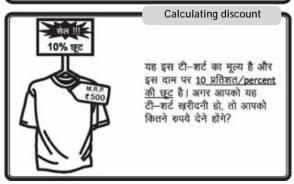
These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

अगर यह लड़की रात को इस समय सोती है और सुबह इस समय उठती है, तो बताओ कि वह कुल कितने घंटे सोती है?

11:30 PM   05:30 AM

Applying unitary method

अगर 15 लीटर पानी को शुद्ध करने के लिए दवाई की 3 गोलियाँ डालनी पड़ती है तो बताओ कि 25 लीटर पानी को शुद्ध करने के लिए कितनी गोलियाँ डालनी पड़ेंगी?

15 लीटर   25 लीटर

Financial decision making

बाज़ार में किताबों की 2 दुकानें हैं जहाँ यह 5 किताबें मिलती है। यदि आपको यह पाँचों किताबें खरीदनी है, तो आपको कम-से-कम कितने रुपये देने होंगे?

दुकान 1 - मूल्य सूची

किताब का नाम	मूल्य
विज्ञान	स्पेशल बचत!! इन 5 किताबों का सेट केवल ₹ 299 में
गणित	
हिन्दी	
अंग्रेजी	
इतिहास	

दुकान 2 - मूल्य सूची

किताब का नाम	मूल्य
विज्ञान	₹80
गणित	₹30
हिन्दी	₹50
अंग्रेजी	₹60
इतिहास	₹40

Calculating discount

सेल !!! 10% छूट
M.R.P ₹500

यह इस टी-शर्ट का मूल्य है और इस दाम पर 10 प्रतिशत/percent की छूट है। अगर आपको यह टी-शर्ट खरीदनी हो, तो आपको कितने रुपये देने होंगे?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	35.0	39.6	37.2	36.4	34.1	35.3	26.9	28.6	27.7	13.3	14.1	13.7
Age 15	25.7	31.6	28.4	44.5	35.6	40.5	23.9	22.1	23.1	14.0	12.3	13.3
Age 16	45.5	33.6	38.6	39.3	35.6	37.2	31.2	29.8	30.4	20.0	14.9	17.0
Age 14-16	33.9	35.5	34.7	39.9	35.0	37.4	26.8	27.0	26.9	15.0	13.8	14.4

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	46.8	44.1	45.6	62.8	51.1	57.6	50.8	37.0	44.7	34.5	20.2	28.2
Age 15	52.5	46.8	50.1	63.4	54.1	59.5	44.6	45.8	45.1	30.3	26.5	28.7
Age 16	54.7	50.1	52.7	57.8	52.8	55.5	43.7	35.1	39.8	35.7	25.0	30.8
Age 14-16	51.0	46.8	49.2	61.7	52.6	57.7	46.6	39.4	43.5	33.3	23.7	29.1

Rajasthan RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 33 OUT OF 33 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	290	146	210	172
Upper primary schools (Std I-VII/VIII)	606	757	709	665
Total schools visited	896	903	919	837

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	71.2	68.0	69.7	74.1
% Teachers present (Average)	90.1	90.3	85.9	83.7
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	73.6	68.6	71.8	75.4
% Teachers present (Average)	88.0	87.0	87.1	86.5

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	65.6	89.0	87.7	86.8
% Schools where Std IV children were observed sitting with one or more other classes	53.6	79.3	83.6	83.4
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	66.0	76.3	69.3	68.9
% Schools where Std IV children were observed sitting with one or more other classes	52.3	63.4	58.0	54.0

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	83.8	89.8	90.8	92.8
	Mid-day meal served in school on day of visit	94.8	82.7	91.8	95.1
Drinking water	No facility for drinking water	20.9	15.0	18.3	17.5
	Facility but no drinking water available	11.1	11.6	11.6	9.7
	Drinking water available	68.0	73.4	70.1	72.8
	Total	100	100	100	100
Toilet	No toilet facility	3.5	2.0	1.2	1.3
	Facility but toilet not useable	31.1	16.5	15.6	13.8
	Toilet useable	65.4	81.5	83.2	84.9
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	19.6	8.9	4.7	4.0
	Separate provision but locked	13.3	5.5	5.1	3.6
	Separate provision, unlocked but not useable	16.8	12.0	10.5	11.5
	Separate provision, unlocked and useable	50.3	73.7	79.8	80.9
	Total	100	100	100	100
Library	No library	36.3	12.2	14.0	18.2
	Library but no books being used by children on day of visit	40.4	48.9	45.8	47.7
	Library books being used by children on day of visit	23.3	38.8	40.2	34.1
	Total	100	100	100	100
Electricity	Electricity connection			71.2	81.6
	Of schools with electricity connection, % schools with electricity available on day of visit			84.8	87.3
Computer	No computer available for children to use	84.3	66.2	65.1	61.4
	Available but not being used by children on day of visit	10.4	25.6	24.4	27.0
	Computer being used by children on day of visit	5.3	8.2	10.5	11.6
	Total	100	100	100	100

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	35.9	63.0	61.5	61.4
Upper primary schools (Std I-VII/VIII)	2.0	9.2	7.0	6.3

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	43.4	71.5	65.8
	No physical education period but dedicated time allotted	12.7	14.2	13.9
	No physical education period and no dedicated time allotted	44.0	14.3	20.4
	Total	100	100	100
Physical education teacher	Separate physical education teacher	8.8	62.0	51.5
	Other physical education teacher	47.2	20.8	26.0
	No physical education teacher	44.0	17.2	22.5
	Total	100	100	100
Playground	Playground inside the school premises	64.2	72.9	71.2
	Playground outside the school premises	10.9	12.0	11.8
	No accessible playground	24.9	15.1	17.1
	Total	100	100	100
Availability of any sports equipment		39.8	72.1	65.4
Supervised physical education activity observed on day of visit		20.6	26.7	25.4

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	97.9	98.2	99.1

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	2.3	1.0	0.5
Between July and September	93.2	77.1	79.2
After September	4.5	21.9	20.3

Sikkim RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 4 OUT OF 4 DISTRICTS
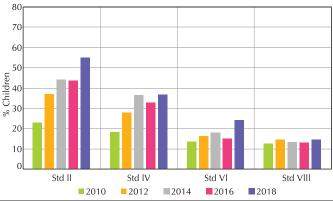Data is not presented where sample size is insufficient.

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	68.6	30.7	0.0	0.7	100
Age 7-16: All	73.2	25.0	0.1	1.7	100
Age 7-10: All	56.4	43.2	0.0	0.5	100
Age 7-10: Boys	52.5	47.1	0.0	0.4	100
Age 7-10: Girls	59.8	39.6	0.0	0.6	100
Age 11-14: All	80.3	18.7	0.0	1.0	100
Age 11-14: Boys	76.8	22.1	0.0	1.1	100
Age 11-14: Girls	82.5	16.5	0.1	0.9	100
Age 15-16: All	85.9	9.0	0.2	4.9	100
Age 15-16: Boys	87.9	7.3	0.0	4.8	100
Age 15-16: Girls	84.5	10.0	0.4	5.1	100
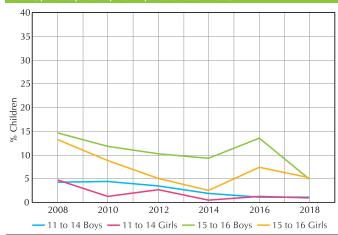
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2008, 2010, 2012, 2014, 2016 and 2018

— 11 to 14 Boys — 11 to 14 Girls — 15 to 16 Boys — 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 13.3% in 2008, 5% in 2012, and 5.1% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

■ 2010 ■ 2012 ■ 2014 ■ 2016 ■ 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 55.1% as compared to 14.6% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	19.8	34.6	36.0	9.1	0.4								100
II	4.8	15.2	41.8	27.8	7.7	2.7							100
III	5.1		16.1	38.8	26.1	10.3	3.7						100
IV	3.0			20.6	31.4	30.1	8.9	6.0					100
V	3.7				8.9	34.3	26.0	17.4	6.4	3.3			100
VI	5.6					12.5	29.0	29.7	15.4	5.6	2.3		100
VII	1.1						7.0	6.7	29.0	36.1	16.0	4.1	100
VIII	4.5							7.7	29.0	32.5	18.5	7.8	100

This table shows the age distribution for each grade. For example, of all children in Std III, 38.8% children are 8 years old but there are also 16.1% who are 7, 26.1% who are 9, 10.3% who are 10, and 3.7% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	59.6	11.3	24.6	3.6	0.2	0.0	0.7	100
Age 4	14.5	21.0	55.8	5.9	2.4	0.0	0.3	100
Age 5	1.5	20.3	54.1	11.3	12.0	0.0	0.8	100
Age 6	0.8	13.2	27.9	31.6	26.4	0.0	0.0	100
Age 7	0.0	3.4	6.6	40.2	49.5	0.0	0.4	100
Age 8	0.7	0.7	0.9	51.4	46.4	0.0	0.0	100

Sikkim RURAL

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	7.7	25.6	45.9	16.0	4.8	100
II	5.7	14.3	38.2	25.3	16.5	100
III	3.1	7.6	30.0	29.8	29.4	100
IV	1.0	3.2	19.9	31.2	44.7	100
V	0.2	4.6	17.9	35.6	41.7	100
VI	1.0	1.7	12.6	26.5	58.1	100
VII	0.0	3.7	3.3	26.5	66.6	100
VIII	0.0	1.5	1.5	18.1	79.0	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 3.1% cannot even read letters, 7.6% can read letters but not words or higher, 30% can read words but not Std I level text or higher, 29.8% can read Std I level text but not Std II level text, and 29.4% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
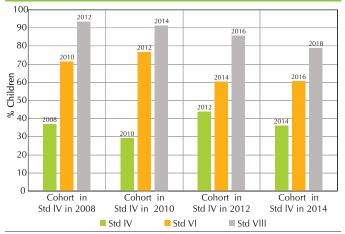
Reading Tool (English)

Std II level text

Salma is a little girl. She had a pretty doll. She loved playing with her doll. One day the doll fell from her hand to the floor. It broke into many pieces. Salma was very sad. She cried a lot. Her mother gave her another doll. Now she is happy again.

Std I level text

Ravi is a boy.
He has many friends.
He loves to draw.
He does not like to sing.

Letters

b s o
k m
y r h
t x

Words

ring bad
ball
cold king
clap foot
fan
girl crow

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012			26.9
2014	Data insufficient		14.3
2016			28.2
2018			29.7

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012			61.6			93.4
2014	Data insufficient	43.4		Data insufficient	91.3
2016			42.5			85.7
2018			41.7			78.9

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 37% and in Std VI (in 2010) was 71.4%. When the cohort reached Std VIII in 2012, this figure was 93.5%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	5.3	22.0	62.1	10.6	0.0	100
II	3.1	14.6	60.8	20.6	1.0	100
III	2.2	8.0	48.8	34.7	6.4	100
IV	0.5	8.3	35.5	39.7	16.0	100
V	1.0	5.5	25.7	55.4	12.5	100
VI	0.8	3.0	28.2	34.5	33.5	100
VII	0.0	2.8	17.2	44.0	35.9	100
VIII	0.6	0.6	12.9	41.2	44.6	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 2.2% cannot even recognize numbers 1-9, 8% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 48.8% can recognize numbers up to 99 but cannot do subtraction, 34.7% can do subtraction but cannot do division, and 6.4% can do division. For each grade, the total of these exclusive categories is 100%.
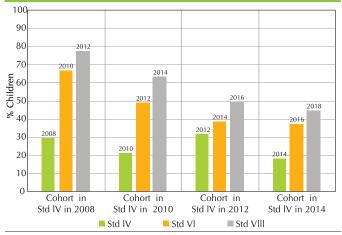
Arithmetic Tool (English)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012			55.0
2014	Data insufficient		42.6
2016			52.5
2018			40.5

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	43.5		43.8	77.2		77.4
2014	24.4		33.3	59.5		63.1
2016	19.9		22.2	44.9		49.3
2018	10.9		12.5	38.6		44.7

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 29.6% and in Std VI (in 2010) was 66.6%. When the cohort reached Std VIII in 2012, this figure was 77.6%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018

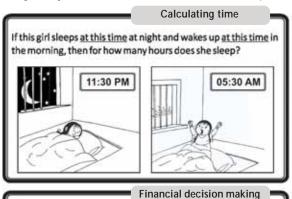| Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	36.8	37.5	37.1
Age 11-13	55.3	69.6	62.5
Age 14-16	88.1	84.8	86.2

Table 11: Basic arithmetic by age group and gender 2018

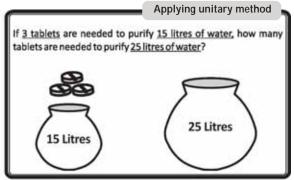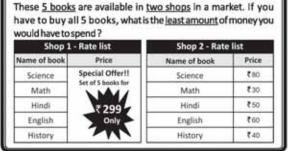| Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	49.1	49.0	49.0	11.9	11.5	11.7
Age 11-13	74.5	76.9	75.7	28.6	34.5	31.6
Age 14-16	86.7	81.1	83.5	56.9	53.4	54.9

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

If this girl sleeps at this time at night and wakes up at this time in the morning, then for how many hours does she sleep?

11:30 PM   05:30 AM

Applying unitary method

If 3 tablets are needed to purify 15 litres of water, how many tablets are needed to purify 25 litres of water?

15 Litres   25 Litres

Financial decision making

These 5 books are available in two shops in a market. If you have to buy all 5 books, what is the least amount of money you would have to spend?

Shop 1 - Rate list
Name of book	Price
Science	Special Offer!! Set of 5 books for ₹299 Only
Math	
Hindi	
English	
History	

Shop 2 - Rate list
Name of book	Price
Science	₹80
Math	₹30
Hindi	₹50
English	₹60
History	₹40

Calculating discount

Sale!!! 10% Discount

M.R.P. ₹500

This is the price of this T-shirt and it is available on a discount of 10 percent. If you were to buy this T-shirt, how much money would you need to spend?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018
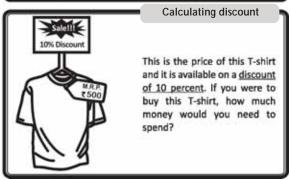
Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14			25.0			34.2			25.0			18.9
Age 15	Data insufficient		22.9	Data insufficient		20.6	Data insufficient		0.0	Data insufficient		10.6
Age 16			23.9			17.6			32.2			26.7
Age 14-16			24.1			24.4			22.6			20.4

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14			39.1			39.1			15.0			11.1
Age 15	Data insufficient		29.4	Data insufficient		48.2	Data insufficient		11.3	Data insufficient		31.2
Age 16			50.9			40.4			18.2			22.0
Age 14-16			41.6			41.8			15.5			20.5

Sikkim RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 4 OUT OF 4 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	28	25	27	37
Upper primary schools (Std I-VII/VIII)	41	52	57	71
Total schools visited	69	77	84	108

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	83.7	83.6	87.7	84.5
% Teachers present (Average)	80.4	87.5	86.8	81.1

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	9.0	17.6	28.6	23.6
% Schools where Std IV children were observed sitting with one or more other classes	9.2	18.3	25.6	20.2

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	95.7	97.3	97.6	95.3
	Mid-day meal served in school on day of visit	98.6	85.1	86.8	78.5
Drinking water	No facility for drinking water	11.6	15.6	16.9	15.1
	Facility but no drinking water available	11.6	10.4	12.1	10.4
	Drinking water available	76.8	74.0	71.1	74.5
	Total	100	100	100	100
Toilet	No toilet facility	1.5	2.7	1.2	0.0
	Facility but toilet not useable	39.1	24.3	21.4	17.6
	Toilet useable	59.4	73.0	77.4	82.4
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	17.2	10.6	1.3	3.7
	Separate provision but locked	26.6	15.2	13.8	7.5
	Separate provision, unlocked but not useable	18.8	9.1	10.0	13.1
	Separate provision, unlocked and useable	37.5	65.2	75.0	75.7
	Total	100	100	100	100
Library	No library	55.9	44.7	42.7	47.7
	Library but no books being used by children on day of visit	17.7	14.5	17.1	20.6
	Library books being used by children on day of visit	26.5	40.8	40.2	31.8
	Total	100	100	100	100
Electricity	Electricity connection			86.8	87.9
	Of schools with electricity connection, % schools with electricity available on day of visit			87.1	84.0
Computer	No computer available for children to use	60.9	57.1	61.0	66.4
	Available but not being used by children on day of visit	14.5	18.2	20.7	24.3
	Computer being used by children on day of visit	24.6	24.7	18.3	9.4
	Total	100	100	100	100

Sikkim RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
All schools (Std I-IV/V and Std I-VII/VIII)	23.2	26.7	39.8	53.3

Table 19: Physical education and sports in schools 2018

% Schools with		All schools (Std I-IV/V and Std I-VII/VIII)
Dedicated time for physical education	Physical education period in the timetable	62.6
	No physical education period but dedicated time allotted	21.5
	No physical education period and no dedicated time allotted	15.9
	Total	100
Physical education teacher	Separate physical education teacher	26.2
	Other physical education teacher	45.8
	No physical education teacher	28.0
	Total	100
Playground	Playground inside the school premises	88.0
	Playground outside the school premises	4.6
	No accessible playground	7.4
	Total	100
Availability of any sports equipment		79.4
Supervised physical education activity observed on day of visit		53.3

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	78.1	97.6	97.2
Of all schools that have an SMC, % schools that had the last SMC meeting			
Before July	38.2	29.5	35.9
Between July and September	54.6	41.0	43.7
After September	7.3	29.5	20.4

Tamil Nadu, Telangana

Tripura, Uttar Pradesh, Uttarakhand

West Bengal

Tamil Nadu RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 31 OUT OF 31 DISTRICTS
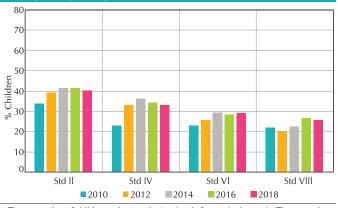Data is not presented where sample size is insufficient.

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	67.4	32.1	0.2	0.3	100
Age 7-16: All	69.5	29.8	0.2	0.6	100
Age 7-10: All	64.4	35.4	0.1	0.0	100
Age 7-10: Boys	61.0	38.9	0.1	0.0	100
Age 7-10: Girls	67.8	32.0	0.1	0.0	100
Age 11-14: All	72.9	26.3	0.3	0.5	100
Age 11-14: Boys	70.2	28.8	0.2	0.8	100
Age 11-14: Girls	75.5	24.0	0.3	0.2	100
Age 15-16: All	73.9	23.7	0.1	2.3	100
Age 15-16: Boys	70.1	26.5	0.0	3.5	100
Age 15-16: Girls	76.9	21.5	0.2	1.4	100
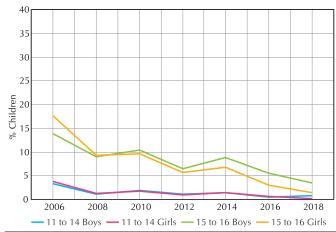
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 17.6% in 2006, 5.7% in 2012, and 1.4% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 40.1% as compared to 25.7% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	32.8	56.8	7.8	2.5									100
II		2.6	20.1	65.7	8.8	2.8							100
III			1.8	16.8	72.9	7.7	0.8						100
IV				2.1	20.0	68.2	8.9	0.7					100
V					2.2	9.6	77.8	8.5	1.9				100
VI					1.6		10.6	71.7	14.6	1.5			100
VII					1.7			11.8	71.2	14.1	1.2		100
VIII					2.3				10.3	78.4	7.9	1.1	100

This table shows the age distribution for each grade. For example, of all children in Std III, 72.9% children are 8 years old but there are also 16.8% who are 7, 7.7% who are 9, and 0.8% who are 10 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	61.1	1.2	24.4	2.1	0.6	0.0	10.6	100
Age 4	42.6	1.9	47.2	1.9	2.5	0.0	3.8	100
Age 5	15.3	1.8	34.5	27.0	20.2	0.0	1.3	100
Age 6	1.4	0.1	4.1	51.3	42.9	0.1	0.2	100
Age 7	0.1	0.1	0.6	61.0	38.2	0.1	0.1	100
Age 8	0.2	0.0	0.3	61.6	37.8	0.1	0.0	100

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	41.1	39.8	15.5	2.2	1.4	100
II	13.8	29.8	39.7	13.0	3.7	100
III	6.4	17.1	39.8	26.5	10.2	100
IV	4.0	7.9	27.5	34.5	26.1	100
V	3.5	4.9	17.2	33.6	40.7	100
VI	1.1	3.7	11.5	28.6	55.1	100
VII	1.1	2.6	9.0	22.6	64.8	100
VIII	0.4	2.0	6.9	17.5	73.2	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 6.4% cannot even read letters, 17.1% can read letters but not words or higher, 39.8% can read words but not Std I level text or higher, 26.5% can read Std I level text but not Std II level text, and 10.2% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
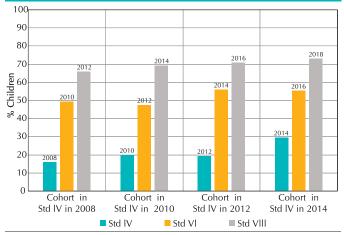
Reading Tool (Tamil)

Std II level text	Std I level text
ஒரு ஊரில் ஒரு ஏழை விவசாயி இருந்தார். அவளிடம் ஒரே ஒரு பானை இருந்தது. அதில் அவர் தினமும் வீட்டிற்கு தண்ணீர் கொண்டு வருவார். ஒருநாள் அந்த பானையில் ஒரு ஓட்டை விழுந்து விட்டது. என்ன செய்வது என்று யோசித்தார். அவர் தண்ணீர் கொண்டு வரும் பாதையில் பூ விதைகளை விதைத்தார். அந்த ஓட்டை பானையிலிருந்து ஒழுகிய நீரால் அந்த விதைகள் செடிகளாக வளர்ந்தன. அழகான பூக்கள் மலர்ந்தன.	ஒரு புலி மானைத் துரத்தியது. மான் வேகமாக ஓடியது. குகைக்குள் ஓடி மறைந்தது. புலி ஏமாந்து போனது.

Letters	Words

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	8.5	8.4	8.4
2014	16.8	14.4	15.9
2016	20.2	13.5	17.7
2018	11.6	7.6	10.2

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	30.2	30.6	30.3	65.3	67.6	65.8
2014	49.9	40.2	46.9	68.3	72.9	69.3
2016	49.4	37.0	45.3	71.2	70.1	70.9
2018	46.3	28.8	40.8	75.0	67.4	73.1

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
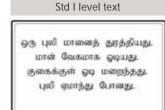### Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 15.8% and in Std VI (in 2010) was 49.5%. When the cohort reached Std VIII in 2012, this figure was 65.8%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	27.5	46.5	23.4	1.9	0.7	100
II	8.1	28.6	55.8	6.3	1.2	100
III	3.4	14.7	55.9	25.0	1.0	100
IV	1.3	7.3	41.6	43.5	6.3	100
V	1.1	3.8	32.2	37.4	25.4	100
VI	0.5	2.0	26.2	34.8	36.5	100
VII	0.4	1.6	22.9	31.7	43.4	100
VIII	0.2	0.6	22.9	26.2	50.2	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 3.4% cannot even recognize numbers 1-9, 14.7% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 55.9% can recognize numbers up to 99 but cannot do subtraction, 25% can do subtraction but cannot do division, and 1% can do division. For each grade, the total of these exclusive categories is 100%.
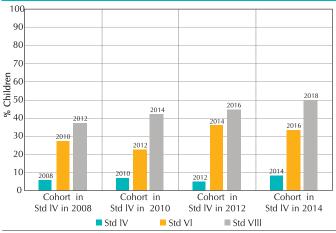
Arithmetic Tool (Tamil)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	14.4	23.6	17.6
2014	20.4	31.2	24.3
2016	24.2	25.7	24.8
2018	23.6	30.0	25.9

* This is the weighted average for children in government and private schools only.
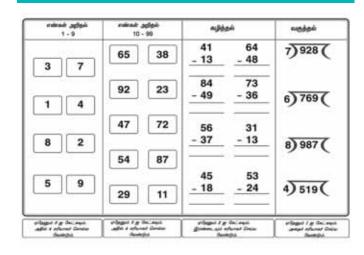
In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	9.6	22.4	13.1	35.7	43.2	37.2
2014	25.6	26.1	25.8	39.6	50.3	42.0
2016	21.4	21.1	21.3	42.6	51.0	44.8
2018	27.1	22.2	25.6	49.6	51.3	50.0

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 5.5% and in Std VI (in 2010) was 27.3%. When the cohort reached Std VIII in 2012, this figure was 37.2%. The progress of each of these cohorts can be understood in the same way.
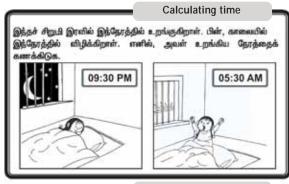
Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018

Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	22.4	32.4	27.6
Age 11-13	56.8	71.3	64.6
Age 14-16	80.0	87.8	84.4

Table 11: Basic arithmetic by age group and gender 2018

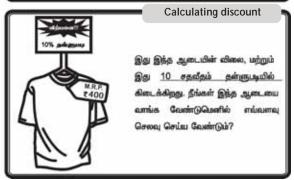| Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	44.7	50.4	47.7	11.3	12.8	12.1
Age 11-13	72.1	77.2	74.9	39.3	47.4	43.7
Age 14-16	78.3	84.9	82.0	56.8	64.5	61.1

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

Applying unitary method

Financial decision making

Calculating discount

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	39.7	38.5	39.1	50.3	48.5	49.4	30.4	27.4	28.9	22.4	17.7	20.1
Age 15	45.9	34.7	40.3	49.7	31.7	40.6	27.7	33.0	30.4	31.4	17.6	24.5
Age 16	44.9	35.5	38.9	32.2	28.4	29.8	28.6	35.6	33.0	34.5	13.9	21.4
Age 14-16	43.1	36.3	39.5	46.2	36.8	41.1	29.0	31.8	30.5	28.3	16.5	21.9

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	57.0	49.5	52.9	58.9	52.6	55.5	43.2	34.8	38.6	37.3	29.4	33.0
Age 15	56.1	52.6	54.0	60.6	53.3	56.1	43.1	42.8	42.9	36.3	36.5	36.4
Age 16	60.6	57.3	58.5	55.5	55.6	55.6	43.4	42.8	43.0	43.2	37.1	39.4
Age 14-16	57.9	53.4	55.2	58.3	53.9	55.7	43.2	40.3	41.5	38.9	34.5	36.3

Tamil Nadu RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 31 OUT OF 31 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	395	450	513	522
Upper primary schools (Std I-VII/VIII)	267	198	195	228
Total schools visited	662	648	708	750

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	89.9	89.5	90.9	91.1
% Teachers present (Average)	86.5	91.7	91.8	93.9
Upper primary schools (Std I-VII/VIII)	**2010**	**2014**	**2016**	**2018**
% Enrolled children present (Average)	90.7	87.7	90.9	91.0
% Teachers present (Average)	79.9	87.8	85.8	91.4

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	81.8	71.3	73.2	62.8
% Schools where Std IV children were observed sitting with one or more other classes	78.3	65.8	66.9	61.5
Upper primary schools (Std I-VII/VIII)	**2010**	**2014**	**2016**	**2018**
% Schools where Std II children were observed sitting with one or more other classes	76.2	64.6	65.5	66.7
% Schools where Std IV children were observed sitting with one or more other classes	69.5	62.5	57.2	58.5

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	96.7	97.5	97.9	96.2
	Mid-day meal served in school on day of visit	99.4	99.8	99.2	98.7
Drinking water	No facility for drinking water	12.8	9.9	10.7	9.7
	Facility but no drinking water available	6.7	10.3	7.0	10.1
	Drinking water available	80.5	79.8	82.4	80.2
	Total	100	100	100	100
Toilet	No toilet facility	7.0	2.5	1.8	0.8
	Facility but toilet not useable	48.5	17.7	18.9	9.0
	Toilet useable	44.6	79.8	79.3	90.2
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	20.8	13.0	5.9	3.9
	Separate provision but locked	23.0	9.1	9.0	3.9
	Separate provision, unlocked but not useable	21.0	9.2	9.0	6.0
	Separate provision, unlocked and useable	35.1	68.7	76.2	86.2
	Total	100	100	100	100
Library	No library	20.9	13.5	15.7	16.2
	Library but no books being used by children on day of visit	21.3	34.2	23.7	31.4
	Library books being used by children on day of visit	57.8	52.3	60.6	52.4
	Total	100	100	100	100
Electricity	Electricity connection			97.7	97.9
	Of schools with electricity connection, % schools with electricity available on day of visit			95.3	94.5
Computer	No computer available for children to use	53.0	37.6	42.6	42.1
	Available but not being used by children on day of visit	17.6	35.4	24.4	28.6
	Computer being used by children on day of visit	29.4	27.1	33.1	29.3
	Total	100	100	100	100

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	38.4	46.4	45.8	49.8
Upper primary schools (Std I-VII/VIII)	3.8	10.8	12.9	16.3

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	78.9	89.7	82.2
	No physical education period but dedicated time allotted	15.6	9.9	13.8
	No physical education period and no dedicated time allotted	5.5	0.5	4.0
	Total	100	100	100
Physical education teacher	Separate physical education teacher	3.9	12.0	6.4
	Other physical education teacher	61.9	70.4	64.5
	No physical education teacher	34.1	17.7	29.1
	Total	100	100	100
Playground	Playground inside the school premises	71.3	76.2	72.8
	Playground outside the school premises	10.9	15.4	12.3
	No accessible playground	17.8	8.4	14.9
	Total	100	100	100
Availability of any sports equipment		70.2	80.9	73.5
Supervised physical education activity observed on day of visit		37.6	40.0	38.3

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	95.4	96.0	95.1
Of all schools that have an SMC, % schools that had the last SMC meeting			
Before July	3.4	1.2	2.3
Between July and September	62.1	40.8	74.2
After September	34.5	57.9	23.5

Telangana RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 9 OUT OF 9 DISTRICTS
Data is not presented where sample size is insufficient.

Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	57.4	41.8	0.2	0.6	100
Age 7-16: All	58.4	40.1	0.2	1.4	100
Age 7-10: All	49.8	49.8	0.2	0.3	100
Age 7-10: Boys	46.3	53.3	0.2	0.3	100
Age 7-10: Girls	53.2	46.4	0.2	0.2	100
Age 11-14: All	65.5	33.3	0.2	1.0	100
Age 11-14: Boys	61.3	37.7	0.0	1.0	100
Age 11-14: Girls	69.9	28.7	0.5	0.9	100
Age 15-16: All	63.5	31.3	0.2	5.1	100
Age 15-16: Boys	64.7	30.8	0.4	4.1	100
Age 15-16: Girls	62.0	31.8	0.0	6.2	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Legend: 11 to 14 Boys, 11 to 14 Girls, 15 to 16 Boys, 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 15.1% in 2006, 12.1% in 2012, and 6.2% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

Legend: 2010, 2012, 2014, 2016, 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 54.4% as compared to 24.7% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤ 5	6	7	8	9	10	11	12	13	14	15	16	Total
I	22.0	35.3	30.6	9.2	3.0								100
II	5.0	10.9	39.4	30.0	10.3	4.4							100
III	2.8		10.5	41.2	30.6	10.4	4.5						100
IV	2.2			12.2	43.1	31.0	8.3	3.3					100
V	3.8				11.2	44.5	26.7	11.3	2.5				100
VI	2.7					12.3	42.8	31.4	8.4	2.3			100
VII	2.3						11.0	49.7	24.5	9.6	3.0		100
VIII	1.8							13.6	50.4	23.2	9.5	1.6	100

This table shows the age distribution for each grade. For example, of all children in Std III, 41.2% children are 8 years old but there are also 10.5% who are 7, 30.6% who are 9, 10.4% who are 10, and 4.5% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school Anganwadi	Pre-school Govt LKG/UKG	Pre-school Pvt LKG/UKG	School Govt	School Pvt	School Other	Not in pre-school or school	Total
Age 3	69.2	1.7	12.4	0.2	3.1	0.0	13.5	100
Age 4	48.3	3.6	37.9	4.4	3.3	0.0	2.5	100
Age 5	20.2	4.2	51.9	15.7	7.7	0.0	0.4	100
Age 6	2.8	2.8	38.3	32.5	23.3	0.0	0.3	100
Age 7	0.9	0.2	12.2	41.9	44.4	0.0	0.4	100
Age 8	0.4	0.0	1.6	47.3	50.2	0.0	0.4	100

Data is not presented where sample size is insufficient.

Annual Status of Education Report
ASER 2018 RURAL
Facilitated by PRATHAM

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	24.2	38.7	30.8	3.9	2.5	100
II	11.3	26.4	41.9	11.9	8.7	100
III	6.5	17.6	35.2	22.8	18.0	100
IV	4.3	9.0	24.7	27.8	34.2	100
V	2.1	6.5	18.9	28.8	43.7	100
VI	1.4	6.0	16.3	25.4	50.9	100
VII	1.8	2.2	14.5	17.0	64.4	100
VIII	0.5	3.4	9.6	17.5	69.0	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 6.5% cannot even read letters, 17.6% can read letters but not words or higher, 35.2% can read words but not Std I level text or higher, 22.8% can read Std I level text but not Std II level text, and 18% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
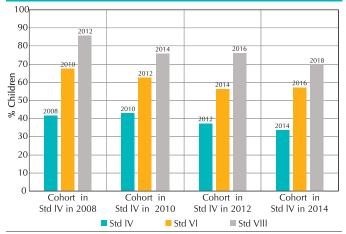
Reading Tool (Telugu)

Std II level text

రమ, రాము అన్నా చెల్లెళ్లు. రమ అంటే రాముకు ఎంతో ఇష్టం. ఒకరోజు రమ రాముతో ఆడుకుంటున్నది. రమ ఆడుతూ దోమల మంద చక్రం చూసింది. రమ చక్రంతో ఆడుకోవాలని అనుకుంది. చక్రం కావాలని అన్నయ్యను అడిగింది. అన్నయ్య ఇవ్వలేదని ఏడ్చింది. రామ కొంచెం సేపు ఆలోచించాడు. అతనికి ఒక ఉపాయం తట్టింది. వెంటనే లోపలికి వెళ్లి అమ్మను అడిగి ఒక చక్కిలం తెచ్చి చెల్లికి ఇచ్చాడు. చక్కిలం కూడా దోమల మంద చక్రంలా గుండ్రంగా ఉంది. రమ దానిని తీసుకొని ఏడుపు ఆపింది. రమ, రాము కలిసి ఆడుకున్నారు.

Std I level text

మంకెన పూలు ఎరుపు
నేరేడు పండు నలుపు
మల్లె పూలు తెలుపు
మామిడి పండు పసుపు.

Letters

న ఊ
వ
హా ఇ
ధ యు
డ ఏ
ష

Words

అట పూలు బాబు
దండ కూర
గాలి గంట కంటి
జడి గడ

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	18.2	25.9	21.6
2014	12.2	30.6	19.9
2016	14.9	22.5	18.6
2018	12.6	24.4	18.1

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	53.3	58.3	54.9	83.6	92.2	85.6
2014	53.7	55.7	54.5	73.9	82.2	75.9
2016	40.0	59.1	47.1	71.7	86.6	76.1
2018	41.3	47.0	43.6	63.1	88.9	69.5

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
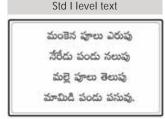### Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 41.8% and in Std VI (in 2010) was 67.4%. When the cohort reached Std VIII in 2012, this figure was 85.6%. The progress of each of these cohorts can be understood in the same way.
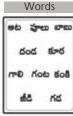
Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	20.0	29.8	46.0	3.1	1.1	100
II	9.2	14.7	60.5	13.6	2.0	100
III	4.9	9.4	51.5	31.2	3.2	100
IV	3.3	6.2	37.5	36.2	16.8	100
V	1.8	3.9	28.5	38.8	27.1	100
VI	1.6	0.7	30.6	32.6	34.6	100
VII	2.7	1.3	20.0	33.4	42.6	100
VIII	1.1	1.1	16.0	33.4	48.3	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 4.9% cannot even recognize numbers 1-9, 9.4% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 51.5% can recognize numbers up to 99 but cannot do subtraction, 31.2% can do subtraction but cannot do division, and 3.2% can do division. For each grade, the total of these exclusive categories is 100%.
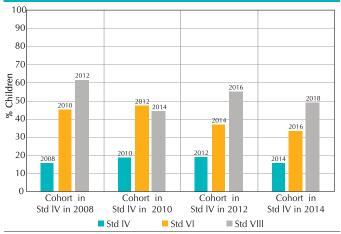
Arithmetic Tool (Telugu)

Table 8: Trends over time Arithmetic in Std III by school type 2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	35.1	56.7	44.6
2014	25.6	47.2	34.7
2016	30.7	54.6	42.2
2018	30.6	38.9	34.5

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time Arithmetic in Std V and Std VIII by school type 2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	29.2	46.0	34.7	56.1	79.6	61.6
2014	29.5	39.7	33.7	43.7	46.1	44.3
2016	26.0	37.6	30.4	51.4	63.2	54.9
2018	26.7	28.0	27.3	43.0	65.4	48.7

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time % Children who can do division Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 15.7% and in Std VI (in 2010) was 45%. When the cohort reached Std VIII in 2012, this figure was 61.6%. The progress of each of these cohorts can be understood in the same way.

Telangana RURAL

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
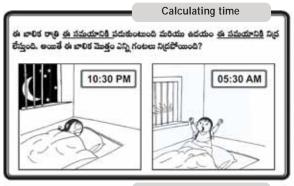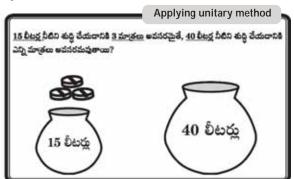
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	21.8	30.1	26.2
Age 11-13	54.4	64.0	59.4
Age 14-16	75.4	83.0	79.3

Table 11: Basic arithmetic by age group and gender 2018

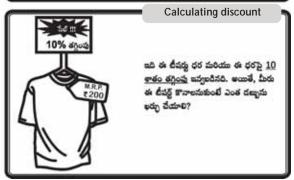| Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	40.3	46.3	43.5	11.3	13.4	12.4
Age 11-13	69.5	75.6	72.6	34.1	41.3	37.8
Age 14-16	81.6	83.7	82.7	55.9	57.8	56.9

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

Applying unitary method

Financial decision making

Calculating discount

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	34.4	40.4	37.8	28.2	46.9	38.8	10.9	18.2	15.1	7.7	13.7	11.1
Age 15	37.5	47.0	41.1	25.1	39.7	30.6	18.2	16.8	17.7	20.8	16.8	19.3
Age 16	35.4	21.6	27.1	36.1	36.2	36.2	0.0	25.8	15.6	16.8	16.1	16.4
Age 14-16	35.8	34.5	35.1	29.3	41.3	35.6	10.6	20.9	16.0	15.1	15.3	15.2

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	47.3	46.2	46.7	52.8	41.0	46.2	24.1	17.6	20.4	23.2	17.9	20.2
Age 15	40.7	42.2	41.5	41.2	36.7	38.8	15.0	22.0	18.8	27.7	21.3	24.2
Age 16	62.3	50.1	56.3	52.2	40.9	46.7	34.3	32.7	33.5	21.2	19.8	20.5
Age 14-16	49.8	45.8	47.7	48.7	39.5	43.8	24.2	23.2	23.7	24.1	19.6	21.7

Telangana RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 9 OUT OF 9 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	200	203	210	196
Upper primary schools (Std I-VII/VIII)	58	61	55	63
Total schools visited	258	264	265	259

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	67.9	70.4	75.4	74.9
% Teachers present (Average)	82.3	77.2	82.1	84.7

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	57.3	57.3	52.1	60.5
% Schools where Std IV children were observed sitting with one or more other classes	48.5	46.3	43.5	49.0

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	71.0	76.1	80.8	86.4
	Mid-day meal served in school on day of visit	98.4	99.6	98.9	95.8
Drinking water	No facility for drinking water	22.8	16.2	16.2	20.4
	Facility but no drinking water available	12.4	22.6	27.2	22.4
	Drinking water available	64.8	61.2	56.6	57.2
	Total	100	100	100	100
Toilet	No toilet facility	23.4	13.0	1.9	3.5
	Facility but toilet not useable	38.1	22.7	23.4	19.5
	Toilet useable	38.6	64.3	74.7	77.0
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	53.1	28.4	15.1	8.7
	Separate provision but locked	9.2	8.7	12.5	8.7
	Separate provision, unlocked but not useable	12.3	8.7	8.3	10.7
	Separate provision, unlocked and useable	25.4	54.2	64.2	71.9
	Total	100	100	100	100
Library	No library	8.0	2.8	13.4	22.4
	Library but no books being used by children on day of visit	14.4	31.6	28.0	22.0
	Library books being used by children on day of visit	77.6	65.6	58.6	55.7
	Total	100	100	100	100
Electricity	Electricity connection			89.1	86.4
	Of schools with electricity connection, % schools with electricity available on day of visit			81.3	86.9
Computer	No computer available for children to use	90.7	86.5	87.8	89.5
	Available but not being used by children on day of visit	3.0	7.9	7.6	7.4
	Computer being used by children on day of visit	6.2	5.6	4.6	3.1
	Total	100	100	100	100

Telangana RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
All schools (Std I-IV/V and Std I-VII/VIII)	17.2	19.7	26.8	34.8

Table 19: Physical education and sports in schools 2018

% Schools with		All schools (Std I-IV/V and Std I-VII/VIII)
Dedicated time for physical education	Physical education period in the timetable	62.7
	No physical education period but dedicated time allotted	21.0
	No physical education period and no dedicated time allotted	16.3
	Total	100
Physical education teacher	Separate physical education teacher	10.9
	Other physical education teacher	49.2
	No physical education teacher	39.9
	Total	100
Playground	Playground inside the school premises	77.0
	Playground outside the school premises	6.2
	No accessible playground	16.7
	Total	100
Availability of any sports equipment		59.1
Supervised physical education activity observed on day of visit		36.1

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	97.3	98.1	97.2
Of all schools that have an SMC, % schools that had the last SMC meeting			
Before July	4.4	1.2	2.1
Between July and September	46.3	55.6	44.6
After September	49.4	43.2	53.3

Tripura RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 4 OUT OF 4 DISTRICTS
Data is not presented where sample size is insufficient.

Annual Status of Education Report
असर ASER 2018 RURAL
Facilitated by PRATHAM

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	85.2	13.9	0.5	0.4	100
Age 7-16: All	85.9	12.3	0.7	1.2	100
Age 7-10: All	79.9	19.7	0.0	0.3	100
Age 7-10: Boys	76.2	23.3	0.0	0.6	100
Age 7-10: Girls	83.4	16.5	0.0	0.1	100
Age 11-14: All	89.7	9.0	1.0	0.3	100
Age 11-14: Boys	86.2	11.4	2.1	0.2	100
Age 11-14: Girls	93.0	6.7	0.0	0.4	100
Age 15-16: All	88.9	5.1	1.1	4.9	100
Age 15-16: Boys	84.7	6.2	2.0	7.1	100
Age 15-16: Girls	94.9	3.9	0.0	1.2	100
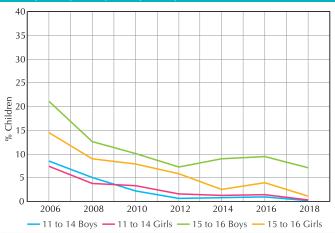
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

— 11 to 14 Boys — 11 to 14 Girls — 15 to 16 Boys — 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 14.4% in 2006, 5.9% in 2012, and 1.2% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

■ 2010 ■ 2012 ■ 2014 ■ 2016 ■ 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 22.2% as compared to 5.7% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	4.1	48.1	42.5				5.3						100
II		2.6	31.2	54.3	11.0			1.0					100
III			1.1	23.9	60.6	11.5			2.9				100
IV				4.9	15.9	67.5	9.5			2.2			100
V					2.0	21.5	59.3	14.1			3.1		100
VI						4.1	23.5	59.6	10.8		2.0		100
VII							2.1	18.7	63.4	14.1		1.8	100
VIII								4.2	15.9	69.5	5.4	5.0	100

This table shows the age distribution for each grade. For example, of all children in Std III, 23.9% children are 8 years old but there are also 1.1% who are 7 or younger, 60.6% who are 9, 11.5% who are 10, and 2.9% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	73.9	2.4	11.8	0.6	0.6	0.0	10.6	100
Age 4	67.4	0.0	29.1	0.0	0.0	0.0	3.5	100
Age 5	50.9	3.4	41.4	3.0	1.1	0.0	0.3	100
Age 6	24.4	0.5	26.7	41.5	5.8	0.0	1.1	100
Age 7	8.0	1.7	6.4	63.8	18.8	0.0	1.2	100
Age 8	0.9	2.0	0.3	71.3	25.6	0.0	0.0	100

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	18.0	43.2	23.6	11.8	3.4	100
II	12.6	31.3	28.2	15.7	12.2	100
III	7.1	19.4	26.6	21.3	25.6	100
IV	2.7	16.4	27.6	25.5	27.7	100
V	2.8	7.3	18.9	26.0	45.0	100
VI	2.6	7.7	10.6	25.7	53.4	100
VII	0.8	3.5	11.9	17.4	66.4	100
VIII	0.0	2.5	10.9	18.4	68.3	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 7.1% cannot even read letters, 19.4% can read letters but not words or higher, 26.6% can read words but not Std I level text or higher, 21.3% can read Std I level text but not Std II level text, and 25.6% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
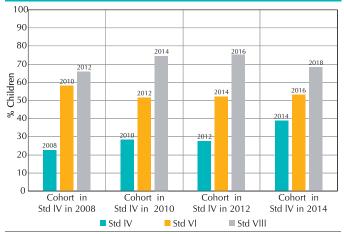
Reading Tool (Bengali)

Std II level text

তিথি বাড়ির একমাত্র মেয়ে। বাবা মা তাকে খুব ভালোবাসেন। সে মাছ খেতে ভালোবাসে। ওর বাবা রোজ বাড়িতে মাছ আনেন। তিথি তখন মায়ের পাশে ঘুরঘুর করতে থাকে। মাছ তেলে ছাড়া হলেই তার মন খুশিতে ভরে যায়। তিথি একসাথে তিন চারটে মাছ ভাজা খেয়ে নেয়। বাবা তিথিকে নিয়ে বাজারে যান। মাঝে মাঝে বাজার থেকে বাবা ইলিশ মাছও আনেন। সেদিন তিথির খুশির সীমা থাকে না।

Std I level text

আজ মাঠে মেলা বসেছে। রানা আর মালা মেলায় যাবে। সাথে যাবে মা আর বাবা। ওরা সবাই জিলিপি খাবে।

Letters

ন	প	ম
চ	স	
থ	গ	দ
র	ল	

Words

বাঘ	নোট
নালা	
দিন	চুন
কোটা	রানী
	দেশ
ভোট	বুড়ো

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	15.7		16.8
2014	25.6		24.4
2016	27.3		28.0
2018	25.3		25.6

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	36.5		36.8	65.7		66.0
2014	45.2		45.7	75.0		74.3
2016	49.0		51.0	75.1		75.3
2018	45.9		45.2	68.3		68.3

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

Cohort in Std IV in 2008	Cohort in Std IV in 2010	Cohort in Std IV in 2012	Cohort in Std IV in 2014

Std IV | Std VI | Std VIII

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 22.8% and in Std VI (in 2010) was 58%. When the cohort reached Std VIII in 2012, this figure was 65.8%. The progress of each of these cohorts can be understood in the same way.

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Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	12.9	50.8	29.9	4.4	1.9	100
II	9.9	37.2	39.1	11.5	2.3	100
III	2.9	23.7	38.6	28.6	6.2	100
IV	0.6	24.4	38.1	24.7	12.1	100
V	1.3	13.7	37.1	28.7	19.2	100
VI	0.4	5.1	47.8	25.3	21.5	100
VII	0.0	6.1	34.3	37.2	22.4	100
VIII	0.0	5.2	33.8	30.3	30.7	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 2.9% cannot even recognize numbers 1-9, 23.7% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 38.6% can recognize numbers up to 99 but cannot do subtraction, 28.6% can do subtraction but cannot do division, and 6.2% can do division. For each grade, the total of these exclusive categories is 100%.
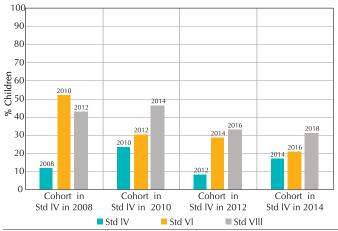
Arithmetic Tool (Bengali)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	28.0		29.6
2014	35.8		38.4
2016	33.0		36.0
2018	33.1		34.8

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	20.5		20.8	42.2		42.7
2014	20.8		22.6	45.1		46.2
2016	17.3		19.9	33.5		32.9
2018	16.6		19.1	30.6		31.0

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 11.7% and in Std VI (in 2010) was 51.8%. When the cohort reached Std VIII in 2012, this figure was 42.9%. The progress of each of these cohorts can be understood in the same way.

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Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
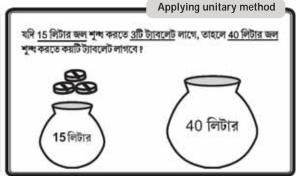
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	23.9	27.0	25.5
Age 11-13	54.4	56.7	55.5
Age 14-16	66.4	81.4	74.1
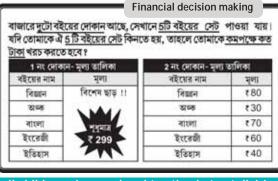
Table 11: Basic arithmetic by age group and gender 2018

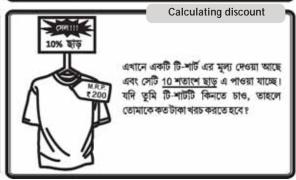| Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	33.2	33.0	33.1	9.4	8.6	9.0
Age 11-13	51.7	50.6	51.2	22.0	19.4	20.7
Age 14-16	59.3	67.0	63.2	31.1	36.4	33.8

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

Applying unitary method

Financial decision making

Calculating discount

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	27.6	15.0	20.0	27.0	11.5	17.6	26.7	21.8	23.7	12.3	2.4	6.3
Age 15	23.5	29.3	26.0	25.1	32.0	28.0	5.2	34.6	17.7	13.1	10.1	11.8
Age 16	20.1	26.7	24.1	20.1	28.7	25.4	12.9	11.8	12.2	12.9	24.2	19.8
Age 14-16	24.1	21.9	22.9	24.5	21.6	22.9	15.2	21.3	18.6	12.8	11.2	11.9

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	44.2	37.8	40.1	52.6	42.5	46.2	15.2	29.9	24.5	27.6	27.4	27.5
Age 15	35.1	13.5	23.7	64.2	29.5	45.9	31.2	19.5	25.0	55.2	8.4	30.5
Age 16	44.0	52.3	47.9	45.7	33.3	39.8	27.1	28.4	27.7	30.1	61.5	44.9
Age 14-16	41.1	34.0	37.1	54.2	36.5	44.4	24.4	26.5	25.5	37.6	29.7	33.2

Tripura RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 4 OUT OF 4 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

**Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018**

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	44	58	75	45
Upper primary schools (Std I-VII/VIII)	54	47	36	70
Total schools visited	98	105	111	115

**Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018**

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	64.7	70.9	72.1	63.1
% Teachers present (Average)	84.6	87.7	87.4	81.8

**Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018**

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	39.6	43.7	41.8	53.5
% Schools where Std IV children were observed sitting with one or more other classes	22.2	29.9	20.2	27.4

School facilities

**Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018**

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	88.2	97.1	99.1	98.3
	Mid-day meal served in school on day of visit	74.7	97.1	98.2	96.5
Drinking water	No facility for drinking water	32.6	33.3	29.1	39.5
	Facility but no drinking water available	27.4	10.5	11.8	14.9
	Drinking water available	40.0	56.2	59.1	45.6
	Total	100	100	100	100
Toilet	No toilet facility	8.6	3.9	4.5	6.1
	Facility but toilet not useable	48.4	37.5	29.7	40.9
	Toilet useable	43.0	58.7	65.8	53.0
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	48.5	20.0	39.0	37.4
	Separate provision but locked	15.2	17.1	12.0	20.6
	Separate provision, unlocked but not useable	6.1	5.7	9.0	9.4
	Separate provision, unlocked and useable	30.3	57.1	40.0	32.7
	Total	100	100	100	100
Library	No library	64.6	40.0	50.0	58.8
	Library but no books being used by children on day of visit	15.6	16.2	10.9	11.4
	Library books being used by children on day of visit	19.8	43.8	39.1	29.8
	Total	100	100	100	100
Electricity	Electricity connection			38.0	51.3
	Of schools with electricity connection, % schools with electricity available on day of visit			90.0	82.1
Computer	No computer available for children to use	91.5	92.2	89.9	95.6
	Available but not being used by children on day of visit	3.2	3.9	8.3	3.5
	Computer being used by children on day of visit	5.3	3.9	1.8	0.9
	Total	100	100	100	100

Tripura RURAL
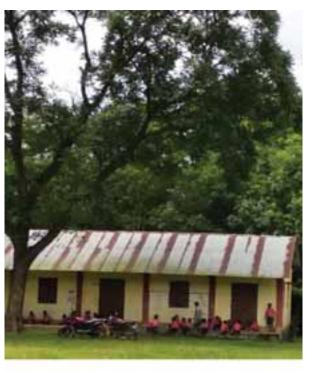
Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
All schools (Std I-IV/V and Std I-VII/VIII)	9.4	21.9	24.6	28.7

Table 19: Physical education and sports in schools 2018

% Schools with		All schools (Std I-IV/V and Std I-VII/VIII)
Dedicated time for physical education	Physical education period in the timetable	36.6
	No physical education period but dedicated time allotted	23.2
	No physical education period and no dedicated time allotted	40.2
	Total	100
Physical education teacher	Separate physical education teacher	9.3
	Other physical education teacher	39.8
	No physical education teacher	50.9
	Total	100
Playground	Playground inside the school premises	85.7
	Playground outside the school premises	3.6
	No accessible playground	10.7
	Total	100
Availability of any sports equipment		54.9
Supervised physical education activity observed on day of visit		15.0

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	96.2	99.1	99.1

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	17.7	8.3	11.6
Between July and September	76.0	47.7	87.5
After September	6.3	44.0	0.9

Uttar Pradesh RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 70 OUT OF 71 DISTRICTS
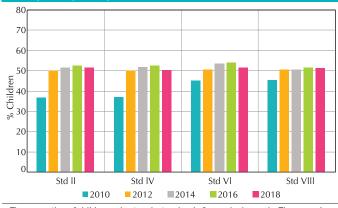Data is not presented where sample size is insufficient.

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	44.3	49.7	1.3	4.9	100
Age 7-16: All	40.7	51.3	1.2	6.9	100
Age 7-10: All	48.1	47.7	1.4	2.8	100
Age 7-10: Boys	44.2	51.7	1.4	2.7	100
Age 7-10: Girls	52.6	43.1	1.5	2.8	100
Age 11-14: All	38.5	54.3	1.1	6.2	100
Age 11-14: Boys	35.8	58.2	1.0	5.0	100
Age 11-14: Girls	41.5	49.9	1.2	7.4	100
Age 15-16: All	27.5	52.8	0.6	19.1	100
Age 15-16: Boys	29.2	54.4	0.5	16.0	100
Age 15-16: Girls	25.8	51.2	0.8	22.2	100

'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 25.6% in 2006, 26.5% in 2012, and 22.2% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 51.7% as compared to 51.1% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	27.8	29.7	19.8	12.7	10.0								100
II	6.0	14.1	27.3	26.1	11.2	8.6	6.7						100
III	5.8		12.3	29.5	19.4	17.9	6.1	5.7	3.4				100
IV	6.4			15.0	21.7	27.7	11.9	11.3	6.0				100
V	2.1			5.7	10.0	30.3	20.5	18.0	7.8	5.7			100
VI	5.2				16.0	23.5	30.8	14.8	6.0	3.7			100
VII	2.0					6.8	10.9	32.7	26.4	12.6	6.1	2.4	100
VIII	6.2						18.1	31.5	24.3	13.5	6.5		100

This table shows the age distribution for each grade. For example, of all children in Std III, 29.5% children are 8 years old but there are also 12.3% who are 7, 19.4% who are 9, 17.9% who are 10, 6.1% who are 11, 5.7% who are 12, and 3.4% who are 13 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	19.2	0.4	12.5	1.9	1.2	0.2	64.7	100
Age 4	19.2	1.2	26.4	6.5	4.1	0.4	42.3	100
Age 5	11.1	1.0	32.2	24.3	12.8	0.6	18.0	100
Age 6	3.3	0.4	24.2	39.4	25.3	0.9	6.4	100
Age 7	1.0	0.3	13.4	44.6	35.9	1.2	3.6	100
Age 8	0.4	0.2	5.3	45.5	44.8	1.6	2.3	100

Uttar Pradesh RURAL

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	47.2	32.3	9.4	5.3	5.9	100
II	24.0	33.7	15.4	10.5	16.5	100
III	15.1	27.2	15.7	14.0	28.1	100
IV	9.8	19.5	12.5	15.8	42.3	100
V	7.8	14.6	10.9	14.8	52.0	100
VI	5.0	11.1	8.2	15.1	60.6	100
VII	3.3	8.4	6.9	13.3	68.1	100
VIII	2.6	6.7	6.0	11.0	73.7	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 15.1% cannot even read letters, 27.2% can read letters but not words or higher, 15.7% can read words but not Std I level text or higher, 14% can read Std I level text but not Std II level text, and 28.1% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
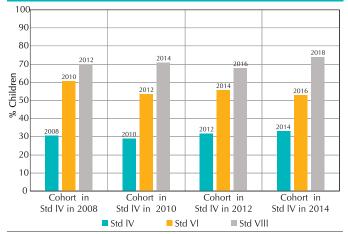
Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	6.5	31.5	18.8
2014	6.0	36.0	21.7
2016	7.2	36.6	22.6
2018	12.3	45.4	28.3

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Reading Tool (Hindi)

Std II level text	Std I level text

Std II level text:

नगमा समझदार लड़की थी। मगर उसका छोटा भाई अमन बहुत नटखट था। एक दिन दोनों बाज़ार में घूम रहे थे। अमन ने रास्ते में पकौड़े देखे। उसे पकौड़े बहुत पसंद थे। माँ उसके लिए पकौड़े बनाती थी। नगमा ने कहा यह पकौड़े तीखे होंगे। मगर अमन नहीं माना। अमन ने पकौड़े खाए और उसकी आँखों से आँसू निकलने लगे।

Std I level text:

रात हो गई है।
चाँद दिख रहा है।
तारे भी चमक रहे हैं।
सब लोग सो गए हैं।

Letters	Words
न प म	आग सोच
च स	ताला
थ ग द	गिर पानी
र ल	मौका धुन
	देश
	पैसा बूढ़ा

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	25.6	59.6	42.7	57.3	81.8	69.7
2014	26.8	61.4	44.6	59.3	81.9	70.9
2016	24.3	61.2	43.1	56.3	78.6	67.9
2018	36.2	68.8	52.4	62.0	85.0	73.8

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

Legend: Std IV, Std VI, Std VIII

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 30.4% and in Std VI (in 2010) was 60.6%. When the cohort reached Std VIII in 2012, this figure was 69.7%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

**Table 7: % Children by grade and arithmetic level
All children 2018**

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	38.7	38.2	18.1	3.8	1.2	100
II	15.5	41.0	28.1	10.9	4.5	100
III	9.5	33.2	30.7	15.2	11.4	100
IV	5.8	23.7	30.3	19.3	20.9	100
V	4.6	17.7	27.9	20.2	29.7	100
VI	2.8	12.4	28.7	20.6	35.4	100
VII	2.0	11.0	27.2	20.9	38.9	100
VIII	1.3	7.7	26.9	19.7	44.4	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 9.5% cannot even recognize numbers 1-9, 33.2% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 30.7% can recognize numbers up to 99 but cannot do subtraction, 15.2% can do subtraction but cannot do division, and 11.4% can do division. For each grade, the total of these exclusive categories is 100%.
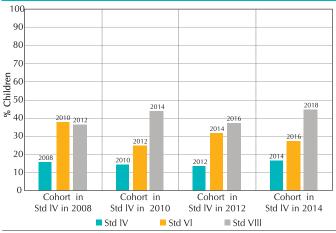
Arithmetic Tool (Hindi)

**Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018**

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	6.7	32.0	19.1
2014	6.6	38.5	23.3
2016	7.9	37.5	23.4
2018	11.2	43.7	26.9

* This is the weighted average for children in government and private schools only.
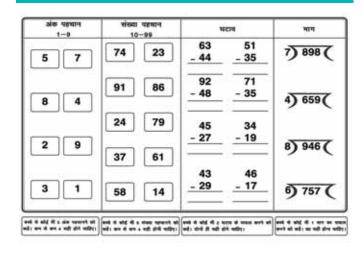
In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

**Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018**

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	9.1	33.3	21.3	24.4	48.4	36.6
2014	12.1	38.7	25.8	30.5	56.6	43.9
2016	10.4	34.6	22.7	25.5	48.4	37.4
2018	17.0	42.9	29.8	32.0	56.5	44.6

* This is the weighted average for children in government and private schools only.

**Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014**

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 15.5% and in Std VI (in 2010) was 37.8%. When the cohort reached Std VIII in 2012, this figure was 36.6%. The progress of each of these cohorts can be understood in the same way.
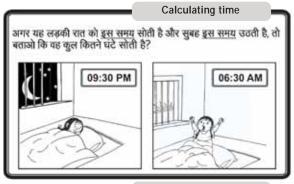
Uttar Pradesh RURAL

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
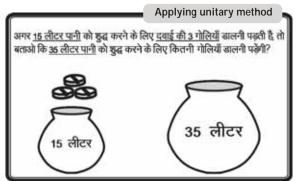
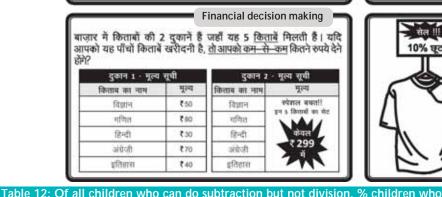| Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	32.2	32.7	32.4
Age 11-13	61.5	58.6	60.1
Age 14-16	77.5	72.4	74.8

Table 11: Basic arithmetic by age group and gender 2018

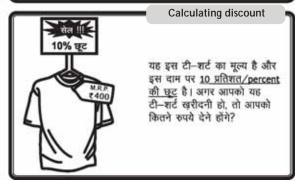| Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	33.1	28.0	30.6	16.8	13.3	15.1
Age 11-13	59.0	49.3	54.2	40.1	29.0	34.6
Age 14-16	71.0	56.5	63.4	53.9	37.3	45.1

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

अगर यह लड़की रात को इस समय सोती है और सुबह इस समय उठती है, तो बताओ कि वह कुल कितने घंटे सोती है?

09:30 PM   06:30 AM

Applying unitary method

अगर 15 लीटर पानी को शुद्ध करने के लिए दवाई की 3 गोलियाँ डालनी पड़ती हैं तो बताओ कि 35 लीटर पानी को शुद्ध करने के लिए कितनी गोलियाँ डालनी पड़ेंगी?

15 लीटर   35 लीटर

Financial decision making

बाज़ार में किताबों की 2 दुकानें हैं जहाँ यह 5 किताबें मिलती हैं। यदि आपको यह पाँचों किताबें खरीदनी है, तो आपको कम-से-कम कितने रुपये देने होंगे?

दुकान 1 - मूल्य सूची
किताब का नाम	मूल्य
विज्ञान	₹50
गणित	₹80
हिन्दी	₹30
अंग्रेजी	₹70
इतिहास	₹40

दुकान 2 - मूल्य सूची
किताब का नाम	मूल्य
विज्ञान	स्पेशल बचत!! इन 5 किताबों का सेट केवल ₹299 में
गणित	
हिन्दी	
अंग्रेजी	
इतिहास	

Calculating discount

सेल !!! 10% छूट

M.R.P ₹400

यह इस टी-शर्ट का मूल्य है और इस दाम पर 10 प्रतिशत/percent की छूट है। अगर आपको यह टी-शर्ट खरीदनी हो, तो आपको कितने रुपये देने होंगे?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	32.1	29.7	30.8	36.0	31.2	33.4	21.7	23.9	22.9	11.0	8.4	9.6
Age 15	38.4	28.2	32.5	39.5	32.0	35.2	26.2	20.6	23.0	15.4	8.3	11.3
Age 16	31.5	27.8	29.3	40.1	31.1	34.8	26.6	26.6	26.6	18.1	10.0	13.4
Age 14-16	34.1	28.6	31.0	38.3	31.4	34.4	24.6	23.6	24.0	14.5	8.8	11.3

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	46.9	43.3	45.4	54.0	44.6	50.0	39.2	33.8	36.9	29.5	22.0	26.3
Age 15	50.8	42.3	47.2	57.0	44.2	51.6	40.0	34.0	37.4	31.9	23.7	28.4
Age 16	50.7	42.5	46.9	55.3	48.2	52.0	38.4	36.2	37.4	36.9	28.0	32.8
Age 14-16	49.3	42.7	46.4	55.4	45.6	51.1	39.3	34.6	37.2	32.4	24.4	28.9

Uttar Pradesh RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 70 OUT OF 71 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	1633	1543	1757	1606
Upper primary schools (Std I-VII/VIII)	263	428	209	392
Total schools visited	1896	1971	1966	1998

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Enrolled children present (Average)	57.6	55.1	56.0	59.9
% Teachers present (Average)	81.0	84.7	85.6	85.2
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	57.6	54.7	55.8	59.5
% Teachers present (Average)	79.8	85.6	83.0	87.0

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

Primary schools (Std I-IV/V)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	51.4	63.7	64.7	63.8
% Schools where Std IV children were observed sitting with one or more other classes	46.5	60.8	59.4	60.4
Upper primary schools (Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	48.4	59.7	47.1	55.4
% Schools where Std IV children were observed sitting with one or more other classes	42.0	53.0	44.8	52.7

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	89.3	96.0	96.5	95.4
	Mid-day meal served in school on day of visit	71.3	93.9	91.2	93.3
Drinking water	No facility for drinking water	6.9	2.5	5.4	3.3
	Facility but no drinking water available	10.9	11.7	12.6	11.5
	Drinking water available	82.2	85.8	82.0	85.1
	Total	100	100	100	100
Toilet	No toilet facility	6.7	4.2	4.7	3.0
	Facility but toilet not useable	45.9	40.9	40.5	24.4
	Toilet useable	47.4	54.9	54.8	72.7
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	24.9	12.3	10.5	8.4
	Separate provision but locked	25.3	18.6	16.6	6.5
	Separate provision, unlocked but not useable	15.9	20.0	21.5	17.9
	Separate provision, unlocked and useable	33.9	49.1	51.5	67.2
	Total	100	100	100	100
Library	No library	51.4	25.5	28.5	36.9
	Library but no books being used by children on day of visit	25.8	38.4	28.8	27.5
	Library books being used by children on day of visit	22.9	36.2	42.8	35.7
	Total	100	100	100	100
Electricity	Electricity connection			52.0	66.5
	Of schools with electricity connection, % schools with electricity available on day of visit			41.0	55.2
Computer	No computer available for children to use	98.6	97.8	97.3	96.7
	Available but not being used by children on day of visit	1.1	1.9	2.1	2.6
	Computer being used by children on day of visit	0.3	0.3	0.6	0.7
	Total	100	100	100	100

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	5.3	11.2	13.5	12.4
Upper primary schools (Std I-VII/VIII)	0.4	1.4	2.4	2.3

Table 19: Physical education and sports in schools 2018

% Schools with		Std I-IV/V	Std I-VII/VIII	All schools
Dedicated time for physical education	Physical education period in the timetable	61.7	70.0	63.3
	No physical education period but dedicated time allotted	23.8	21.8	23.4
	No physical education period and no dedicated time allotted	14.5	8.2	13.3
	Total	100	100	100
Physical education teacher	Separate physical education teacher	5.0	15.6	7.1
	Other physical education teacher	72.9	66.9	71.7
	No physical education teacher	22.1	17.5	21.2
	Total	100	100	100
Playground	Playground inside the school premises	69.6	80.8	71.8
	Playground outside the school premises	12.9	11.4	12.6
	No accessible playground	17.5	7.8	15.6
	Total	100	100	100
Availability of any sports equipment		55.2	64.8	57.1
Supervised physical education activity observed on day of visit		24.9	33.8	26.6

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	97.2	93.7	96.7

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	7.3	2.6	2.2
Between July and September	77.5	57.1	64.5
After September	15.2	40.3	33.4

Uttarakhand RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 13 OUT OF 13 DISTRICTS
Data is not presented where sample size is insufficient.

School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	55.0	42.7	0.8	1.5	100
Age 7-16: All	57.1	39.7	0.8	2.4	100
Age 7-10: All	49.4	48.6	1.2	0.8	100
Age 7-10: Boys	48.0	50.4	1.0	0.6	100
Age 7-10: Girls	50.9	46.6	1.5	0.9	100
Age 11-14: All	60.0	37.6	0.4	2.0	100
Age 11-14: Boys	55.5	42.3	0.5	1.8	100
Age 11-14: Girls	65.2	32.3	0.3	2.2	100
Age 15-16: All	66.1	26.5	0.6	6.9	100
Age 15-16: Boys	62.8	29.7	0.4	7.1	100
Age 15-16: Girls	69.7	22.9	0.8	6.6	100
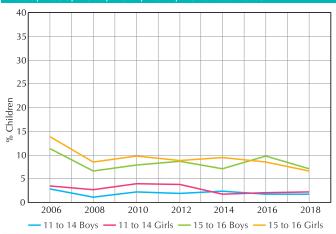
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

— 11 to 14 Boys — 11 to 14 Girls — 15 to 16 Boys — 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 13.8% in 2006, 8.8% in 2012, and 6.6% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

■ 2010 ■ 2012 ■ 2014 ■ 2016 ■ 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 49.8% as compared to 34.6% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	28.6	35.7	22.4	8.4	4.9								100
II	4.1	12.9	37.2	27.7	9.3	5.0	3.8						100
III		3.3	13.0	37.8	28.2	10.5	7.2						100
IV			3.2	12.3	30.7	33.0	12.8	5.3	2.6				100
V				4.1	10.0	38.8	25.1	14.1	6.0	1.7			100
VI				3.0		11.2	33.9	33.1	11.9	5.3	1.6		100
VII				5.0			11.9	39.8	29.2	9.8	4.4		100
VIII				5.6				17.2	38.9	25.5	10.9	1.9	100

This table shows the age distribution for each grade. For example, of all children in Std III, 37.8% children are 8 years old but there are also 13% who are 7, 28.2% who are 9, 10.5% who are 10, and 7.2% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	51.8	0.3	21.6	0.8	1.7	0.3	23.4	100
Age 4	45.5	1.8	38.0	2.7	2.1	0.6	9.4	100
Age 5	16.7	1.5	46.0	20.2	10.4	0.9	4.3	100
Age 6	5.1	0.6	25.4	37.5	29.5	0.6	1.4	100
Age 7	0.0	0.2	10.2	46.8	40.0	1.3	1.5	100
Age 8	0.2	0.1	3.3	44.0	50.7	1.0	0.8	100

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	29.9	37.0	17.9	8.9	6.3	100
II	11.6	26.3	22.1	18.7	21.3	100
III	6.3	18.2	19.1	21.9	34.5	100
IV	3.4	9.4	13.3	21.5	52.4	100
V	2.9	7.5	8.4	16.9	64.3	100
VI	2.2	4.3	6.0	14.3	73.2	100
VII	1.7	3.7	2.6	13.2	78.8	100
VIII	1.1	2.1	2.6	10.5	83.8	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 6.3% cannot even read letters, 18.2% can read letters but not words or higher, 19.1% can read words but not Std I level text or higher, 21.9% can read Std I level text but not Std II level text, and 34.5% can read Std II level text. For each grade, the total of these exclusive categories is 100%.
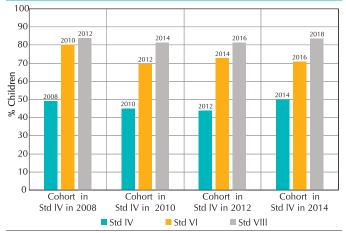
Table 5: Trends over time Reading in Std III by school type 2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	20.7	48.8	31.7
2014	23.3	51.7	35.3
2016	25.3	54.1	38.2
2018	24.7	43.3	34.5

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Reading Tool (Hindi)

Std II level text

सावन का महीना था। आसमान में बहुत काले-काले बादल छाए थे। ठंडी-ठंडी हवा चल रही थी। मुझे झूला झूलने का मन किया। बड़े भैया एक मोटी सी रस्सी लेकर बाहर आए। भैया ने रस्सी को पेड़ से लटकाकर झूला बनाया। सब ने मिलकर खूब झूला झूला। बाकी बच्चे भी आकर मज़े से झूलने लगे। झूलते-झूलते रात हो गई।

Std I level text

बग़ीचे में एक पेड़ है। पेड़ पर एक तोता रहता है। तोते का रंग हरा है। वह लाल टमाटर खाता है।

Letters

ल प स
क ग
ड ब म
ट झ

Words

लाल दूध
पैर
तेल किला
मोर जूता
कुल
पानी मौका

Table 6: Trends over time Reading in Std V and Std VIII by school type 2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	52.2	70.1	58.1	81.7	89.9	83.9
2014	52.0	75.0	60.3	77.3	90.7	81.2
2016	55.9	73.7	63.6	79.4	86.7	81.4
2018	58.0	72.8	64.6	81.6	87.7	83.7

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time % Children who can read Std II level text Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 49% and in Std VI (in 2010) was 80%. When the cohort reached Std VIII in 2012, this figure was 83.8%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level
All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	26.8	34.7	34.1	4.4	0.1	100
II	8.4	32.1	43.7	14.2	1.6	100
III	4.6	22.4	40.7	23.9	8.4	100
IV	2.8	14.1	41.3	22.9	19.0	100
V	1.4	10.9	27.2	23.0	37.5	100
VI	1.4	8.3	31.0	22.1	37.3	100
VII	0.4	5.1	27.6	24.1	42.8	100
VIII	0.5	2.6	27.2	21.2	48.6	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 4.6% cannot even recognize numbers 1-9, 22.4% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 40.7% can recognize numbers up to 99 but cannot do subtraction, 23.9% can do subtraction but cannot do division, and 8.4% can do division. For each grade, the total of these exclusive categories is 100%.
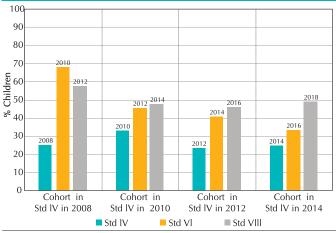
Arithmetic Tool (Hindi)

Table 8: Trends over time
Arithmetic in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	23.4	58.0	37.1
2014	17.2	45.8	29.3
2016	23.4	53.3	36.8
2018	18.5	45.2	32.6

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time
Arithmetic in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	27.3	50.1	34.9	50.2	76.7	57.4
2014	21.4	46.1	30.3	38.1	70.6	47.7
2016	25.5	51.6	36.8	38.5	66.5	45.9
2018	26.7	50.9	37.5	41.6	62.7	48.7

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time
% Children who can do division
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 25% and in Std VI (in 2010) was 68%. When the cohort reached Std VIII in 2012, this figure was 57.4%. The progress of each of these cohorts can be understood in the same way.

Uttarakhand RURAL

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
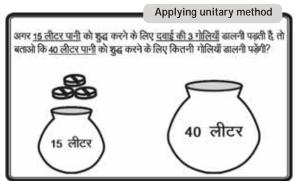
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	42.3	48.7	45.3
Age 11-13	71.7	78.5	74.9
Age 14-16	85.4	87.5	86.4
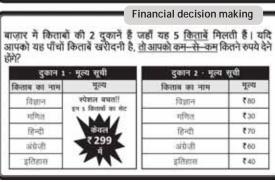
Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	39.4	37.7	38.6	17.3	14.9	16.2
Age 11-13	64.5	61.9	63.3	40.7	41.1	40.9
Age 14-16	75.6	66.5	71.2	59.8	41.5	51.0

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

अगर यह लड़की रात को इस समय सोती है और सुबह इस समय उठती है, तो बताओ कि वह कुल कितने घंटे सोती है?

Applying unitary method

अगर 15 लीटर पानी को शुद्ध करने के लिए दवाई की 3 गोलियाँ डालनी पड़ती है तो बताओ कि 40 लीटर पानी को शुद्ध करने के लिए कितनी गोलियाँ डालनी पड़ेंगी?

Financial decision making

बाज़ार में किताबों की 2 दुकानें हैं जहाँ यह 5 किताबें मिलती हैं। यदि आपको यह पाँचों किताबें खरीदनी है, तो आपको कम-से-कम कितने रुपये देने होंगे?

Calculating discount

यह इस टी-शर्ट का मूल्य है और इस दाम पर 10 प्रतिशत/percent की छूट है। अगर आपको यह टी-शर्ट खरीदनी हो, तो आपको कितने रुपये देने होंगे?

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018
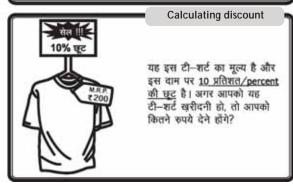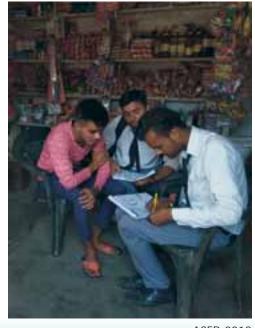
Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	26.6	38.4	33.4	29.4	40.1	35.6	24.0	33.8	29.7	5.2	9.3	7.6
Age 15	28.1	27.9	28.0	48.8	22.0	32.3	32.2	29.1	30.3	12.4	6.8	8.9
Age 16	46.4	36.8	40.4	41.8	29.8	34.3	35.3	30.9	32.6	25.4	11.2	16.6
Age 14-16	32.7	34.5	33.8	38.8	31.2	34.2	29.7	31.4	30.7	13.1	9.1	10.7

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	42.4	37.1	40.2	55.7	46.9	52.1	44.2	37.9	41.6	31.3	14.9	24.6
Age 15	46.7	48.6	47.4	53.8	46.1	50.9	44.0	46.4	44.9	32.0	17.1	26.4
Age 16	53.3	40.8	48.3	61.2	49.8	56.7	45.1	49.9	47.0	33.7	24.4	30.0
Age 14-16	47.1	42.2	45.2	56.6	47.5	53.0	44.4	44.3	44.3	32.2	18.4	26.8

ASER 2018

Uttarakhand RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 13 OUT OF 13 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018
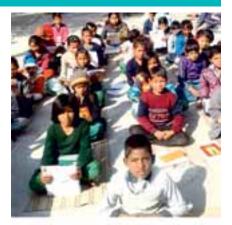
	2010	2014	2016	2018
Primary schools (Std I-IV/V)	321	297	317	286
Upper primary schools (Std I-VII/VIII)	16	4	7	10
Total schools visited	337	301	324	296

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	89.7	80.2	82.4	82.9
% Teachers present (Average)	90.9	81.0	79.7	86.2

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	61.9	80.1	76.9	75.9
% Schools where Std IV children were observed sitting with one or more other classes	57.0	76.9	74.6	71.9

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	96.3	97.3	95.6	98.0
	Mid-day meal served in school on day of visit	95.0	92.3	95.0	88.1
Drinking water	No facility for drinking water	22.1	17.7	14.0	13.2
	Facility but no drinking water available	9.7	13.0	14.0	11.2
	Drinking water available	68.3	69.2	72.1	75.6
	Total	100	100	100	100
Toilet	No toilet facility	5.8	5.0	2.8	1.7
	Facility but toilet not useable	40.9	25.8	22.3	12.5
	Toilet useable	53.4	69.2	74.9	85.8
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	47.7	26.2	17.3	17.8
	Separate provision but locked	11.5	8.8	10.0	5.1
	Separate provision, unlocked but not useable	16.9	11.3	11.3	9.9
	Separate provision, unlocked and useable	24.0	53.7	61.3	67.2
	Total	100	100	100	100
Library	No library	52.3	14.1	13.0	15.3
	Library but no books being used by children on day of visit	27.2	49.0	45.7	58.6
	Library books being used by children on day of visit	20.4	36.9	41.3	26.1
	Total	100	100	100	100
Electricity	Electricity connection			83.6	86.3
	Of schools with electricity connection, % schools with electricity available on day of visit			74.3	74.8
Computer	No computer available for children to use	93.3	91.2	90.4	90.2
	Available but not being used by children on day of visit	5.2	6.8	7.1	9.1
	Computer being used by children on day of visit	1.5	2.0	2.5	0.7
	Total	100	100	100	100

Uttarakhand RURAL

Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
All schools (Std I-IV/V and Std I-VII/VIII)	69.0	76.7	75.0	73.1

Table 19: Physical education and sports in schools 2018

% Schools with		All schools (Std I-IV/V and Std I-VII/VIII)
Dedicated time for physical education	Physical education period in the timetable	59.2
	No physical education period but dedicated time allotted	25.6
	No physical education period and no dedicated time allotted	15.2
	Total	100
Physical education teacher	Separate physical education teacher	7.5
	Other physical education teacher	70.4
	No physical education teacher	22.1
	Total	100
Playground	Playground inside the school premises	68.8
	Playground outside the school premises	11.5
	No accessible playground	19.7
	Total	100
Availability of any sports equipment		50.5
Supervised physical education activity observed on day of visit		22.0

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	98.3	98.7	97.0

Of all schools that have an SMC, % schools that had the last SMC meeting

	2014	2016	2018
Before July	9.9	7.3	7.1
Between July and September	71.7	33.0	61.8
After September	18.4	59.7	31.1

West Bengal RURAL

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 17 OUT OF 18 DISTRICTS
Data is not presented where sample size is insufficient.
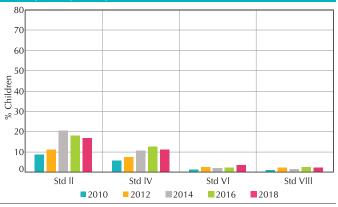
School enrollment

Table 1: % Children enrolled in different types of schools by age group and gender 2018

Age group	Govt	Pvt	Other	Not in school	Total
Age 6-14: All	88.1	7.9	1.9	2.0	100
Age 7-16: All	87.8	6.5	2.1	3.6	100
Age 7-10: All	85.5	12.5	1.0	1.1	100
Age 7-10: Boys	84.5	12.9	1.2	1.5	100
Age 7-10: Girls	86.4	12.2	0.7	0.7	100
Age 11-14: All	91.8	2.8	3.1	2.4	100
Age 11-14: Boys	90.7	3.1	2.7	3.5	100
Age 11-14: Girls	92.8	2.5	3.4	1.3	100
Age 15-16: All	84.1	1.9	2.4	11.7	100
Age 15-16: Boys	76.8	2.8	1.3	19.2	100
Age 15-16: Girls	90.9	1.1	3.3	4.8	100
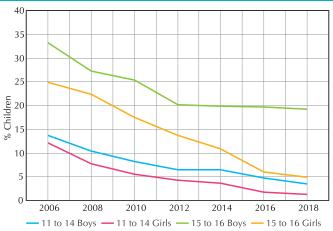
'Other' includes children going to Madarsa or EGS.
'Not in school' includes children who never enrolled or have dropped out.

Chart 1: Trends over time
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

— 11 to 14 Boys   — 11 to 14 Girls   — 15 to 16 Boys   — 15 to 16 Girls

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 24.9% in 2006, 13.8% in 2012, and 4.8% in 2018.

Chart 2: Trends over time
% Children enrolled in private schools in Std II, IV, VI and VIII 2010, 2012, 2014, 2016 and 2018

■ 2010   ■ 2012   ■ 2014   ■ 2016   ■ 2018

The proportion of children going to private school often varies by grade. There are also changes over time. For example, in 2018 private school enrollment in Std II is 16.7% as compared to 2.2% in Std VIII.

Table 2: Age-grade distribution
% Children in each grade by age 2018

Std \ Age	≤5	6	7	8	9	10	11	12	13	14	15	16	Total
I	16.2	31.9	37.7	11.2	3.0								100
II	2.1	6.4	26.6	47.7	10.8	6.4							100
III	1.8		7.0	25.9	45.8	17.0	2.5						100
IV	6.6			22.3	54.9	11.9	4.3						100
V	3.1				31.1	45.2	16.0	4.5					100
VI	6.2					24.3	47.5	14.8	7.3				100
VII	1.6						7.3	39.1	37.3	11.2	3.6		100
VIII	1.4							9.3	38.2	36.1	10.7	4.2	100

This table shows the age distribution for each grade. For example, of all children in Std III, 25.9% children are 8 years old but there are also 7% who are 7, 45.8% who are 9, 17% who are 10, and 2.5% who are 11 or older.

Young children in pre-school and school

Table 3: % Children age 3-8 enrolled in different types of pre-schools and schools 2018

Age	Pre-school			School			Not in pre-school or school	Total
	Anganwadi	Govt LKG/UKG	Pvt LKG/UKG	Govt	Pvt	Other		
Age 3	72.7	0.8	5.1	2.0	0.7	0.0	18.8	100
Age 4	69.6	1.5	14.1	3.7	1.0	0.3	9.9	100
Age 5	44.0	9.6	21.5	16.8	3.0	0.0	5.1	100
Age 6	14.2	14.0	16.5	44.8	7.0	0.5	3.1	100
Age 7	2.8	2.8	5.4	77.2	10.3	0.5	1.0	100
Age 8	0.8	1.2	4.0	78.8	13.8	0.4	1.0	100

Data is not presented where sample size is insufficient.

Reading

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 4: % Children by grade and reading level
All children 2018

Std	Not even letter	Letter	Word	Std I level text	Std II level text	Total
I	24.8	33.3	22.8	10.9	8.2	100
II	10.3	20.6	24.6	21.0	23.5	100
III	8.3	16.0	16.3	19.4	40.0	100
IV	7.4	13.0	16.1	21.5	42.0	100
V	5.1	9.8	13.2	21.2	50.7	100
VI	5.3	8.7	14.7	16.8	54.6	100
VII	2.3	8.8	10.6	19.6	58.7	100
VIII	3.0	6.1	10.9	18.3	61.8	100

The reading tool is a progressive tool. Each row shows the variation in children's reading levels within a given grade. For example, among children in Std III, 8.3% cannot even read letters, 16% can read letters but not words or higher, 16.3% can read words but not Std I level text or higher, 19.4% can read Std I level text but not Std II level text, and 40% can read Std II level text. For each grade, the total of these exclusive categories is 100%.

Reading Tool (Bengali)

Std II level text

খড়িয়া গ্রামে একটা বড়ো খেলার মাঠ আছে। রোজ বিকেলে ছেলে মেয়েরা খেলতে আসে। কেউ ফুটবল খেলে, কেউ দৌড়াদৌড়ি করে। মাঝে মাঝে খেলার আয়োজন হয় বড়ো করে। তখন সবাই মাঠের ধারে আলো লাগায়। রেফারি থাকেন বাঁশি নিয়ে। মাঠের চারধারে কতলোক জড়ো হয়। লোকে খেলা দেখে, হাততালি দেয়। যে দল খেলায় জেতে, তাদের নিয়ে সবাই হই-চই করে। শেষে মিষ্টি খাওয়া হয়।

Std I level text

রাজা দাদা খুব ভালো খেলে। ও রোজ খুব ভোরে ওঠে। ব্যাট বল নিয়ে মাঠে যায়। তারপর ফিরে দাদা পড়তে বসে।

Letters

হ	চ	ট
ল	ন	
ফ	ম	র
স	ত	

Words

ভুল	আতা
ভোজ	
রাণি	পূজা
আলো	মাসি
লোভ	
বেল	নৌকা

Table 5: Trends over time
Reading in Std III by school type
2012, 2014, 2016 and 2018

Year	% Children in Std III who can read Std II level text		
	Govt	Pvt	Govt & Pvt*
2012	26.1		28.1
2014	32.9		36.3
2016	34.0		38.5
2018	36.6		40.0

* This is the weighted average for children in government and private schools only.

The highest level in the ASER reading assessment is a Std II level text. Table 5 shows the proportion of children in Std III who can read Std II level text. This figure is a proxy for "grade level" reading for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 6: Trends over time
Reading in Std V and Std VIII by school type
2012, 2014, 2016 and 2018

Year	% Children in Std V who can read Std II level text			% Children in Std VIII who can read Std II level text		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	48.7		48.9	76.9		76.7
2014	51.8		53.1	76.3		76.3
2016	50.2		51.1	72.3		72.7
2018	50.5		51.3	63.0		62.9

* This is the weighted average for children in government and private schools only.

Chart 3: Trends over time
% Children who can read Std II level text
Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who could read Std II level text in Std IV (in 2008) was 37% and in Std VI (in 2010) was 66.3%. When the cohort reached Std VIII in 2012, this figure was 76.7%. The progress of each of these cohorts can be understood in the same way.

Data is not presented where sample size is insufficient.

Arithmetic

ASER learning assessments are conducted in the household. Children in the age group 5-16 are assessed. Assessments are conducted in 19 languages across the country. The type of school in which children are enrolled (government or private) is also recorded.

Table 7: % Children by grade and arithmetic level All children 2018

Std	Not even 1-9	Recognize numbers 1-9	Recognize numbers 10-99	Subtract	Divide	Total
I	20.4	43.1	25.8	8.2	2.5	100
II	6.7	33.2	33.3	18.0	8.9	100
III	4.2	24.5	32.9	20.3	18.2	100
IV	4.1	19.6	33.6	21.7	21.1	100
V	2.8	13.6	34.5	19.4	29.7	100
VI	2.8	10.3	38.5	17.0	31.4	100
VII	1.0	10.0	40.2	16.9	31.8	100
VIII	1.7	7.4	46.8	15.5	28.7	100

The arithmetic tool is a progressive tool. Each row shows the variation in children's arithmetic levels within a given grade. For example, among children in Std III, 4.2% cannot even recognize numbers 1-9, 24.5% can recognize numbers up to 9 but cannot recognize numbers up to 99 or higher, 32.9% can recognize numbers up to 99 but cannot do subtraction, 20.3% can do subtraction but cannot do division, and 18.2% can do division. For each grade, the total of these exclusive categories is 100%.
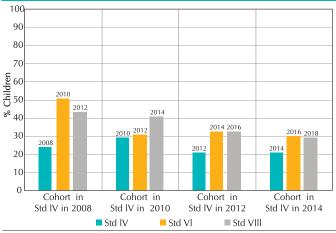
Arithmetic Tool (Bengali)

Table 8: Trends over time Arithmetic in Std III by school type 2012, 2014, 2016 and 2018

Year	% Children in Std III who can do at least subtraction		
	Govt	Pvt	Govt & Pvt*
2012	25.1		28.2
2014	33.0		36.2
2016	35.5		40.4
2018	35.4		38.6

* This is the weighted average for children in government and private schools only.

In most states, children are expected to do 2-digit by 2-digit subtraction with borrowing by Std II. Table 8 shows the proportion of children in Std III who can do subtraction. This figure is a proxy for "grade level" arithmetic for Std III. Data for children enrolled in government schools and private schools is shown separately.

Table 9: Trends over time Arithmetic in Std V and Std VIII by school type 2012, 2014, 2016 and 2018

Year	% Children in Std V who can do division			% Children in Std VIII who can do division		
	Govt	Pvt	Govt & Pvt*	Govt	Pvt	Govt & Pvt*
2012	28.7		29.2	43.0		43.5
2014	31.3		32.5	40.4		40.8
2016	28.6		29.7	32.5		32.7
2018	29.2		29.7	28.9		29.1

* This is the weighted average for children in government and private schools only.

Chart 4: Trends over time % Children who can do division Cohorts of children in Std IV in 2008, 2010, 2012 and 2014

This graph shows the progress of four cohorts from Std IV to Std VIII. For example, the first cohort was in Std IV in 2008, in Std VI in 2010, and in Std VIII in 2012. For this cohort, % children who were at division level in Std IV (in 2008) was 23.6% and in Std VI (in 2010) was 50.7%. When the cohort reached Std VIII in 2012, this figure was 43.5%. The progress of each of these cohorts can be understood in the same way.

West Bengal RURAL

Data is not presented where sample size is insufficient.

Basic reading and arithmetic

Table 10: Basic reading by age group and gender 2018
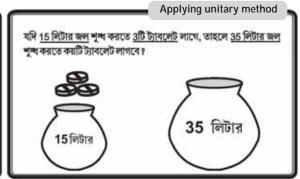
Age group	% Children who can read Std II level text		
	Male	Female	All
Age 8-10	35.2	39.3	37.4
Age 11-13	52.7	59.9	56.7
Age 14-16	60.3	69.1	65.3

Table 11: Basic arithmetic by age group and gender 2018

Age group	% Children who can do at least subtraction			% Children who can do division		
	Male	Female	All	Male	Female	All
Age 8-10	37.2	38.7	38.0	17.6	18.6	18.1
Age 11-13	48.8	48.3	48.5	31.5	29.9	30.6
Age 14-16	52.2	49.4	50.6	33.3	30.8	31.9

Beyond basics

These questions were asked only to children in the age group 14-16. For each task, the surveyor showed the visual and read out the question to the child. The exact answer given by the child was recorded. The results are reported only for those children who were able to do at least subtraction correctly.

Calculating time

যদি মেয়েটি রাতে এই সময়ে ঘুমোয় এবং সকালে এই সময়ে ঘুম থেকে ওঠে। তাহলে মেয়েটি মোট কত ঘন্টা ঘুমোয় ?

09:30 PM   05:30 AM

Applying unitary method

যদি 15 লিটার জল শুদ্ধ করতে 3টি ট্যাবলেট লাগে, তাহলে 35 লিটার জল শুদ্ধ করতে কয়টি ট্যাবলেট লাগবে ?

15 লিটার   35 লিটার

Financial decision making

বাজারে দুটো বইয়ের দোকান আছে, সেখানে 5টি বইয়ের সেট পাওয়া যায়। যদি তোমাকে এই 5টি বইয়ের সেট কিনতে হয়, তাহলে তোমাকে কমপক্ষে কত টাকা খরচ করতে হবে ?

১ নং দোকান- মূল্য তালিকা	
বইয়ের নাম	মূল্য
বিজ্ঞান	₹ 50
অঙ্ক	₹ 80
বাংলা	₹ 30
ইংরেজী	₹ 70
ইতিহাস	₹ 40

২ নং দোকান- মূল্য তালিকা	
বইয়ের নাম	মূল্য
বিজ্ঞান	বিশেষ ছাড় !! পাঁচটি বইয়ের সেট পাবেন শুধুমাত্র ₹ 299
অঙ্ক	
বাংলা	
ইংরেজী	
ইতিহাস	

Calculating discount

সেল!!! 10% ছাড়

এখানে একটি টি-শার্ট এর মূল্য দেওয়া আছে এবং সেটি 10 শতাংশ ছাড় এ পাওয়া যাচ্ছে। যদি তুমি টি-শার্টটি কিনতে চাও, তাহলে তোমাকে কত টাকা খরচ করতে হবে ?

মূল্য ₹400

Table 12: Of all children who can do subtraction but not division, % children who can correctly answer by age and gender 2018
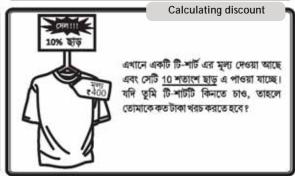
Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	38.1	36.2	37.1	43.2	39.8	41.5	41.5	31.9	36.7	18.7	14.0	16.3
Age 15	37.6	40.6	39.5	44.6	41.1	42.4	47.9	31.2	37.3	32.6	26.5	28.8
Age 16	56.0	19.4	35.5	64.8	37.2	49.4	37.4	24.5	30.2	47.1	6.8	24.5
Age 14-16	42.0	34.2	37.6	48.6	39.7	43.6	42.6	29.9	35.5	29.5	17.6	22.8

Table 13: Of all children who can do division, % children who can correctly answer by age and gender 2018

Age	Calculating time			Applying unitary method			Financial decision making			Calculating discount		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Age 14	45.4	46.7	46.0	56.0	55.2	55.6	45.9	45.5	45.7	41.2	31.1	36.0
Age 15	59.5	49.9	54.0	69.5	50.7	58.6	51.5	48.2	49.6	53.6	41.8	46.7
Age 16	43.7	41.5	42.4	55.4	54.1	54.6	48.3	42.4	44.8	48.2	41.6	44.3
Age 14-16	49.4	46.4	47.7	60.0	53.3	56.3	48.2	45.6	46.8	46.7	37.7	41.7

West Bengal RURAL

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 17 OUT OF 18 DISTRICTS
Data is not presented where sample size is insufficient.

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 14: Trends over time
Number of schools visited
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
Primary schools (Std I-IV/V)	406	443	442	437
Upper primary schools (Std I-VII/VIII)	2	13	4	4
Total schools visited	408	456	446	441

Table 15: Trends over time
Student and teacher attendance on the day of visit
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Enrolled children present (Average)	68.5	55.8	60.1	54.9
% Teachers present (Average)	85.6	80.3	82.9	76.7

Table 16: Trends over time
Multigrade classes
2010, 2014, 2016 and 2018

All schools (Std I-IV/V and Std I-VII/VIII)	2010	2014	2016	2018
% Schools where Std II children were observed sitting with one or more other classes	42.4	47.1	43.8	46.0
% Schools where Std IV children were observed sitting with one or more other classes	33.6	36.3	44.0	38.8

School facilities

Table 17: Trends over time
% Schools with selected facilities
2010, 2014, 2016 and 2018

% Schools with		2010	2014	2016	2018
Mid-day meal	Kitchen shed for cooking mid-day meal	86.3	95.4	93.2	94.0
	Mid-day meal served in school on day of visit	63.4	66.7	67.4	81.6
Drinking water	No facility for drinking water	19.3	13.9	11.9	8.0
	Facility but no drinking water available	13.5	7.7	9.7	10.7
	Drinking water available	67.2	78.4	78.4	81.3
	Total	100	100	100	100
Toilet	No toilet facility	7.6	2.2	0.7	0.7
	Facility but toilet not useable	40.3	27.0	22.4	18.2
	Toilet useable	52.1	70.8	76.9	81.1
	Total	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	44.5	30.8	16.8	14.5
	Separate provision but locked	14.5	18.8	13.2	12.2
	Separate provision, unlocked but not useable	17.4	3.6	7.0	5.7
	Separate provision, unlocked and useable	23.7	46.9	63.0	67.7
	Total	100	100	100	100
Library	No library	50.5	33.7	41.7	33.9
	Library but no books being used by children on day of visit	17.8	22.7	12.2	27.7
	Library books being used by children on day of visit	31.8	43.6	46.2	38.4
	Total	100	100	100	100
Electricity	Electricity connection			94.3	97.7
	Of schools with electricity connection, % schools with electricity available on day of visit			89.3	91.0
Computer	No computer available for children to use	98.7	98.0	95.9	93.3
	Available but not being used by children on day of visit	0.8	0.4	2.9	5.5
	Computer being used by children on day of visit	0.5	1.5	1.1	1.2
	Total	100	100	100	100

Annual Status of Education Report

ASER 2018 RURAL

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Data is not presented where sample size is insufficient.

Other school indicators

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools in this report is based on these visits.

Table 18: Trends over time
% Schools with total enrollment of 60 or less
2010, 2014, 2016 and 2018

	2010	2014	2016	2018
All schools (Std I-IV/V and Std I-VII/VIII)	10.1	23.3	23.3	20.2

Table 19: Physical education and sports in schools 2018

% Schools with		All schools (Std I-IV/V and Std I-VII/VIII)
Dedicated time for physical education	Physical education period in the timetable	62.7
	No physical education period but dedicated time allotted	22.4
	No physical education period and no dedicated time allotted	14.9
	Total	100
Physical education teacher	Separate physical education teacher	2.8
	Other physical education teacher	70.9
	No physical education teacher	26.3
	Total	100
Playground	Playground inside the school premises	52.9
	Playground outside the school premises	27.7
	No accessible playground	19.5
	Total	100
Availability of any sports equipment		54.3
Supervised physical education activity observed on day of visit		17.3

Table 20: School Management Committee (SMC) in schools
2014, 2016 and 2018

	2014	2016	2018
% Schools which reported having an SMC	33.2	51.7	50.3
Of all schools that have an SMC, % schools that had the last SMC meeting			
Before July	33.9	14.9	19.8
Between July and September	65.4	72.9	79.7
After September	0.8	12.2	0.5

Divisional estimates

Divisional estimates of learning outcomes and schooling status: precision of ASER estimates

Every year since 2005, ASER has presented estimates of learning and schooling status at the state and district level. The survey design of ASER is based on the premise of generating estimates at the district level, which is desirable since education plans are made at this level. As a result, ASER is one of the largest sample-based surveys conducted in India, with a sample size of approximately 650,000 children in the age group of 3-16 years.

ASER is a household survey, undertaken in almost all rural districts of India. Within each district, 30 villages are randomly chosen.[1] In each village, 20 households are randomly selected for a total of 600 households per district. All children in the age group of 3-16 years who regularly live in the sampled households are recorded in the survey. This translates into 900-1,200 children per district.[2]

The statistical precision of district level estimates is an issue because of the ASER sample design - namely clustering and absence of stratification at the village level. In a design without clustering, children in the relevant age group would be directly sampled. Not only is this expensive (in terms of survey time), it is also difficult to have a reliable population frame that could be used for sampling. Instead, ASER employs a two-stage clustering design. The first stage clustering happens when villages are randomly picked. The second stage clustering is when households within a village are randomly selected and the children belonging to that household are tested.

While this is an inexpensive and practical way of sampling children, it is well known that clustering increases the variability of estimates. One way of increasing precision at the district level would have been to stratify the village sample according to age of children or school type. However, this would require a prior house list, which is expensive to generate in terms of both time and resources.

The ASER sample is stratified, however, at the district level. Insofar as outcomes within a district are more homogenous than across districts, stratification within the district leads to more precise estimates at the state level.

Ramaswami and Wadhwa (2009)[3] studied the precision of ASER state and district level estimates for a selection of states and variables for the year 2008. They found that state level averages are estimated precisely, with a margin of error of 5% or less. However, district-level estimates are less precisely estimated. The precision varies across states and districts, and also according to the learning outcome. In both cases, learning outcomes of children in Std III-V are relatively less precisely estimated than those of children in Std VI-VIII.

Two commonly used measures of precision are the margin of error and the 95% confidence interval.

The margin of error is the % interval around the point estimate that almost certainly contains the population estimate (i.e., with 95% probability). For instance, if x is the margin of error, then the population proportion lies within $\pm x\%$ of the sample proportion with 95% probability.

Suppose $\hat{p}$ is the estimated sample proportion and is $\hat{\sigma}$ the associated standard error. From statistical theory, it is known that the interval [$\hat{p} \pm 2\hat{\sigma}$] contains the population proportion with 95% probability - 95% confidence interval. The margin of error expresses the confidence interval in terms of the sample estimate. It is thus defined as

$$me = \frac{2\hat{\sigma}}{\hat{p}}$$

A margin of error of 10% is regarded as an acceptable degree of precision in many studies (United Nations, 2005).[4] Estimates with a margin of error in excess of 20% are regarded as estimates with low precision.

Note that the margin of error depends on the standard error and the estimated proportion and the standard error itself depends on the estimated proportion. For a given sample size, therefore, a lower precision will be associated with a variable which has a lower incidence in the population and/or a higher standard error. Further, in the case of proportions, for a given sample size, the standard error is the largest for a population proportion close to 0.5. On the other hand, for a given incidence, one way to reduce the standard error and therefore increase precision is to increase the sample size.

In the case of ASER, as shown by Ramaswami and Wadhwa (2009), precision is not an issue at the state level. But at the district level, since sample sizes in sub-populations of interest are much smaller than the total sample size, precision can be an issue.

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[1] Villages are chosen from the Census Directory using PPS (Probability Proportional to Size) sampling.

[2] Over time the rural household size, in India, has been steadily falling. Since ASER samples households and not children, the sample size in terms of children has also been falling. For instance, in 2006, a sample of 322,425 households in 15,841 villages yielded 762,252 children in the age group 3-16 years. In comparison, ASER 2016 surveyed 350,232 households in 17,473 villages and the total sample of 3-16 year olds was 562,305.

[3] Ramaswami, Bharat and Wadhwa, Wilima (2009), "Survey Design and Precision of ASER Estimates", available at http://img.asercentre.org/docs/Aser%20survey/Technical%20Papers/precisionofaserestimates_ramaswami_wadhwa.pdf.

[4] United Nations (2005), Designing Household Survey Samples: Practical Guidelines, Studies in Methods, Series F No. 98, Department of Economic and Social Affairs, Statistics Division.

However, increasing the sample size at the district level, for a national survey, is extremely costly. In the past, ASER has clubbed classes while presenting district level estimates, in an attempt to increase the sample size. However, precision gains from this strategy were limited, especially for variables whose estimated proportions were in the vicinity of 0.5.

One way to provide sub-state estimates with acceptable levels of precision is to club districts within a state.[5] Many states have administrative divisions, comprised of two or more districts that can be used as units of analysis. These divisions are at a level of aggregation between the state and district level. Since 2011, ASER has provided estimates for selected indicators at the divisional level.[6] In the 2014 report, these estimates were provided for the period 2010 to 2014 for the states that have administrative divisions.

As discussed in the sampling note in this report, ASER has used Census 2011 as the sampling frame since ASER 2016. Between Census 2001 and 2011, 31 new rural districts were created. Since divisions are constituted from districts, some of the divisional boundaries have changed as a result of this redistricting. In addition, in some states like Punjab, administrative divisions have been formed, which have replaced the geographical divisions used in ASER 2011-14. ASER 2016, therefore, started a new series of divisional estimates; and this year, divisional trends from 2018 have been added.[7]

ASER 2018 presents divisional estimates for Andhra Pradesh, Assam, Bihar, Chhattisgarh, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, and West Bengal.[8] In addition, in Gujarat, divisions were formed using geographical regions commonly used in the state.[9]
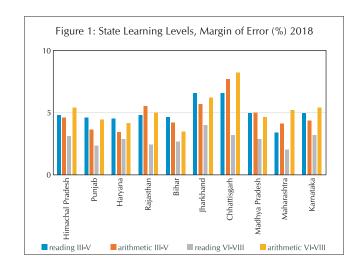
Divisional estimates are provided for the following 6 variables:[10]

% Children in the age group 6-14 years who are out of school

% Children in the age group 6-14 years who are in private school

% Children in Std III-V who can read at least Std II level text in own language

% Children in Std III-V who can do at least subtraction

% Children in Std VI-VIII who can read at least Std II level text in own language

% Children in Std VI-VIII who can do division

In addition to point estimates, the 95% confidence interval [$\hat{p} \pm 2\hat{\sigma}$] is also presented. The last row of each state table presents both these statistics for the state as a whole as well.

Figure 1 presents the margin of error for the four learning outcomes in selected states in 2018. As is clear from the figure, most of these are below 5%. Also, note that learning outcomes in arithmetic are less precisely estimated as compared to those in reading - that is, the margin of error for math learning outcomes is consistently higher as compared to that for reading learning outcomes. This is true for both Std III-V and Std VI-VIII. Across all states,[11] reading in Std VI-VIII has the lowest average margin of error (3.2%), followed by reading in Std III-V and arithmetic in Std III-V (5.3%). The margin of error is the highest for Std VI-VIII arithmetic (6.1%). As compared to 2016, the margins of error at the state level are lower in 2018 for comparable learning outcomes.

Figure 1: State Learning Levels, Margin of Error (%) 2018

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[5] For instance, NSS surveys are not representative at the district level. However, they are representative for NSS regions, which are formed using agro-climatic criteria.

[6] We decided to go with the state administrative divisions, rather than the NSS regions, since these are more commonly used within the state.

[7] In three states – Haryana, Chhattisgarh and West Bengal – divisions are re-constituted and new divisions added between 2016 and 2018. These changes have been incorporated to make the divisions comparable between 2016 and 2018.

[8] The district composition was obtained from the relevant state websites. See the section on Divisional Estimates in this report for the exact composition.
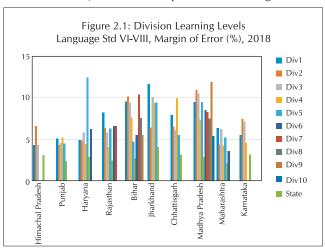
[9] See the section on Divisional Estimates in this report for the exact composition.
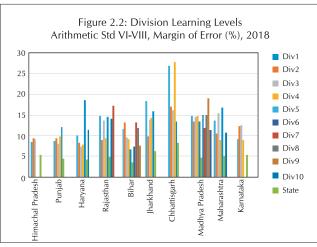
[10] In ASER 2016 we replaced learning levels in Std I-II (used in ASER 2011-14) with those in Std VI-VIII. Further, in 2018 we change the learning outcome for reading in Std III-V that was used in ASER 2016.
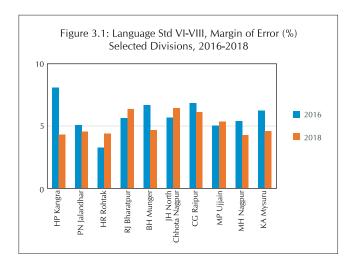
[11] Here we are only including states for which divisional estimates are presented.
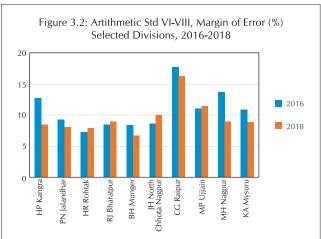
At the division level, margins of error are, understandably, higher because sample sizes are smaller. For instance, the average margin of error for reading in Std VI-VIII is 3.2% at the state level and 7.4% at the divisional level. Among the four learning outcomes, while average standard errors are similar, these translate into quite different margins of error. Arithmetic learning outcomes have higher margins of error as compared to reading. In reading, Std III-V learning outcomes have a higher margin of error as compared to Std VI-VIII. The highest average margin of error is for arithmetic in Std VI-VIII at 13.5%. In discussing the division level estimates we concentrate on Std VI-VIII learning outcomes since they represent the best case (reading) and the worst case (arithmetic) scenarios.

Figures 2.1 and 2.2 present the 2018 margins of error for language and arithmetic in Std VI-VIII, across divisions of selected states. With the exception of a few divisions, language learning outcomes in most states are estimated with margins of under or close to 10%. Across the board, precision levels are lower for arithmetic learning outcomes. Even in this case, most states now have margins of error within 10-15%, with the exception of Chhattisgarh.

Figure 2.1: Division Learning Levels
Language Std VI-VIII, Margin of Error (%), 2018

Figure 2.2: Division Learning Levels
Arithmetic Std VI-VIII, Margin of Error (%), 2018

Figure 3.1: Language Std VI-VIII, Margin of Error (%)
Selected Divisions, 2016-2018

Figure 3.2: Artithmetic Std VI-VIII, Margin of Error (%)
Selected Divisions, 2016-2018

Figures 3.1 and 3.2 present the margins of error for language and arithmetic in Std III-V respectively, for one division each in the selected states, in 2016 and 2018. Margins of error are fairly robust over time and in most cases are lower in 2018 as compared to 2016. Across all districts, average margins of error are lower in 2018 for all learning outcomes.

Why are margins of error consistently higher for arithmetic in Std VI-VIII? Similarly, in reading, why are learning outcomes in Std III-V less precisely estimated as compared to Std VI-VIII? First, for a given sample size, the margin of error is inversely proportional to the incidence of the variable concerned. This implies that any variable that has a low incidence in the population will be estimated with a high margin of error. Intuitively this makes sense because if something is not observed very frequently, one would need a much larger sample size to measure it accurately. However, this is not that much of a problem if the standard error is small. To understand why, consider the case of out of school children - say the point estimate is 0.04 (i.e., 4%) with a standard error of 0.01. The margin of error would be 50% (=((2 * 0.01)/0.04)*100), which is very high. However, note that this translates into confidence

bounds of ± 2 percentage points, i.e., with 95% probability the true proportion of out of school children lie between 2% and 6%. In other words, given a low incidence, a high margin of error may still translate into tight confidence bands. Another way of looking at this is by focusing on children enrolled in schools instead of out of school children. If out of school children are 4% then enrolled children will be 96% with the same standard error of 1%, giving a margin of error of only 2.1% and confidence bounds of ± 2 percentage points around the point estimate of 96%.

Second, the margin of error is directly proportional to the standard error. For a given sample size, a large standard error, implying imprecise estimation, not surprisingly will result in a high margin of error. In the case of proportions, the standard error itself depends on the value of the proportion, and is larger when the value is closer to 0.5.

Intuitively the reason behind this is that the greatest uncertainty is associated with a proportion of 0.5, requiring larger sample sizes to measure it accurately.

By and large, learning levels in reading are higher as compared to arithmetic, resulting in lower margins of error for arithmetic. Often, arithmetic learning levels are closer to 0.5, again resulting in high margins of error.

Overall, the divisional estimates are more precisely estimated as compared to district level estimates. Clubbing districts increases the sample size and lowers the standard errors. It also smooths the jumpiness in point estimates often observed at the district level. One of the problems associated with large standard errors, and therefore wide confidence intervals, is that it is difficult to identify significant changes across districts and time. That problem is ameliorated with divisional estimates to a large extent.

Divisional estimates

Districts have been clubbed into divisions to produce these estimates. The grouping of districts is based on administrative divisions used in the state or on geographical regions.

The first row for each division gives the estimate of the relevant variable. The numbers below the estimate, in the second row, are twice the standard error of the corresponding estimate and represent the 95% confidence interval for the estimate. For instance, in Coastal Andhra division of Andhra Pradesh, in 2018, proportion of Std III-V children who can read Std II level text is 41.4%. With 95% probability, the true population proportion lies within 4.08% points of the estimate, i.e., between 45.5% and 37.3%.

Andhra Pradesh

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools Std III-V % Children who can read Std II level text		% Children who can at least do subtraction		Std VI-VIII % Children who can read Std ll level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Coastal Andhra	2.1	1.6	37.1	38.3	41.1	41.4	61.5	58.9	69.3	70.3	44.7	42.8
	± 0.62	± 0.62	± 2.90	± 3.24	± 3.94	± 4.08	± 3.92	± 4.08	± 3.58	± 4.04	± 4.06	± 4.10
Rayalaseema	3.6	1.0	28.7	30.0	40.2	41.3	59.9	52.8	66.0	71.4	43.7	46.3
	± 2.04	± 0.52	± 4.04	± 4.58	± 5.64	± 4.64	± 5.58	± 5.42	± 4.88	± 5.16	± 6.04	± 5.70
Andhra Pradesh	2.6	1.4	34.2	35.2	40.7	41.4	60.9	56.6	68.3	70.7	44.4	44.1
	± 0.82	± 0.44	± 2.38	± 2.68	± 3.26	± 3.08	± 3.22	± 3.30	± 2.90	± 3.18	± 3.38	± 3.34

List of districts under each division

Coastal Andhra	Visakhapatnam
East Godavari	Vizianagaram
Guntur	West Godavari
Krishna	**Rayalaseema**
Prakasam	Anantapur
Sri Potti Sriramulu	Chittoor
Nellore	Kurnool
Srikakulam	Y.S.R.

Assam

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools Std III-V % Children who can read Std II level text		% Children who can at least do subtraction		Std VI-VIII % Children who can read Std ll level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Barak Valley	2.8	2.4	18.7	21.1	22.2	22.2	35.2	32.3	49.8	42.7	23.2	19.9
	± 1.24	± 0.76	± 3.78	± 4.16	± 4.64	± 4.40	± 6.12	± 5.82	± 6.48	± 6.62	± 5.30	± 5.08
Central Assam	3.2	2.4	27.7	23.6	29.1	24.8	35.8	30.8	53.9	46.2	27.2	16.8
	± 1.52	± 0.82	± 5.72	± 3.98	± 6.06	± 6.78	± 6.66	± 7.72	± 7.50	± 7.00	± 6.94	± 4.00
Lower Assam	2.5	2.0	20.8	25.2	30.1	31.0	37.5	47.2	55.6	57.2	22.6	33.8
	± 0.66	± 0.58	± 2.70	± 3.54	± 4.24	± 3.48	± 4.84	± 4.54	± 4.36	± 4.14	± 3.48	± 4.86
North Assam	4.4	3.3	19.9	27.5	27.7	30.4	29.5	34.7	50.3	54.9	19.0	19.6
	± 1.82	± 1.78	± 3.62	± 4.26	± 5.78	± 5.84	± 5.56	± 7.04	± 8.52	± 8.28	± 5.68	± 5.02
Upper Assam	3.4	2.2	23.2	26.1	30.6	37.4	32.2	42.3	60.2	64.8	20.8	24.8
	± 1.14	± 0.64	± 3.44	± 3.24	± 4.14	± 4.34	± 4.46	± 4.46	± 4.46	± 4.28	± 3.62	± 3.78
Assam	3.1	2.3	21.9	24.8	28.3	29.8	34.8	39.8	54.7	54.4	22.7	25.6
	± 0.50	± 0.38	± 1.68	± 1.80	± 2.20	± 2.16	± 2.50	± 2.64	± 2.60	± 2.56	± 2.14	± 2.38

List of districts under each division

Barak Valley	Kamrup
Cachar	Kamrup Metropolitan*
Hailakandi	Kokrajhar
Karimganj	Nalbari
Central Assam	**North Assam**
Dima Hasao	Darrang
Karbi Anglong	Sonitpur
Morigaon	Udalguri
Nagaon	**Upper Assam**
Lower Assam	Dhemaji
Baksa	Dibrugarh
Barpeta	Golaghat
Bongaigaon	Jorhat
Chirang	Lakhimpur
Dhubri	Sivasagar
Goalpara	Tinsukia

* District not surveyed in ASER 2018.

Annual Status of Education Report
ASER 2018 RURAL
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The first row for each division gives the estimate of the relevant variable. The numbers below the estimate, in the second row, are twice the standard error of the corresponding estimate and represent the 95% confidence interval for the estimate. For instance, in Bhagalpur division of Bihar, in 2018, proportion of Std III-V children who can read Std II level text is 30.9%. With 95% probability, the true population proportion lies within 4.76% points of the estimate, i.e., between 35.7% and 26.1%.

Bihar

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools Std III-V % Children who can read Std II level text		% Children who can at least do subtraction		Std VI-VIII % Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Bhagalpur	2.9	5.8	12.2	11.6	26.9	30.9	40.9	39.2	60.4	61.1	55.1	55.2
	± 1.20	± 2.00	± 3.42	± 2.90	± 4.94	± 4.76	± 5.32	± 5.88	± 5.20	± 5.84	± 5.84	± 6.46
Darbhanga	2.0	2.7	11.0	15.9	32.0	30.0	39.4	32.7	64.1	59.9	52.9	48.8
	± 0.60	± 0.92	± 2.60	± 2.74	± 3.98	± 5.04	± 5.16	± 5.06	± 4.80	± 6.10	± 5.12	± 6.46
Kosi	3.1	6.5	5.2	6.2	29.3	28.2	42.3	37.5	64.5	58.7	57.5	52.5
	± 0.94	± 1.48	± 1.50	± 1.58	± 4.56	± 3.74	± 5.18	± 4.50	± 5.32	± 5.52	± 5.84	± 5.02
Magadh	3.3	4.0	11.7	18.7	38.9	35.2	46.1	43.7	70.2	64.0	58.6	50.6
	± 1.22	± 1.26	± 2.24	± 2.86	± 4.64	± 4.96	± 4.48	± 5.56	± 3.80	± 4.88	± 4.52	± 4.70
Munger	2.1	2.6	11.6	13.3	32.2	36.1	43.4	45.1	65.0	68.7	56.0	57.9
	± 0.60	± 0.70	± 2.00	± 1.98	± 4.22	± 3.50	± 4.22	± 3.38	± 4.36	± 3.24	± 4.70	± 3.88
Patna	2.8	3.4	19.4	24.4	39.5	40.8	49.3	46.3	69.5	68.2	58.7	51.4
	± 1.38	± 1.00	± 2.76	± 3.04	± 3.62	± 3.70	± 4.02	± 4.28	± 3.56	± 3.78	± 3.72	± 3.76
Purnia	7.2	6.9	6.7	9.1	28.0	23.3	31.5	28.2	57.7	56.5	43.6	37.2
	± 1.56	± 1.44	± 1.70	± 2.80	± 3.46	± 4.28	± 4.16	± 4.84	± 5.28	± 5.86	± 5.72	± 4.96
Saran	0.9	1.3	20.5	26.7	35.2	39.4	41.9	43.4	70.9	63.9	52.6	46.3
	± 0.40	± 0.50	± 3.06	± 3.56	± 4.62	± 4.26	± 5.20	± 4.08	± 4.74	± 4.84	± 4.82	± 5.52
Tirhut	2.8	3.8	13.8	19.2	27.5	32.8	35.7	36.2	64.9	63.6	52.9	47.6
	± 0.62	± 0.90	± 2.44	± 2.44	± 3.24	± 3.58	± 4.08	± 3.66	± 3.54	± 3.48	± 4.22	± 3.60
Bihar	3.0	3.9	12.9	16.9	31.9	32.8	40.2	38.2	65.5	63.1	53.9	49.0
	± 0.34	± 0.38	± 0.90	± 0.98	± 1.38	± 1.52	± 1.62	± 1.62	± 1.52	± 1.68	± 1.68	± 1.70

List of districts under each division

Bhagalpur	**Patna**
Banka	Bhojpur
Bhagalpur	Buxar
Darbhanga	Kaimur
Darbhanga	Nalanda
Madhubani	Patna
Samastipur	Rohtas
Kosi	**Purnia**
Madhepura	Araria
Saharsa	Katihar
Supaul	Kishanganj
Magadh	Purnia
Arwal	**Saran**
Aurangabad	Gopalganj
Gaya	Saran
Jehanabad	Siwan
Nawada	**Tirhut**
Munger	East Champaran
Begusarai	Muzaffarpur
Jamui	Sheohar
Khagaria	Sitamarhi
Lakhisarai	Vaishali
Munger	West Champaran
Sheikhpura	

Divisional estimates

Districts have been clubbed into divisions to produce these estimates. The grouping of districts is based on administrative divisions used in the state or on geographical regions.

The first row for each division gives the estimate of the relevant variable. The numbers below the estimate, in the second row, are twice the standard error of the corresponding estimate and represent the 95% confidence interval for the estimate. For instance, in Bastar division of Chhattisgarh, in 2018, proportion of Std III-V children who can read Std II level text is 37%. With 95% probability, the true population proportion lies within 6.34% points of the estimate, i.e., between 43.3% and 30.7%.

Chhattisgarh

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools Std III-V % Children who can read Std II level text		Std III-V % Children who can at least do subtraction		Std VI-VIII % Children who can read Std II level text		Std VI-VIII % Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Bastar	7.8	7.9	8.9	8.2	38.4	37.0	32.0	23.5	67.0	67.8	21.9	20.0
	± 1.98	± 2.82	± 3.18	± 2.96	± 7.80	± 6.34	± 6.78	± 5.00	± 5.66	± 5.36	± 5.54	± 5.38
Bilaspur	3.2	2.9	22.7	24.4	40.2	37.8	31.3	31.1	70.0	69.6	26.5	26.6
	± 1.10	± 1.00	± 3.82	± 4.10	± 5.42	± 5.42	± 4.90	± 4.92	± 5.18	± 4.56	± 4.28	± 4.54
Durg	1.6	2.9	14.9	16.6	49.4	55.2	38.6	44.5	69.9	82.1	27.9	38.7
	± 0.90	± 1.16	± 3.26	± 3.96	± 6.90	± 6.26	± 5.08	± 5.76	± 5.78	± 4.54	± 4.60	± 5.22
Raipur	1.5	2.2	19.1	20.9	47.5	54.5	38.7	41.1	74.8	77.2	28.6	33.4
	± 0.68	± 0.98	± 5.04	± 6.58	± 6.62	± 6.50	± 6.00	± 6.32	± 5.10	± 4.72	± 5.08	± 5.42
Surguja	2.4	4.9	27.0	22.8	35.4	40.2	27.4	25.2	58.5	69.6	21.0	19.1
	± 0.92	± 1.90	± 5.18	± 5.56	± 6.28	± 7.64	± 6.48	± 5.44	± 6.42	± 6.94	± 5.04	± 5.32
Chhattisgarh	2.8	3.6	19.9	20.0	42.5	45.5	33.6	34.4	68.8	73.9	25.9	29.1
	± 0.48	± 0.62	± 2.00	± 2.28	± 2.90	± 2.98	± 2.58	± 2.66	± 2.62	± 2.36	± 2.22	± 2.40

List of districts under each division

Bastar	Durg
Bastar	Durg
Bijapur*	Kabirdham
Dantewada	Rajnandgaon
Narayanpur*	**Raipur**
North Bastar Kanker	Dhamtari
Bilaspur	Mahasamund
Bilaspur	Raipur
Janjgir-Champa	**Surguja**
Korba	Jashpur
Raigarh	Koriya
	Surguja

* District not surveyed in ASER 2018.

Gujarat

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools Std III-V % Children who can read Std II level text		Std III-V % Children who can at least do subtraction		Std VI-VIII % Children who can read Std II level text		Std VI-VIII % Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Central	1.7	1.7	12.5	13.8	35.0	39.9	27.7	32.4	63.0	65.9	22.9	26.4
	± 0.76	± 0.60	± 2.38	± 2.96	± 4.98	± 4.06	± 4.44	± 3.72	± 4.56	± 4.28	± 4.12	± 3.92
North	2.6	2.2	9.4	10.5	44.2	46.0	36.7	40.8	71.2	70.3	28.0	34.2
	± 1.74	± 0.80	± 2.38	± 2.52	± 5.10	± 5.28	± 5.18	± 5.32	± 4.92	± 5.16	± 4.46	± 5.34
Saurashtra	2.7	2.0	9.4	11.0	40.0	49.3	36.8	43.6	66.8	70.4	32.1	36.4
	± 0.86	± 0.80	± 2.18	± 2.42	± 4.82	± 3.68	± 4.98	± 4.28	± 4.28	± 3.70	± 4.04	± 3.80
South	2.6	1.1	8.2	15.4	36.6	49.1	28.4	44.3	68.7	69.1	25.1	34.9
	± 1.02	± 0.44	± 2.02	± 3.34	± 5.26	± 4.34	± 4.26	± 4.90	± 4.90	± 4.38	± 5.18	± 5.90
Gujarat	2.4	1.8	10.2	12.4	39.0	45.5	32.7	39.4	66.9	68.8	27.4	32.7
	± 0.56	± 0.36	± 1.18	± 1.42	± 2.56	± 2.22	± 2.46	± 2.28	± 2.40	± 2.22	± 2.22	± 2.32

List of districts under each division

Central	Bhavnagar
Ahmedabad	Jamnagar
Anand	Junagadh
Dahod	Kachchh
Kheda	Porbandar
Narmada	Rajkot
Panchmahal	Surendranagar
Vadodara	**South**
North	Bharuch
Banaskantha	Navsari
Gandhinagar	Surat
Mahesana	Tapi
Patan	The Dangs
Sabarkantha	Valsad
Saurashtra	
Amreli	

Divisional estimates

Districts have been clubbed into divisions to produce these estimates. The grouping of districts is based on administrative divisions used in the state or on geographical regions.

The first row for each division gives the estimate of the relevant variable. The numbers below the estimate, in the second row, are twice the standard error of the corresponding estimate and represent the 95% confidence interval for the estimate. For instance, in Ambala division of Haryana, in 2018, proportion of Std III-V children who can read Std II level text is 60.4%. With 95% probability, the true population proportion lies within 5.08% points of the estimate, i.e., between 65.5% and 55.3%.

Haryana

Division/Region	Not in school: % Children (Age 6-14) not enrolled in school		Private school: % Children (Age 6-14) enrolled in private school		Learning levels: All schools							
					Std III-V				Std VI-VIII			
					% Children who can read Std II level text		% Children who can at least do subtraction		% Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Ambala	0.6	0.6	50.9	53.3	56.8	60.4	66.0	62.5	77.4	81.6	52.5	58.5
	±0.34	±0.48	±4.36	±4.56	±5.70	±5.08	±5.42	±4.86	±6.26	±4.00	±5.82	±5.86
Faridabad	8.5	7.7	38.9	39.8	31.3	34.6	42.8	47.1	62.2	62.8	36.7	44.8
	±2.80	±2.60	±5.30	±5.52	±5.70	±6.52	±6.86	±6.22	±6.32	±7.80	±6.72	±8.38
Gurugram	0.4	0.3	64.3	67.5	64.9	70.1	75.9	77.1	85.6	88.6	70.4	71.4
	±0.44	±0.40	±4.72	±4.84	±5.50	±7.10	±4.74	±5.36	±5.60	±4.30	±5.58	±5.86
Hisar	1.0	0.3	56.1	53.9	59.1	61.1	69.4	69.9	83.2	83.1	66.0	65.1
	±0.42	±0.20	±4.04	±4.68	±5.48	±5.68	±4.76	±4.22	±3.86	±4.82	±4.84	±4.82
Rohtak	0.2	0.3	71.8	71.2	69.4	70.1	80.9	76.7	89.3	85.3	74.4	70.2
	±0.30	±0.28	±4.24	±4.52	±5.80	±4.34	±5.28	±4.82	±2.92	±3.76	±5.44	±5.52
Karnal	0.8	0.9	56.4	55.3	60.9	58.2	65.7	60.6	80.0	79.5	55.3	55.0
	±0.44	±0.54	±5.24	±5.56	±6.32	±7.22	±5.58	±6.80	±4.36	±4.94	±5.64	±6.34
Haryana	2.0	1.7	55.8	55.3	56.9	58.7	66.6	65.8	80.2	80.4	60.1	61.1
	±0.50	±0.48	±1.98	±2.20	±2.54	±2.66	±2.36	±2.26	±2.02	±2.30	±2.44	±2.56

List of districts under each division

Ambala	Hisar
Ambala	Fatehabad
Kurukshetra	Hisar
Panchkula	Jind
Yamunanagar	Sirsa
Faridabad	**Karnal**
Faridabad	Kaithal
Nuh	Karnal
Palwal	Panipat
Gurugram	**Rohtak**
Gurugram	Bhiwani
Mahendragarh	Jhajjar
Rewari	Rohtak
	Sonipat

Himachal Pradesh

Division/Region	Not in school: % Children (Age 6-14) not enrolled in school		Private school: % Children (Age 6-14) enrolled in private school		Learning levels: All schools							
					Std III-V				Std VI-VIII			
					% Children who can read Std II level text		% Children who can at least do subtraction		% Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Kangra	0.3	0.5	41.2	44.8	53.2	57.2	61.9	59.4	80.0	86.6	53.4	56.4
	±0.30	±0.40	±4.78	±5.42	±6.58	±4.62	±5.70	±5.28	±6.48	±3.72	±6.78	±4.78
Mandi	0.1	0.2	37.7	40.0	64.3	68.4	76.4	72.8	83.0	85.9	57.1	60.8
	±0.10	±0.20	±5.74	±5.22	±5.82	±5.68	±4.68	±4.78	±4.64	±5.68	±5.88	±5.74
Shimla	0.3	0.6	35.2	35.0	62.5	69.5	68.2	65.6	84.6	87.2	53.0	53.6
	±0.26	±0.38	±5.18	±6.26	±6.14	±4.62	±5.06	±5.14	±4.48	±3.74	±6.32	±4.90
Himachal Pradesh	0.2	0.4	38.5	40.7	59.6	64.1	68.8	65.7	82.1	86.5	54.5	57.4
	±0.14	±0.20	±3.04	±3.24	±3.70	±3.06	±3.14	±3.00	±3.38	±2.72	±3.82	±3.10

List of districts under each division

Kangra	Shimla
Chamba	Kinnaur
Kangra	Shimla
Una	Sirmaur
Mandi	Solan
Bilaspur	
Hamirpur	
Kullu	
Lahul and Spiti	
Mandi	

Divisional estimates

Districts have been clubbed into divisions to produce these estimates. The grouping of districts is based on administrative divisions used in the state or on geographical regions.

The first row for each division gives the estimate of the relevant variable. The numbers below the estimate, in the second row, are twice the standard error of the corresponding estimate and represent the 95% confidence interval for the estimate. For instance, in Kolhan division of Jharkhand, in 2018, proportion of Std III-V children who can read Std II level text is 27%. With 95% probability, the true population proportion lies within 5% points of the estimate, i.e., between 32% and 22%.

Jharkhand

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools Std III-V % Children who can read Std II level text		% Children who can at least do subtraction		Std VI-VIII % Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Kolhan	3.7	4.6	12.9	10.9	24.5	27.0	31.0	31.3	56.5	53.1	35.7	31.8
	±1.24	±1.30	±3.40	±2.68	±4.32	±5.00	±4.56	±5.56	±6.44	±6.20	±6.52	±5.84
North Chota Nagpur	2.0	1.4	23.7	24.4	36.4	30.7	39.5	35.3	63.3	62.3	44.0	39.7
	±0.56	±0.72	±2.98	±3.10	±4.24	±3.34	±3.90	±3.36	±3.60	±4.00	±3.80	±3.96
Palamu	2.0	2.2	10.8	15.0	27.6	25.8	29.4	31.5	60.6	58.3	36.2	41.3
	±0.78	±0.92	±2.52	±3.78	±4.18	±4.78	±4.68	±3.98	±5.38	±5.90	±6.60	±5.78
Santhal Pargana	5.8	3.5	10.3	11.3	19.9	21.2	30.8	29.9	53.4	48.3	39.3	31.4
	±1.76	±1.36	±2.42	±2.08	±2.60	±2.78	±3.52	±3.74	±4.34	±4.52	±3.54	±4.50
South Chota Nagpur	5.8	2.5	29.4	32.7	24.9	32.8	27.5	32.1	63.5	63.5	23.8	29.0
	±3.70	±0.78	±4.72	±4.44	±4.72	±4.86	±5.56	±4.94	±5.36	±5.96	±4.22	±4.62
Jharkhand	3.8	2.6	17.4	19.0	26.8	27.1	32.4	32.3	59.2	57.3	37.7	35.6
	±0.76	±0.48	±1.42	±1.46	±1.80	±1.78	±1.96	±1.84	±2.16	±2.30	±2.18	±2.20

List of districts under each division

Kolhan	**Santhal Pargana**
East Singhbhum	Deoghar
Saraikela-Kharsawan	Dumka
West Singhbhum	Godda
North Chota Nagpur	Jamtara
Bokaro	Pakur
Chatra	Sahibganj
Dhanbad	**South Chota Nagpur**
Giridih	Gumla
Hazaribagh	Khunti
Koderma	Lohardaga
Ramgarh	Ranchi
Palamu	Simdega
Garhwa	
Latehar	
Palamu	

Karnataka

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools Std III-V % Children who can read Std II level text		% Children who can at least do subtraction		Std VI-VIII % Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Bangalore	0.9	0.5	32.6	34.1	28.9	30.4	45.6	44.9	60.1	59.3	36.2	37.1
	±0.32	±0.22	±2.80	±2.46	±3.24	±2.90	±3.48	±3.24	±3.80	±3.24	±3.44	±3.44
Belgaum	0.6	0.5	24.0	23.8	34.5	35.2	43.7	38.4	63.4	63.3	37.9	32.4
	±0.28	±0.24	±4.78	±2.98	±5.62	±3.66	±4.96	±4.04	±6.18	±4.68	±5.28	±4.00
Kalaburagi	2.8	1.6	21.6	23.4	22.5	23.0	31.0	29.7	51.9	55.7	25.1	25.5
	±0.80	±0.40	±2.62	±3.06	±2.90	±3.06	±3.14	±3.44	±4.04	±3.98	±3.08	±3.22
Mysore	0.4	0.3	31.3	35.7	35.3	43.7	52.1	51.0	66.5	70.3	37.2	40.3
	±0.24	±0.18	±3.52	±3.16	±3.80	±3.24	±4.08	±3.40	±4.16	±3.24	±4.06	±3.58
Karnataka	1.1	0.7	27.4	29.1	30.6	33.0	43.2	41.1	60.9	62.0	34.6	33.7
	±0.22	±0.14	±1.84	±1.44	±2.14	±1.64	±2.10	±1.80	±2.42	±1.96	±2.12	±1.82

List of districts under each division

Bangalore	Vijayapura
Bengaluru Urban	**Kalaburagi**
Bengaluru Rural	Bellary
Chikkaballapur	Bidar
Chitradurga	Kalaburagi
Davanagere	Koppal
Kolar	Raichur
Ramanagara	Yadgir
Shivamogga	**Mysore**
Tumakuru	Chamarajanagar
Belgaum	Chikkamagaluru
Bagalkot	Dakshina Kannada
Belgaum	Hassan
Dharwad	Kodagu
Gadag	Mandya
Haveri	Mysuru
Uttara Kannada	Udupi

Divisional estimates

Districts have been clubbed into divisions to produce these estimates. The grouping of districts is based on administrative divisions used in the state or on geographical regions.

The first row for each division gives the estimate of the relevant variable. The numbers below the estimate, in the second row, are twice the standard error of the corresponding estimate and represent the 95% confidence interval for the estimate. For instance, in Central division of Kerala, in 2018, proportion of Std III-V children who can read Std II level text is 70.1%. With 95% probability, the true population proportion lies within 5.42% points of the estimate, i.e., between 75.5% and 64.7%.

Kerala

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools							
					Std III-V				Std VI-VIII			
					% Children who can read Std II level text		% Children who can at least do subtraction		% Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Central	0.1	0.2	60.3	47.0	64.0	70.1	59.6	60.6	80.4	86.4	53.3	47.8
	±0.10	±0.26	±5.46	±5.02	±5.88	±5.42	±6.32	±5.66	±4.88	±5.04	±5.46	±6.62
North	0.1	0.1	45.2	38.8	57.2	64.7	48.7	52.9	80.3	87.4	43.5	45.2
	±0.12	±0.20	±4.28	±5.02	±5.22	±5.74	±5.08	±5.92	±5.42	±3.92	±5.56	±5.00
South	0.1	0.0	62.4	55.3	59.3	67.2	64.9	66.4	83.7	84.0	64.3	58.8
	±0.20	±0.00	±6.00	±5.12	±7.02	±5.38	±6.84	±6.18	±4.70	±4.06	±5.94	±6.16
Kerala	0.1	0.1	54.8	46.9	60.2	67.4	56.7	60.0	81.2	85.9	52.3	50.8
	±0.08	±0.12	±3.00	±2.94	±3.42	±3.20	±3.50	±3.46	±3.00	±2.50	±3.34	±3.46

List of districts under each division

Central	Malappuram
Ernakulam	Wayanad*
Idukki	**South**
Palakkad	Alappuzha*
Thrissur	Kollam
North	Kottayam
Kannur	Pathanamthitta
Kasaragod	Thiruvananthapuram
Kozhikode	

* District not surveyed in ASER 2018.

Divisional estimates

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The first row for each division gives the estimate of the relevant variable. The numbers below the estimate, in the second row, are twice the standard error of the corresponding estimate and represent the 95% confidence interval for the estimate. For instance, in Bhopal division of Madhya Pradesh, in 2018, proportion of Std III-V children who can read Std II level text is 29.2%. With 95% probability, the true population proportion lies within 4.04% points of the estimate, i.e., between 33.2% and 25.2%.

Madhya Pradesh

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools							
					Std III-V				Std VI-VIII			
					% Children who can read Std II level text		% Children who can at least do subtraction		% Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Bhopal	4.0	3.3	32.9	35.5	28.1	29.2	27.7	26.8	58.3	57.6	25.6	27.6
	±1.20	±0.82	±3.96	±4.18	±3.74	±4.04	±4.06	±3.90	±4.80	±5.44	±3.64	±4.10
Chambal	2.5	3.7	21.2	26.5	29.2	36.1	32.4	33.7	50.5	60.8	37.1	44.0
	±0.88	±1.10	±4.54	±4.64	±6.10	±5.60	±5.44	±4.94	±5.82	±6.62	±5.08	±5.94
Gwalior	5.8	4.0	17.2	17.6	23.1	25.3	24.0	24.1	44.5	47.6	29.0	30.7
	±1.50	±0.96	±3.28	±3.28	±5.32	±4.18	±4.80	±3.40	±5.64	±4.98	±4.48	±4.46
Indore	10.7	12.0	23.4	25.8	23.6	26.4	22.7	20.4	57.1	59.8	22.1	22.8
	±1.64	±2.32	±2.70	±3.30	±3.66	±3.82	±3.52	±3.50	±4.90	±4.40	±4.54	±3.40
Jabalpur	2.4	1.9	21.6	19.3	31.1	28.6	31.7	25.5	60.2	53.6	28.2	28.0
	±0.62	±0.46	±2.96	±3.04	±3.96	±4.32	±3.94	±3.42	±3.82	±5.08	±3.50	±3.78
Narmadapuram	4.1	3.0	23.1	23.4	31.1	41.0	30.5	37.0	57.0	70.6	25.0	42.2
	±1.32	±1.26	±5.08	±5.34	±5.46	±6.84	±6.06	±5.86	±6.80	±6.02	±5.78	±6.38
Rewa	2.2	2.4	27.8	32.4	30.9	32.1	26.7	28.7	56.9	56.7	32.4	34.1
	±0.74	±0.72	±3.58	±3.94	±4.32	±5.20	±4.06	±4.54	±4.78	±4.70	±4.08	±4.04
Sagar	3.0	3.7	17.5	17.6	23.5	26.5	22.3	23.5	50.4	57.8	28.2	35.4
	±0.74	±0.82	±3.26	±3.30	±3.86	±3.84	±3.88	±3.70	±4.80	±4.34	±3.40	±5.34
Shahdol	2.6	2.0	13.7	15.6	26.9	25.6	21.2	23.5	54.4	54.4	25.8	26.4
	±0.90	±0.78	±4.00	±4.74	±5.92	±5.78	±4.70	±5.48	±6.86	±6.46	±4.94	±5.02
Ujjain	2.7	2.2	41.4	42.7	32.4	41.6	28.6	30.8	68.9	76.0	32.4	38.9
	±0.64	±0.68	±4.06	±4.36	±3.82	±4.68	±3.64	±4.06	±3.48	±4.08	±3.60	±4.44
Madhya Pradesh	4.4	4.2	24.7	26.0	27.8	30.6	26.7	26.4	56.4	59.0	28.6	32.2
	±0.40	±0.42	±1.16	±1.26	±1.42	±1.52	±1.36	±1.32	±1.60	±1.68	±1.36	±1.50

List of districts under each division

Bhopal	Mandla
Bhopal	Narsimhapur
Raisen	Seoni
Rajgarh	**Narmadapuram**
Sehore	Betul
Vidisha	Harda
Chambal	Hoshangabad
Bhind	**Rewa**
Morena	Rewa
Sheopur	Satna
Gwalior	Sidhi
Ashoknagar	Singrauli
Datia	**Sagar**
Guna	Chhatarpur
Gwalior	Damoh
Shivpuri	Panna
Indore	Sagar
Alirajpur	Tikamgarh
Barwani	**Shahdol**
Burhanpur	Anuppur
Dhar	Shahdol
Indore	Umaria
Jhabua	**Ujjain**
Khandwa	Dewas
Khargone	Mandsaur
Jabalpur	Neemuch
Balaghat	Ratlam
Chhindwara	Shajapur
Dindori	Ujjain
Jabalpur	
Katni	

Divisional estimates

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Maharashtra

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools Std III-V % Children who can read Std II level text		% Children who can at least do subtraction		Std VI-VIII % Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Amravati	0.5	0.4	40.9	32.2	43.5	44.1	29.9	40.2	67.1	72.6	26.3	36.1
	± 0.38	± 0.24	± 4.52	± 3.88	± 4.66	± 4.62	± 4.08	± 4.66	± 4.60	± 4.60	± 4.30	± 4.96
Aurangabad	0.9	0.5	36.4	32.2	46.8	48.7	35.4	41.3	67.2	73.9	30.4	34.9
	± 0.36	± 0.28	± 3.52	± 3.02	± 3.68	± 3.98	± 3.18	± 3.78	± 3.18	± 3.22	± 2.84	± 3.68
Konkan	1.6	0.6	26.0	29.0	58.5	60.8	43.5	52.8	78.5	81.7	32.5	47.4
	± 1.10	± 0.46	± 5.12	± 4.88	± 5.70	± 5.72	± 6.04	± 5.70	± 5.00	± 5.08	± 7.38	± 7.38
Nagpur	0.3	0.4	34.0	41.2	49.3	53.8	38.1	48.6	68.2	75.2	26.3	43.9
	± 0.28	± 0.24	± 3.98	± 3.50	± 4.26	± 3.92	± 3.58	± 3.90	± 3.68	± 3.20	± 3.60	± 3.94
Nashik	1.7	2.0	43.4	44.4	51.0	54.0	35.4	36.6	68.0	75.0	24.0	27.2
	± 0.60	± 0.74	± 4.16	± 4.50	± 4.10	± 4.46	± 4.24	± 4.66	± 4.12	± 3.90	± 4.62	± 4.60
Pune	0.5	0.5	42.4	43.1	70.4	71.7	55.9	54.4	84.2	86.1	38.8	45.4
	± 0.42	± 0.32	± 4.36	± 4.50	± 3.96	± 4.10	± 4.84	± 4.34	± 3.22	± 3.06	± 3.98	± 4.88
Maharashtra	0.9	0.8	38.4	37.6	52.6	55.5	39.2	44.8	71.6	77.5	29.6	38.3
	± 0.20	± 0.18	± 1.74	± 1.70	± 1.76	± 1.88	± 1.72	± 1.84	± 1.66	± 1.58	± 1.76	± 2.00

List of districts under each division

Amravati	Nagpur
Akola	Bhandara
Amravati	Chandrapur
Buldhana	Gadchiroli
Washim	Gondia
Yavatmal	Nagpur
Aurangabad	Wardha
Aurangabad	**Nashik**
Beed	Ahmednagar
Hingoli	Dhule
Jalna	Jalgaon
Latur	Nandurbar
Nanded	Nashik
Osmanabad	**Pune**
Parbhani	Kolhapur
Konkan	Pune
Raigarh	Sangli
Ratnagiri	Satara
Sindhudurg	Solapur
Thane	

Odisha

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools Std III-V % Children who can read Std II level text		% Children who can at least do subtraction		Std VI-VIII % Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Central	0.8	0.4	11.7	14.0	55.5	60.3	63.4	52.6	73.8	78.1	48.9	48.5
	± 0.34	± 0.20	± 1.54	± 1.74	± 3.94	± 3.32	± 3.12	± 3.12	± 3.82	± 3.52	± 3.48	± 3.34
North	1.3	0.8	8.5	9.6	41.1	46.2	37.6	34.8	63.4	68.3	31.5	33.1
	± 0.48	± 0.30	± 1.38	± 1.52	± 4.24	± 3.72	± 3.72	± 3.46	± 3.62	± 3.84	± 3.54	± 3.68
South	4.9	3.5	5.6	6.9	32.8	38.1	26.5	31.8	54.8	56.4	22.5	25.9
	± 1.00	± 0.88	± 1.20	± 1.40	± 3.56	± 4.12	± 3.58	± 4.14	± 3.86	± 4.04	± 3.36	± 3.66
Odisha	2.2	1.5	8.9	10.5	44.5	49.0	44.7	40.7	65.3	68.9	36.2	37.4
	± 0.36	± 0.30	± 0.82	± 0.92	± 2.30	± 2.08	± 2.14	± 2.04	± 2.22	± 2.20	± 2.12	± 2.10

List of districts under each division

Central	Jharsuguda
Baleshwar	Kendujhar
Bhadrak	Sambalpur
Cuttack	Subarnapur
Jagatsinghpur	Sundargarh
Jajpur	**South**
Kendrapara	Baudh
Khordha	Gajapati
Mayurbhanj	Ganjam
Nayagarh	Kalahandi
Puri	Kandhamal
North	Koraput
Angul	Malkangiri
Balangir	Nabarangpur
Bargarh	Nuapada
Deogarh	Rayagada
Dhenkanal	

Divisional estimates

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Punjab

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools							
					Std III-V				Std VI-VIII			
					% Children who can read Std II level text		% Children who can at least do subtraction		% Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Faridkot	0.7	0.2	47.0	45.9	61.8	62.4	65.5	68.6	81.9	84.0	49.6	62.6
	±0.48	±0.24	±5.96	±5.58	±5.90	±5.86	±6.08	±4.62	±6.00	±4.30	±7.66	±5.46
Firozpur	1.7	2.2	46.9	47.2	55.6	62.6	59.7	63.1	82.6	86.0	54.4	57.6
	±0.90	±1.08	±5.48	±5.60	±5.26	±6.94	±6.06	±5.36	±4.96	±3.68	±5.56	±5.48
Jalandhar	0.9	0.9	53.4	55.1	51.5	57.2	67.5	66.4	78.3	78.9	51.2	57.0
	±0.46	±0.48	±3.58	±3.86	±5.08	±4.78	±4.00	±4.60	±3.98	±3.60	±4.76	±4.62
Patiala	0.7	0.7	54.3	53.5	51.2	58.9	61.3	64.6	81.0	82.6	53.5	61.3
	±0.46	±0.40	±4.54	±4.20	±4.82	±5.62	±5.06	±4.50	±3.78	±4.32	±5.28	±6.08
Ropar	1.0	1.0	50.3	53.4	49.0	58.1	60.1	65.8	81.2	85.9	50.9	58.9
	±0.84	±0.78	±5.66	±5.02	±6.42	±6.24	±6.72	±5.60	±3.96	±3.84	±6.80	±7.10
Punjab	1.0	1.0	51.7	52.2	52.9	59.2	63.7	65.5	80.3	82.3	52.2	59.1
	±0.28	±0.30	±2.20	±2.18	±2.64	±2.72	±2.46	±2.38	±2.16	±1.94	±2.68	±2.62

List of districts under each division

Faridkot	Tarn Taran
Bathinda	**Patiala**
Faridkot	Barnala
Mansa	Fatehgarh Sahib
Firozpur	Ludhiana
Firozpur	Patiala
Moga	Sangrur
Muktsar	**Ropar**
Jalandhar	Rupnagar
Amritsar	Sahibzada Ajit Singh Nagar
Gurdaspur	
Hoshiarpur	Shahid Bhagat Singh Nagar
Jalandhar	
Kapurthala	

Divisional estimates

Districts have been clubbed into divisions to produce these estimates. The grouping of districts is based on administrative divisions used in the state or on geographical regions.

The first row for each division gives the estimate of the relevant variable. The numbers below the estimate, in the second row, are twice the standard error of the corresponding estimate and represent the 95% confidence interval for the estimate. For instance, in Ajmer division of Rajasthan, in 2018, proportion of Std III-V children who can read Std II level text is 33.7%. With 95% probability, the true population proportion lies within 4.3% points of the estimate, i.e., between 38% and 29.4%.

Rajasthan

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools Std III-V % Children who can read Std II level text		% Children who can at least do subtraction		Std VI-VIII % Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Ajmer	4.4	2.1	39.3	36.8	45.6	33.7	40.1	29.7	74.1	60.9	39.9	30.4
	± 1.12	± 0.68	± 4.08	± 4.18	± 5.04	± 4.30	± 4.84	± 4.38	± 4.84	± 5.00	± 5.02	± 4.48
Bharatpur	2.9	2.7	54.7	47.2	41.9	39.0	46.7	37.8	77.4	73.0	57.5	44.5
	± 0.74	± 1.38	± 5.02	± 4.90	± 5.22	± 4.94	± 5.64	± 4.46	± 4.36	± 4.62	± 4.90	± 4.00
Bikaner	3.4	2.5	45.5	40.0	46.3	34.6	50.1	35.9	78.7	75.1	53.8	42.4
	± 0.94	± 1.06	± 5.24	± 4.50	± 5.00	± 4.84	± 5.10	± 5.00	± 4.24	± 4.36	± 5.16	± 5.84
Jaipur	1.9	1.7	53.6	55.8	47.9	49.4	50.0	44.6	81.0	82.0	52.0	44.5
	± 0.84	± 0.78	± 4.20	± 4.20	± 4.76	± 4.16	± 4.56	± 4.74	± 3.84	± 3.30	± 4.44	± 4.24
Jodhpur	6.5	6.8	31.6	26.0	32.2	27.4	28.9	23.6	64.8	66.0	29.0	31.2
	± 1.32	± 1.50	± 3.90	± 3.74	± 3.76	± 3.90	± 3.46	± 3.86	± 4.50	± 4.14	± 4.88	± 4.56
Kota	3.8	2.9	35.1	28.5	40.9	33.4	34.7	32.0	70.5	70.2	38.3	39.0
	± 1.26	± 1.06	± 5.26	± 4.64	± 5.82	± 5.20	± 4.76	± 4.46	± 5.10	± 4.66	± 4.64	± 5.52
Udaipur	6.0	5.5	20.6	18.8	27.1	27.0	20.5	19.9	62.6	64.7	22.9	20.3
	± 1.44	± 1.42	± 3.18	± 3.30	± 3.94	± 3.82	± 3.74	± 3.96	± 5.08	± 4.28	± 4.32	± 3.50
Rajasthan	4.3	3.8	39.2	35.8	39.1	34.7	37.3	31.1	71.8	70.0	39.7	34.9
	± 0.46	± 0.48	± 1.66	± 1.62	± 1.82	± 1.66	± 1.76	± 1.72	± 1.86	± 1.70	± 1.92	± 1.74

List of districts under each division

Ajmer	Jodhpur
Ajmer	Barmer
Bhilwara	Jaisalmer
Nagaur	Jalor
Tonk	Jodhpur
Bharatpur	Pali
Bharatpur	Sirohi
Dhaulpur	**Kota**
Karauli	Baran
Sawai Madhopur	Bundi
Bikaner	Jhalawar
Bikaner	Kota
Churu	**Udaipur**
Ganganagar	Banswara
Hanumangarh	Chittaurgarh
Jaipur	Dungarpur
Alwar	Pratapgarh
Dausa	Rajsamand
Jaipur	Udaipur
Jhunjhunun	
Sikar	

Divisional estimates

Districts have been clubbed into divisions to produce these estimates. The grouping of districts is based on administrative divisions used in the state or on geographical regions.

The first row for each division gives the estimate of the relevant variable. The numbers below the estimate, in the second row, are twice the standard error of the corresponding estimate and represent the 95% confidence interval for the estimate. For instance, in Agra division of Uttar Pradesh, in 2018, proportion of Std III-V children who can read Std II level text is 46.3%. With 95% probability, the true population proportion lies within 4.52% points of the estimate, i.e., between 50.8% and 41.8%.

Uttar Pradesh

Division/Region	Not in school: % Children (Age 6-14) not enrolled in school		Private school: % Children (Age 6-14) enrolled in private school		Learning levels: All schools							
					Std III-V				Std VI-VIII			
					% Children who can read Std II level text		% Children who can at least do subtraction		% Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Agra	4.0	3.1	61.8	62.0	31.9	46.3	39.0	48.1	61.8	74.5	40.9	54.0
	±1.32	±1.16	±3.34	±3.78	±4.22	±4.52	±4.68	±4.66	±4.64	±3.68	±5.02	±4.48
Aligarh	5.9	5.6	59.2	54.4	34.1	46.7	36.3	45.3	57.7	66.3	38.5	46.7
	±1.44	±1.32	±4.16	±3.82	±4.52	±4.56	±4.80	±3.98	±5.22	±4.82	±6.10	±4.98
Ayodhya	4.0	3.1	53.7	51.0	34.2	38.9	34.3	34.0	58.6	62.7	27.9	27.5
	±1.08	±0.92	±4.14	±4.38	±3.98	±4.86	±4.08	±4.94	±4.76	±4.84	±5.02	±4.60
Azamgarh	1.7	1.5	63.2	63.2	39.5	48.2	39.7	51.3	64.0	74.4	38.7	52.0
	±0.76	±0.60	±4.14	±5.08	±4.92	±6.22	±5.62	±5.74	±5.14	±4.68	±5.54	±5.18
Bareilly	12.2	12.6	42.0	39.3	24.3	29.6	20.6	28.5	51.4	55.6	22.3	25.8
	±2.06	±2.54	±3.76	±3.96	±4.50	±4.88	±4.00	±4.16	±5.44	±5.52	±4.22	±4.92
Basti	3.6	3.5	53.8	50.4	33.5	36.0	32.6	41.9	59.6	64.5	30.6	38.0
	±1.00	±1.32	±5.12	±4.70	±4.98	±5.50	±3.86	±5.40	±5.46	±6.06	±4.92	±5.16
Chitrakoot	5.6	3.7	37.2	31.1	29.0	33.9	28.8	38.3	63.0	60.0	34.9	41.4
	±1.12	±1.16	±3.74	±4.08	±4.14	±4.56	±3.90	±4.90	±4.40	±4.60	±4.14	±4.54
Devipatan	7.0	9.3	34.0	37.1	19.9	30.3	18.6	30.5	43.8	57.3	19.9	31.2
	±1.44	±1.48	±3.70	±3.66	±3.50	±4.80	±3.90	±4.46	±6.10	±6.26	±4.80	±4.84
Gorakhpur	1.7	2.0	64.1	58.0	41.8	48.6	40.7	41.0	70.5	75.2	37.7	40.0
	±0.56	±0.60	±3.24	±4.00	±4.82	±4.26	±4.14	±4.24	±3.88	±3.36	±4.96	±4.28
Jhansi	2.7	3.5	35.2	36.1	32.8	39.9	36.8	40.4	58.3	66.3	41.3	38.9
	±0.86	±1.26	±4.82	±4.82	±4.88	±4.84	±5.60	±5.98	±4.70	±5.60	±5.46	±5.54
Kanpur	3.7	4.7	57.5	48.7	38.3	40.2	33.7	39.5	61.3	65.8	33.3	41.7
	±0.98	±1.08	±3.70	±3.44	±4.14	±3.88	±3.98	±3.58	±4.50	±4.14	±4.06	±3.90
Lucknow	8.2	5.7	41.7	40.6	27.4	32.4	24.2	28.7	54.4	61.5	21.9	33.2
	±1.36	±1.12	±3.18	±3.34	±3.92	±3.22	±3.38	±3.36	±4.36	±3.50	±3.72	±3.92
Meerut	5.4	3.6	60.5	61.9	40.3	58.7	41.4	56.9	69.1	84.2	44.8	58.2
	±1.68	±1.02	±3.84	±4.22	±4.06	±3.98	±4.18	±4.82	±4.82	±2.80	±4.74	±3.80
Mirzapur	3.9	3.7	44.7	37.7	32.2	38.9	28.4	28.0	56.3	66.3	28.7	31.9
	±1.44	±1.20	±5.12	±5.38	±4.78	±5.04	±4.62	±4.20	±5.18	±5.40	±5.12	±5.58
Moradabad	8.8	8.1	54.2	55.6	26.9	35.2	24.2	31.7	58.3	65.4	25.2	33.5
	±1.60	±1.66	±3.98	±4.56	±4.60	±5.50	±4.04	±6.26	±6.02	±5.36	±4.78	±5.44
Prayagraj	4.4	3.1	62.1	57.1	34.8	45.3	36.0	41.7	61.7	69.5	35.3	41.6
	±1.02	±0.70	±3.94	±4.52	±4.54	±4.56	±4.58	±4.84	±6.34	±4.18	±5.54	±5.00
Saharanpur	6.0	4.4	56.8	53.3	37.6	46.6	37.9	45.3	71.7	76.8	40.0	50.3
	±1.68	±1.82	±6.44	±6.76	±7.00	±7.74	±6.26	±7.72	±6.24	±6.38	±8.10	±8.10
Varanasi	1.2	2.1	54.0	52.2	42.2	45.4	41.7	44.7	70.0	70.1	40.8	44.2
	±0.48	±0.74	±4.26	±4.20	±4.90	±4.56	±4.88	±4.32	±4.20	±4.86	±5.76	±4.84
Uttar Pradesh	5.3	4.8	52.0	49.7	33.2	40.6	32.5	38.6	60.5	67.1	32.4	39.3
	±0.34	±0.34	±0.98	±1.06	±1.14	±1.16	±1.10	±1.16	±1.28	±1.18	±1.28	±1.22

List of districts under each division

Agra	Kanpur
Agra	Auraiya
Firozabad	Etawah
Mainpuri	Farrukhabad
Mathura	Kannauj
Aligarh	Kanpur Dehat
Aligarh	Kanpur Nagar*
Etah	**Lucknow**
Hathras	Hardoi
Kashganj	Kheri
Ayodhya	Lucknow
Ambedkar Nagar	Raebareli
Ayodhya	Sitapur
Bara Banki	Unnao
Sultanpur	**Meerut**
Azamgarh	Baghpat
Azamgarh	Bulandshahr
Ballia	Gautam Buddha Nagar
Mau	Ghaziabad
Bareilly	Meerut
Bareilly	**Mirzapur**
Budaun	Mirzapur
Pilibhit	Bhadohi
Shahjahanpur	Sonbhadra
Basti	**Moradabad**
Basti	Amroha
Sant Kabir Nagar	Bijnor
Siddharth Nagar	Moradabad
Chitrakoot	Rampur
Banda	**Prayagraj**
Chitrakoot	Fatehpur
Hamirpur	Kaushambi
Mahoba	Pratapgarh
Devipatan	Prayagraj
Bahraich	**Saharanpur**
Balrampur	Muzaffarnagar
Gonda	Saharanpur
Shrawasti	**Varanasi**
Gorakhpur	Chandauli
Deoria	Ghazipur
Gorakhpur	Jaunpur
Kushinagar	Varanasi
Mahrajganj	
Jhansi	
Jalaun	
Jhansi	
Lalitpur	

* District not surveyed in ASER 2018.

Divisional estimates

Districts have been clubbed into divisions to produce these estimates. The grouping of districts is based on administrative divisions used in the state or on geographical regions.

The first row for each division gives the estimate of the relevant variable. The numbers below the estimate, in the second row, are twice the standard error of the corresponding estimate and represent the 95% confidence interval for the estimate. For instance, in Garhwal division of Uttarakhand, in 2018, proportion of Std III-V children who can read Std II level text is 50%. With 95% probability, the true population proportion lies within 5.12% points of the estimate, i.e., between 55.1% and 44.9%.

Uttarakhand

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools Std III-V % Children who can read Std II level text		% Children who can at least do subtraction		Std VI-VIII % Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Garhwal	1.2	1.8	42.0	41.3	48.4	50.0	47.8	44.6	74.6	79.0	38.8	43.5
	± 0.54	± 0.92	± 4.30	± 4.56	± 5.62	± 5.12	± 5.56	± 4.74	± 5.34	± 4.74	± 4.86	± 4.98
Kumaon	1.1	1.0	40.7	44.5	53.6	51.7	49.8	46.6	75.2	78.3	39.9	42.3
	± 0.48	± 0.54	± 4.80	± 4.80	± 5.16	± 5.44	± 4.90	± 4.84	± 5.76	± 4.64	± 5.00	± 4.88
Uttarakhand	1.2	1.4	41.4	42.7	50.7	50.7	48.6	45.4	74.9	78.7	39.3	43.0
	± 0.36	± 0.58	± 3.20	± 3.32	± 3.92	± 3.78	± 3.80	± 3.46	± 3.92	± 3.34	± 3.48	± 3.50

List of districts under each division

Garhwal	Kumaon
Chamoli	Almora
Dehradun	Bageshwar
Garhwal	Champawat
Hardwar	Nainital
Rudraprayag	Pithoragarh
Tehri Garhwal	Udham Singh Nagar
Uttarkashi	

West Bengal

Division/Region	Not in school % Children (Age 6-14) not enrolled in school		Private school % Children (Age 6-14) enrolled in private school		Learning levels: All schools Std III-V % Children who can read Std II level text		% Children who can at least do subtraction		Std VI-VIII % Children who can read Std II level text		% Children who can do division	
	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Burdwan	2.3	1.7	5.8	8.4	42.3	49.2	37.7	42.5	64.2	66.1	31.3	38.0
	± 0.98	± 1.06	± 2.24	± 3.44	± 7.22	± 6.00	± 8.06	± 7.58	± 6.74	± 7.20	± 5.78	± 7.94
Jalpaiguri	0.8	1.8	15.5	11.7	34.6	37.7	37.3	38.3	59.0	52.8	28.2	22.2
	± 0.56	± 0.86	± 3.46	± 3.16	± 6.98	± 6.76	± 6.10	± 6.40	± 7.14	± 8.12	± 6.26	± 6.60
Maldah	3.9	3.9	11.5	9.6	27.8	33.1	31.1	31.3	52.9	45.6	20.8	21.2
	± 1.08	± 1.28	± 2.22	± 2.16	± 5.06	± 6.50	± 5.50	± 7.84	± 7.26	± 6.02	± 5.54	± 5.36
Medinipur	1.2	1.3	10.2	6.9	52.6	49.6	58.2	52.0	72.5	62.6	40.5	37.8
	± 0.62	± 0.60	± 3.58	± 1.78	± 5.68	± 5.52	± 6.74	± 5.60	± 5.24	± 6.30	± 6.28	± 6.26
Presidency	2.5	1.3	8.5	5.7	52.1	45.9	49.5	46.3	69.0	64.0	32.4	28.8
	± 1.28	± 0.68	± 2.10	± 1.72	± 5.56	± 6.52	± 6.84	± 5.72	± 5.38	± 5.98	± 5.80	± 6.84
West Bengal	2.4	2.0	9.9	7.9	42.6	44.1	43.6	43.3	63.8	58.8	30.6	30.6
	± 0.48	± 0.42	± 1.22	± 1.04	± 2.78	± 2.88	± 3.12	± 3.00	± 2.98	± 3.02	± 2.76	± 3.08

List of districts under each division

Burdwan	Medinipur
Barddhaman	Bankura
Birbhum	Paschim Medinipur
Hooghly	Purba Medinipur
Jalpaiguri	Puruliya
Cooch Behar	**Presidency**
Darjiling*	Howrah
Jalpaiguri	Nadia
Maldah	North Twenty Four Parganas
Dakshin Dinajpur	
Maldah	South Twenty Four Parganas
Murshidabad	
Uttar Dinajpur	

* District not surveyed in ASER 2018.

ASER 2018 process documents

Sample design of rural ASER 2018

Wilima Wadhwa, Director, ASER Centre

The purpose of ASER is twofold: (i) to obtain reliable estimates of the status of children's schooling and basic learning (reading and math ability); and (ii) to measure the change in these basic learning and school statistics over time. Every year a core set of questions regarding schooling status and basic learning levels remains the same. However, new questions are added to explore different dimensions of schooling and learning at the elementary stage. The latter set of questions can vary each year.

ASER 2006 and 2007 tested reading comprehension for different kinds of readers. ASER 2007 introduced testing in English, which has been repeated in four subsequent editions of ASER (2009, 2012, 2014, and 2016). ASER 2018 also included questions on paid tuition, which have been repeated every year since 2009. ASER 2008, for the first time, had questions on telling time and oral math problems using currency. In addition, ASER 2008 incorporated questions on village infrastructure and household assets. Investigators were asked to record whether the village visited had a pucca road leading to it, whether it had a bank, PDS shop, etc. In the sampled households, information on assets like type of house, phone, television, etc was recorded. These questions were repeated in 2009 and in addition, father's education was also recorded. ASER 2010, while retaining the core questions on parents' education, household and village characteristics, introduced higher level testing tools for the first time. Questions on critical thinking were introduced, based on simple mathematical operations that appear in Std V textbooks. These were further refined and expanded in ASER 2011. Testing of reading and comprehension of English was first introduced in 2007, repeated in 2009 and 2012. ASER 2013 added expenditure on private tuition to the household questionnaire.[1]

Every year, ASER surveyors visit a government primary or upper primary school in each sampled village. The school information is recorded based either on direct observation (such as attendance or usability of facilities) or on information provided by the school (such as grants information). School observations have been reported in 2005, 2007, and every year since 2009. Beginning in 2010, information is also collected on schools' RTE compliance.

ASER 2016 started a new series of ASER estimates after a break of one year,[2] and included the largest set of core questions. In ASER 2018, we continue with largely the same set of indicators. This year we have dropped the English assessment and instead added some "bonus" questions for older children to test their ability to apply basic arithmetic skills to everyday tasks such as calculating time, applying unitary method, financial decision making and calculating discount.[3]

Finally, ASER continues the process of strengthening and streamlining started in 2008. Recheck of 4 or more villages in each district was introduced in 2008. This process was further strengthened in 2009. In ASER 2010, special attention was focused on improving training. In ASER 2011, in addition, Master Trainers monitored the survey process in the field. In ASER 2012, in addition, phone recheck was used on a large scale. During the survey, Master Trainers were called from a call centre in the state to get feedback on the progress of the survey on a daily basis. ASER 2013 incorporated all of these procedures, further streamlining processes in the field. ASER 2014 added external rechecks to the process. ASER 2018 includes all the monitoring and recheck processes of previous years, including external rechecks.

ASER has a two-stage sample design. In the first stage, for each rural district, villages are randomly selected from the Census village directory. Therefore, the coverage of ASER is the population of rural India.[4] ASER 2005-2014 uses the Census 2001 village directory as the sampling frame. The Census 2011 sampling frame became available in the public domain in 2015 and ASER 2016 uses this frame. In the second stage, households are randomly selected in each of the villages selected in the first stage. This sampling strategy generates a representative picture of each district. All rural districts are surveyed. The estimates obtained are then aggregated to the state and all-India levels.

Since estimates are generated at the district level, the minimum sample size calculations are done at the district level. The sample size is determined by the following considerations:

- Incidence of what is being measured in the population: Prior to ASER 2005, a survey of foundational learning outcomes had never been done in India. Therefore, the incidence of what we were trying to measure was unknown in the population. However, now we can use estimates from previous ASERs for sample size calculations.

- Confidence level of estimates: The standard used is 95%.

- Precision required on either side of the true value: The standard degree of accuracy most surveys employ is between 5% and 10%. An absolute precision of 5% along with a 95% confidence level implies that the estimates generated by the survey will be within 5

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[1] For more details, see the section 'Domains covered in ASER (2005-2018)' in this report.

[2] In 2015, ASER was done in only two states, Maharashtra and Punjab.

[3] Some of these questions are taken from ASER 2017 'Beyond Basics', the ASER survey that was designed for and administered to youth in the 14-18 age group in 28 districts across the country.

[4] No adjustments are made to the population as given in the Census.

percentage points of the true values with a 95% probability. The precision can also be specified in relative terms — a relative precision of 5% means that the estimates will be within 5% of the true value. Relative precision requires higher sample sizes.

Sample size calculations can be done in various ways, depending on what assumptions are made about the underlying population. With a 50% incidence, 95% confidence level, and 5% absolute precision, the minimum sample size required in each stratum[5] is 384.[6] This derivation assumes that the population proportion is normally distributed. A sample size of 384 would imply a relative precision of 10%. If we were to require a 5% relative precision, on the other hand, the sample size would increase to 1600.[7] Note that all the sample size calculations require estimates of the incidence in the population. In our case, we can get an estimate of the incidence from previous ASER surveys. However, incidence varies across different indicators — so incidence of reading ability is different from incidence of dropouts. In addition, we often want to measure things that are not binary, for which we need more observations.

Given these considerations, the sample size was decided to be 600 households in each district.[8] At the state level and at the all-India level, the survey has many more observations, lending estimates at those levels much higher levels of precision.

Since ASER has a two-stage sample design,[9] the district level sample size of 600 households has to be allocated to the two stages of sampling. ASER samples 30 villages in the first stage. These are randomly selected using the village directory of the Census as the sample frame.[10] In the second stage 20 households are randomly selected in each of the 30 selected villages in the first stage.[11]

Villages are selected using the Probability Proportional to Size (PPS) sampling method. This method allows villages with larger populations to have a higher chance of being selected in the sample. It is most useful when the first stage sampling units vary considerably in size, because it ensures that households in larger villages have the same probability of getting into the sample as those in smaller villages, and vice-versa.[12,13]

In the selected villages, 20 households are surveyed. Ideally, a complete house list of the selected village should be made and 20 households selected randomly from it. However, given time and resource constraints, a procedure for selecting households is adopted that preserves randomness as much as possible. The field investigators are asked to divide the village into four parts. This is done because villages often consist of hamlets and a procedure that randomly selects households from some central location may miss out households on the periphery of the village. In each of the four parts, investigators are asked to start at a central location and pick every 5th

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[5] Stratification is discussed below.

[6] The sample size with absolute precision is given by $\frac{z^2 pq}{d^2}$, where z is the standard normal deviate corresponding to 95% probability (=1.96), p is the incidence in the population (0.5), q=(1-p) and d is the degree of precision required (0.05).

[7] The sample size with relative precision is given by $\frac{z^2 q}{r^2 p}$, where z is the standard normal deviate corresponding to 95% probability (=1.96), p is the incidence in the population (0.5), q=(1-p) and r is the degree of relative precision required (0.1).

[8] Sample size calculations assume simple random sampling. However, simple random sampling is unlikely to be the method of choice in an actual field survey. Therefore, often a "design effect" is added to the sample size. A design effect of 2 would double the sample size. At the district level a 7% precision along with a 95% confidence level would imply a sample size of 196, giving us a design effect of approximately 3. However, note that a sample size of 600 households gives us approximately 1000–1200 children per district.

[9] For a two-stage sample design, as explained above, sample size calculations have to take into account the design effect, which is the increase in variance of estimates due to departure from simple random sampling. This design effect is a function of the intra-cluster correlation. The greater this correlation, the larger is the design effect implying a larger sample size for a given level of precision. For a given margin of error (me), the sample size can be backed out from $me = \frac{2\sigma}{p} = \frac{2\sqrt{\frac{d\,p(1-p)}{N-1}}}{p}$ where d is the design effect, p is the incidence in the population, its standard error, and N the sample size.

[10] Since the sampling frame is not current, sometimes sampled villages need to be replaced. However, as far as possible, villages are not replaced. There are three main reasons for replacing a village: first, if it has been converted to an urban municipality; second, due to natural disasters, like floods; or third, due to insurgency problems. Replacement villages are also drawn as an independent sample.

[11] This allocation of the total sample size to the different sampling stages is often based on logistical and cost considerations. For instance, a sample size of 600 households per district could have been allocated into 40 villages per district and 15 households per village; or 20 villages per district and 30 households per village. The first allocation would yield higher precision but cost more. Precision increases with a larger number of first-stage units since that reduces the adverse effect of a large intra-cluster correlation; however, cost also increases with a larger number of first-stage units, since that entails travelling to more villages (the marginal cost of surveying additional households in a given village is negligible). Therefore, there is a tradeoff between precision and cost.

[12] Probability Proportional to Size (PPS) is a sampling technique in which the probability of selecting a sampling unit (village, in our case) is proportional to the size of its population. The method works as follows: first, the cumulative population by village is calculated. Second, the total household population of the district is divided by the number of sampling units (villages) to get the Sampling Interval (SI). Third, a random number between 1 and the SI is chosen. This is referred to as the Random Start (RS). The RS denotes the site of the first village to be selected from the cumulative population. Fourth, the following series of numbers is formed: RS; RS+SI; RS+2SI; RS+3SI; .... The villages selected are those for which the cumulative population contains the numbers in the series.

[13] Most large household surveys in India, like the National Sample Survey and the National Family Health Survey, also use this two-stage design and use PPS to select villages in the first stage.

household in a circular fashion till 5 households are selected. In each selected household, information on all resident children in the age group of 3-16 years is recorded and all children in the age group of 5-16 years are tested.

Since one of the goals of ASER is to generate estimates of change in learning, a panel survey design would provide more efficient estimates of change. However, given the large sample size of the ASER surveys and cost considerations, we adopted a rotating panel of villages rather than children. For ASER 2008-2014, each year, 10 villages from three years ago are dropped; 20 villages from the previous two years are retained and 10 new villages are added.[14] Given the sample size of 30 villages per district, this procedure creates a 3-year cycle in which the entire village sample is replaced. For instance, in ASER 2014 we dropped the 10 villages from ASER 2011, kept the 20 villages from 2012 and 2013 and added 10 more villages from the 2001 census village directory. However, for ASER 2016 a fresh sample of 30 villages was drawn for each district because we were using a new sampling frame – Census 2011. In ASER 2018, we have randomly dropped 10 villages from the 2016 sample, and added 10 new villages. Like before, these 10 new villages are drawn as an independent sample from the Census 2011 frame. In the next ASER, we will drop another 10 villages from the 2016 sample, retain the 10 villages added in 2018, and add another 10 villages.[15]

The survey provides estimates at the district, state and national levels. In order to aggregate estimates up from the district level, households have to be assigned weights — also called inflation factors. The inflation factor corresponding to a particular household denotes the number of households that the sampled household represents in the population. Given that 600 households are sampled in each district regardless of the size of the district, a household in a larger district will represent many more households and, therefore, have a larger weight associated with it than one in a sparsely populated district.

The advantage of using PPS sampling in the first stage is that the sample is self-weighting at the district level. In other words, in each district the weight assigned to each of the sampled household turns out to be the same. This is because the inflation factor associated with a household is simply the inverse of the probability of it being selected into the sample. Since PPS sampling in the first stage and SRS sampling in the second stage, ensures that all households have an equal chance of being selected at the district level, the weights associated with households within a district are the same.[16] Therefore, weighted estimates are exactly the same as the unweighted estimates at the district level. However, to get estimates at the state and national levels, weighted estimates are needed since states have a different number of districts and districts vary by population.

Even though the purpose of the survey is to estimate learning levels among children, the household was chosen as the second stage sampling unit. This has a number of advantages. First, children are tested at home rather than in school, allowing all children to be tested rather than just those in school. Further, testing children in school might create a self-selection bias since many children don't attend school regularly and/or teachers may encourage testing the brighter children in class. Second, a household sample will generate an age distribution of children that can be cross-checked with other data sources, like the Census and the NSS. Third, a household sample makes calculation of the inflation factors easier since the population of children is no longer needed.

Often household surveys are stratified on various parameters of interest. The reason for stratification is to get enough observations on entities that have the characteristic that is being studied. The ASER survey stratifies the sample by population in the first stage. No stratification was possible at the second stage. In order to stratify on households with children in the 3-16 age group, in the second stage, we would need the population of such households in the village, which is not possible without a complete house list of the village.

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[14] The 10 new villages are drawn as an independent sample from the same sampling frame.

[15] Note that starting in 2016, the "regular" ASER that visits all rural districts and assesses all children in basic reading and arithmetic is being done every other year rather than every year. Therefore, the entire village sample will be replaced in 6 rather than 3 years.

[16] The probability that household j gets selected in village i (p_{ij}) is the product of the probability that village i gets selected (p_i) and the probability that household j gets selected ($p_{j(i)}$). This is given by:

$$p_{ij} = p_i \, p_{j(i)} = \frac{30\,vpop_i}{dpop} \cdot \frac{20}{vpop_i} = \frac{600}{dpop}$$, where $vpop_i$ is the household population of village i and $dpop$ is the number of households in the district.

Therefore, the weight associated with each sampled household within a district is the same and is the inverse of the probability of selection.

ASER 2018 – Training

The ASER survey is conducted in almost every rural district in India with the help of local organisations and institutions including universities and colleges, non-governmental organisations, self-help groups, youth clubs, government departments, District Institutes of Education and Training (DIETs), etc. On average ASER reaches over 560 districts each year, surveying an average of 650,000 children in more than 16,000 villages across the country. For ASER surveyors to succeed in this endeavour, they need to be trained rigorously. The ASER training process gives surveyors the skills needed to survey a village, assess children's learning levels reliably and record the information accurately.

In 2018, ASER reached 17,730 villages in 596 districts of India. A notable feature this year was ASER's partnership with DIETs. DIET volunteers surveyed 237 districts out of all 596 surveyed districts. ASER provides a unique opportunity to DIET and university/college students to understand and apply simple methods of assessment, survey and research, and an important exposure to the current realities of children's learning in the Indian education system. ASER survey trainings follow a three-tier model that consists of:

National training:
ASER state team members are trained by the ASER central team

State level training:
Master Trainers* are trained by the ASER state teams

District level training:
Surveyors are trained by Master Trainers

Standardisation in training and survey is extremely important in order to ensure that the data collected is reliable and valid across districts and states. For this purpose, ASER Centre ensures that the guidelines and instructions for the trainings delivered at all three tiers are kept clear and consistent so that each participant is able to conduct the survey accurately. The three-tiered structure is as follows:

Tier I: National training: Each year ASER survey begins with a 6-day national training. It brings together 100+ people - the core team, ASER state teams from across the country, participants from other countries, external guests, independent researchers, and others. The main objective of the national training is to thoroughly train teams on all survey tools and processes.

This year, the national training was held in Agra, Uttar Pradesh from 4 August to 11 August. Around 130 participants attended 6 days of classroom sessions and 2 days of field visits to villages to pilot ASER 2018 survey instruments.

Key features of the national training include:

- **Classroom sessions:** These are designed to provide a theoretical understanding of the survey process, quality control processes, sampling, financial planning for the survey, etc. Instruction manuals, role plays, group work, energizers, and presentations are used to make the classroom sessions effective and engaging. Energizers are used to enhance audience engagement during or in between classroom sessions. They make good icebreakers for people attending the national workshop for the first time, creating a more participative and positive learning environment.

- **Field visits:** One day of the national training is devoted to practicing the actual survey. An additional field day is devoted to rechecking** the villages surveyed on the first field visit day. The two field visit days are extremely useful for the participants to get hands-on experience of doing the survey and recheck.

- **Quizzes:** Quizzes are administered in order to ensure that every participant understands the survey content and other processes thoroughly. Post training, additional sessions are organised to fill learning gaps identified through the quiz results.

This year, the ASER team successfully piloted an online quiz format in the national training which was also replicated in some state level trainings.

- **Mock training:** An entire day in the national training is devoted to mock trainings. Participants prepare on given topics after which each of them conducts a training session. Mock training sessions are organised to gauge participants' training ability and assist them in improving the same. Participants are assessed by experienced ASER trainers and personalized feedback is given to each participant. This session prepares the participants to lead and deliver trainings in the next tier more efficiently and confidently.

- **Clarification and feedback:** Short feedback and clarification rounds are conducted to provide additional

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* ASER Centre recruits Master Trainers in each district for the entire survey period. Two Master Trainers are responsible for the successful execution of the complete survey in each district, including quality control processes.

** Rechecks are conducted in the surveyed villages to ensure that the survey was conducted properly.

support, close any gaps and ensure participants' complete understanding of the survey processes.

- **State planning:** The national training is also a time to finalize the survey roll-out plans for each state, including identification of partners, plans for state level trainings and calendars for execution of the survey. Experience of the previous years' ASER survey is reviewed, manpower requirements are identified, partner lists are drawn up, tentative timelines are made, and detailed budgeting is done.

Tier II: State level training: These trainings are conducted in every state just before the district trainings. The national training process is replicated in the state level trainings. State level trainings are scheduled for 5 to 6 days with 3 to 4 days of classroom sessions and 2 days of field visits. The main objective is to prepare the Master Trainers as lead trainers so that they can successfully train the surveyors in their own districts. Approximately 843 Master Trainers participated in ASER 2018.

The structure of state level trainings is kept as close as possible to that of the national training. State level trainings too have five major components: classroom sessions, field visits, quizzes, mock trainings and district level planning.

Performance in mock trainings, field visits and quiz results are analysed to identify under-confident or under-prepared Master Trainers, who are either replaced, re-trained or provided with additional support during district trainings. It is mandatory for all participants to be present on all days of the training. Any participant who is not present for all sessions of the training cannot qualify as a Master Trainer for ASER.

Tier III: District level training: The district level training is the last tier of the training for the ASER survey. Master Trainers who were trained in the state level training, now train surveyors who carry out the survey in the villages.

District level trainings usually span 2-3 days. Like state level trainings, key elements of district trainings include classroom sessions, field practice sessions and a quiz. In most districts, surveyors who score low on the quiz are either replaced or are paired with stronger surveyors to carry out the survey. After the district level training, the survey is conducted by a team of two surveyors in each village.

Monitoring of trainings: Specific steps are taken to ensure that key aspects of training are implemented across all state level and district level trainings:

- State level trainings are usually attended and monitored by the head of the Pratham programs in the state as well as members of the central ASER team.

- To support district level activities of ASER including district level training, a call centre is set up to monitor and support ASER teams in some states. The call centre leader also attends the state level training to get a clear understanding of the ASER process. A trained call centre person interacts with Master Trainers on a daily basis to ensure that they complete all basic processes during training, survey and recheck. In states without a call centre, district activities are monitored by the ASER state teams.

- In all district level trainings, records are maintained for each ASER surveyor. These records contain attendance for each day of training and quiz marks of all surveyors. The data in this sheet is used for surveyor selection and pairing of surveyors for the ASER survey.

Feedback on trainings: ASER teams collect training feedback for all trainings - national, state level and district level. This exercise will help the core team assess quality of trainings delivered to the respective participants and aid review and improvement in training design, methods and materials and capability of trainers.

For a more detailed report on ASER 2018 trainings, please visit www.asercentre.org

ASER village process

The following process explanations are excerpts from the ASER 2018 instruction manual, used by our volunteers during trainings. The sections covered are: talking to the Sarpanch, how to collect village information, how to make a map and divide it into sections, what to do in each hamlet/section, what to do in each household, what to do with children, and what to do in a school. Sample English versions of the survey formats have been provided in between sections. All formats are translated into regional languages for the survey along with the instruction manual.

Talking to the Sarpanch

Purpose: Inform the Sarpanch about the ASER survey process and request cooperation for the survey.

Go to the village assigned to you. Two surveyors will survey one village. Once you are in the village, meet the Sarpanch and give him the 'Letter for Sarpanch'. Explain the purpose and importance of conducting the ASER survey and the activities you'll be doing in the village. If the Sarpanch is not present, then meet a village representative, such as the Panchayat Secretary. People may come up to you and ask what you are doing. Use the same points to explain the purpose of your visit.

How to collect village information?

Purpose: To note the presence or absence of some basic facilities in the village.

Write the name of the state, district, block/taluk, village, surveyors, and date and day of the survey on the Village Information Sheet.

As you are walking around the village, look out for the basic facilities and schools listed on the Village Information Sheet and tick the 'Yes' box if they are available. If you are unable to locate these facilities and schools, ask the villagers and then observe yourself. While observing educational facilities in the village, go inside the facility to verify the information required before ticking the appropriate box. After you have walked around the entire village, if there are facilities on the Village Information Sheet that you could not observe, tick 'No' in the appropriate box. Every facility should be ticked either 'Yes' or 'No'.

Refer to page 270 for the Village Information Sheet.

How to make a map and divide it into sections?

Purpose: To divide the village into hamlets/sections and to randomly select households. The map is also used later for the recheck process.

Get to know the village: Walk around the village and talk to the local people. Ask them how many hamlets/sections are there in the village and where are they located? Where are the starting and ending points of the village? You could ask the villagers/village children to take you around as well.

Make a rough map: As you walk around, draw a rough map of how the village is laid out. The rough map will help you understand the pattern of habitations in the village. Use the help of local people to show you the main landmarks, such as places of worship, river, schools, bus stops, panchayat bhavans, anganwadis, ponds, clinics, ration shops, etc. Mark the main roads/streets/pathways

through the village prominently on the map. Mark each government school for which you have recorded the information in the Village Information Sheet on the map.
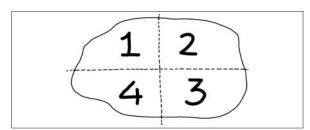
Verify the rough map: Get the Sarpanch or any other person who knows the village well to verify your rough map. Once everyone agrees that the map is a good representation of the village, finalize it.

Make the final map: Copy the final version of your rough map onto the map sheet given in the survey booklet (see page 269 for an example).

Once the final map has been made, make and number the sections as explained below:

Case 1: Continuous village

- Divide the entire village into 4 sections geographically.
- Assign each section a number. Write the number on the map (see the example given below).
- Select 5 households from each section.
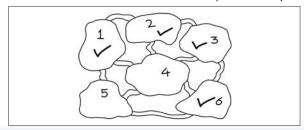
Case 2: Village with hamlets/sections
If the village has discontinuous hamlets/sections, assign each hamlet/section a number. Write the number on the map.
If the village has:

- **2 hamlets/sections:** Divide each hamlet/section in 2 parts so that now you have 4 parts in all. Select 5 households from each part.
- **3 hamlets/sections:** Take 7, 7 and 6 households from the 3 hamlets, respectively.
- **4 hamlets/sections:** Select 5 households from each hamlet/section.
- **More than 4 hamlets/sections:** Randomly pick 4 hamlets/sections and then select 5 households from each of the 4 hamlets/sections. On the map, tick the hamlets/sections chosen for the survey on the map.

What to do in each hamlet/section?

You need to pick 5 households from each of the 4 hamlets/sections that you have selected, using the following procedure:

- Go to the selected hamlet/section. Try to find the central point in that hamlet/section. Standing in the centre of the hamlet/section, select the first household on your left. Begin the survey from this household.

- Thereafter, you must select every 5th household. This means that after you have surveyed the first household, skip the next 4 households and select the 5th one. While selecting households, count only those dwellings that are residential. 'Household' refers to every 'door or entrance to a house from the street'.

- If you have reached the end of the hamlet/section before surveying 5 households, go around the same hamlet/section again using the 'every 5th household rule'.

- If a surveyed household gets selected again, go to the next/adjacent household, and continue till you have 5 households from the hamlet/section.

- If the hamlet/section has less than 5 households, then survey all the households. Survey the remaining households from other hamlets/sections.

- If the village has 20 or fewer households, then survey all the households in the village.

SOME SPECIAL CASES

- **Household with multiple kitchens:** In each house ask how many kitchens or chulhas are there. If there is more than one kitchen in a household, then select the kitchen from which the respondent's[1] family eats. You will survey only those individuals who regularly eat from the selected kitchen. After completing the survey in this household proceed to the next 5th household counting from the next household on the street, not from the next kitchen/chulha.

- **Household with no children:** If there are no children in the age group 3-16 in the selected household but there are inhabitants, include that household. Write the number of the hamlet/section from the map from which the household has been selected. Take information from the respondent about the name of the head of the household, total number of members in the household who eat from the same kitchen, household assets, name of the respondent and mobile number of the household. In addition, ask if anyone in the household has passed Std. 12 and if anyone knows how to use a computer. Such a household will be counted as one of the 5 surveyed households in each hamlet/section but no information about mother or father will be collected.

- **Household locked:** If the selected household is closed or if there is nobody at home, make a tally mark on the cover page of the survey booklet under 'Locked households'. This household does not count as a surveyed household. Do not include this household in the household survey sheet. Move to the next/adjacent household. After the survey is over, count the tally marks and write the total number of such cases in the same space on the cover page of the survey booklet.

- **No response:** If a household refuses to participate in the survey, make a tally mark on the cover page of the survey booklet under 'No response households'. This household does not count as a surveyed household. Do not include this household in the household survey sheet. Move to the next/adjacent household. After the survey is over, count the tally marks and write the total number of such cases in the same space on the cover page of the survey booklet.

After you have completed 5 households in the first hamlet/section, move to the next hamlet/section. Follow the same process in all hamlets/sections to be surveyed.
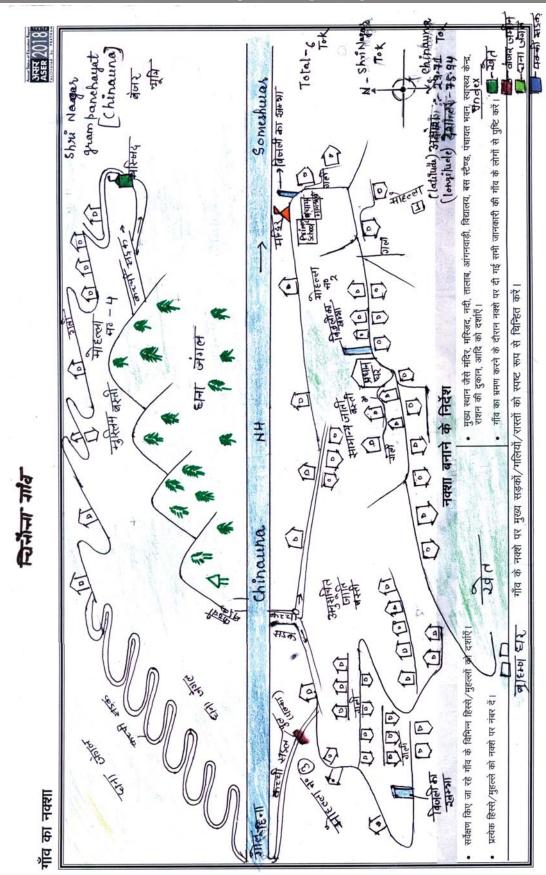
Ensure that you go to households only when children are likely to be at home. This means that you will go to households after school hours and/or on a holiday/Sunday.

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[1] Respondent is an adult who is present in the household during the survey and is providing information.
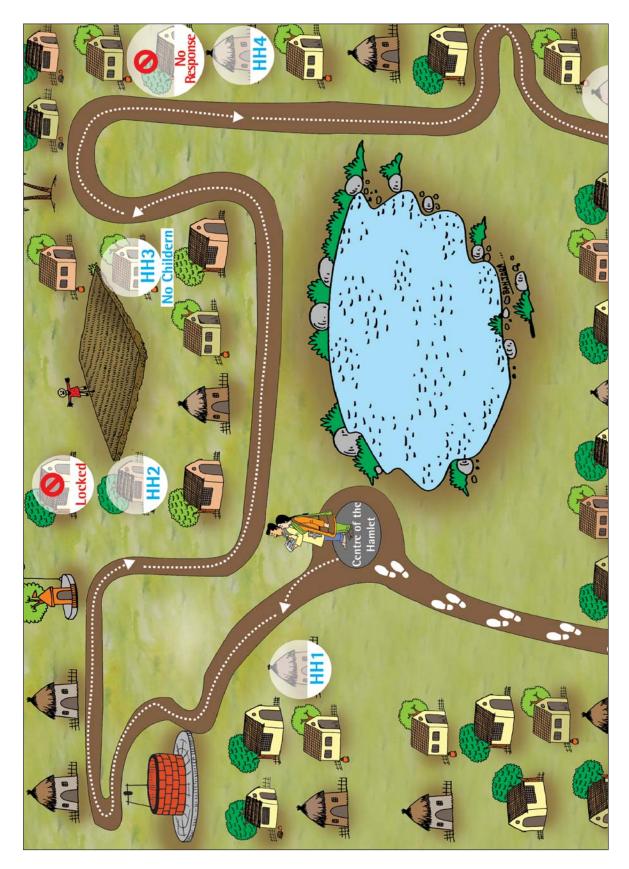
VILLAGE INFORMATION SHEET

असर ASER 2018

Name of state:	ARUNACHAL PRADESH	Name of block:	NAFRA
Name of district:	WEST KAMENG	Name of village:	KHUPI
Surveyors' names:		1. TENZENG NORBU	
		2. PEMMA ZOMBA	
Date of survey:	22/09/2018	Day of survey:	SATURDAY

Please tick (✓) the relevant box	Did you see the following facilities/services in the village yourself? (Tick Yes/No based on your own observation)	

BASIC FACILITIES

	Yes	No
Pucca road leading to the village?	✓ Yes	No
Electricity connection in the village?	✓ Yes	No
Post office in the village?	Yes	✓ No
Bank (any type) in the village?	Yes	✓ No
Govt. Primary/Sub Health Centre in the village?	Yes	✓ No
Private health clinic in the village?	Yes	✓ No
Computer centre/Internet café in the village?	Yes	✓ No

SCHOOLS

	Yes	No
Govt. Primary School (Std. 1 to 4/5) in the village?	✓ Yes	No
Govt. Upper Primary School (Std. 1 to 7/8) in the village?	Yes	✓ No
Govt. School (Std. 1 to 10/12) in the village?	Yes	✓ No
Govt. School (Std. 6 to 8/10/12) in the village?	✓ Yes	No
Private school in the village?	Yes	✓ No
Anganwadi in village?	✓ Yes	No

Purpose: To collect all required information about the selected households.

Refer to page 274 for the Household Survey Sheet.

GENERAL INFORMATION

Fill in the general information about the household in the top block of the Household Survey Sheet:

- **HH No.:** Write the household number on every sheet. Write '1' for the first household surveyed, '2' for the second household surveyed and so on till the 20th household.

- **Total number of members in the HH who regularly eat from the same kitchen:** Ask this question to the adults present in the household and write the total number. If there are multiple kitchens/chulhas in the household, remember to include only those members who eat regularly from the respondent's kitchen.

- **Note the following carefully:**
  - Respondent name: 'Respondent' is an adult who is present in the household during the survey and is providing you with information.
  - Hamlet/Section no. (from the map) from which the household is selected.

INFORMATION ABOUT CHILDREN AND ADULTS LIVING IN THE HOUSEHOLD

No information will be written in the Household Survey Sheet about any individual who does not regularly live in the household and does not eat from the respondent's kitchen.

Collect information from the sampled household about all children aged 3-16 years who regularly live in the household and eat from the same kitchen. Ask members of the household to help you identify these children. All such children should be included, even if their parents live in another village or if they are the children of the domestic help in the household.

RULES FOR SELECTING CHILDREN

- **Include all children who are:**
  - **Older children:** Often older girls and boys (in the age group of 11 to 16 years) may not be considered as children. Avoid saying 'children' in such cases. Probe about who all live in the household to make sure that nobody in this age group gets left out. Often older children who cannot read are very shy and hesitant about being tested. Be sensitive about this issue.
  - **Not at home during the time of the survey:** Often children are busy in the household or on the farm. If the child is somewhere nearby, but not at home, take the information about the child, like the name, age, and schooling status. Ask the family members to call the child so that you can speak to her directly. If she does not come immediately, make a note of the

household and revisit it once you are done surveying the other households.

If there are children who regularly live in the household but who are out of the village on the day of the survey (e.g. a child has gone to visit her relatives) write their information even if you cannot test them. Record the reason for not testing her on the back of the Household Survey Sheet for that household.

- **Relatives who live in the sampled household on a regular basis:** Include these children because they live in the same household on a regular basis. But do not take information about their parents if parents do not live in this household.

- **Do NOT include all children who are:**
  - **Not living in the household on a regular basis:** DO NOT INCLUDE children of this family who do not regularly live in the household (e.g. children who are studying in another village/city or children who got married and are living elsewhere). Even if such children are present in the household during your visit, do not record their information.
  - **Visiting children:** DO NOT INCLUDE children who have come to visit their relatives or friends as they do not regularly live in the sampled household.

Many children may come up to you and want to be included out of curiosity. Do not discourage children who want to be tested. You can interact with them. But data must be recorded ONLY for children living in the 20 households that have been randomly selected.

Mother's background information: While beginning to record the information for each child, ask for the name of the child's mother. Note her name only if she is alive and regularly living in the household. If the child's mother is dead or not living in the household, do not write her name. If the mother has died or is divorced and the child's stepmother (father's present wife) is living in the household, include the stepmother as the child's mother. Note the mother's age and schooling information in the box 'Mother's Background Information'. While recording the mother's education, record the last class she has completed. For graduates, write B.A., B.Com. etc.

Children: Now that we have identified which children to survey, let us review what information is to be collected about each child. Remember, one row of the Household Survey Sheet will be used for each child.

- **Collect the following information for ALL children aged 3-16:**
  - **Child's name, age, sex:** The child's name, completed age and sex should be filled for all children in the sampled household. For female children write 'F' and for male children write 'M' (F = Female, M = Male).

- **For children currently enrolled in school:** Fill the child's class and type of school under 'In school children' in Household Survey Sheet as:

- If the child is attending an anganwadi, then put a tick under 'Anganwadi'. Tick under 'Government' in the 'Type of School' block.
- If the child is attending Lower Kindergarten (LKG), or Upper Kindergarten (UKG), or Nursery (NUR), or Balwadi, then tick under 'LKG/UKG/NUR/Balwadi'. Additionally, put a tick under 'Private' in case LKG/UKG/NUR/Balwadi is a private school, OR under 'Government' in case of a pre-primary class of a government school.
- If the child is enrolled in Std. 1 to Std. 12, then write the Std. number under 'Std.' and put a tick under the appropriate type of school in the next column.
- If a child is double enrolled (i.e. enrolled in more than 1 school), then record the information only about the school she attends regularly.
- If child goes to the surveyed school: Ask the child if she attends the government school which you have or will be surveying. Do not ask this question to children who are not currently enrolled in school.
- Medium of Instruction: Record the language in which the child's school textbooks are written. For example, if the textbooks are in Hindi, write 'Hindi'. If you are unsure about this, ask the respondent which language the child's Math textbook is written in and note the answer.

- **For out of school children (currently not enrolled in school):** Fill the child's information under 'Out of school' as:

- **Never Enrolled:** If the child has never been enrolled in school, then put a tick under 'Never enrolled'.
- **Drop Out:** If the child has dropped out of school, then put a tick under 'Drop out'. Note the Std. in which the child was studying when she dropped out, irrespective of whether she passed or failed in that Std. Probe carefully to find out these details. Also note the actual year when the child left school. For example, if the child dropped out in 2012 write '2012'. Similarly, if the child dropped out in the last few months of this year, write '2018'.

- **Tuitions:** Ask the respondent if the child (aged 3-16) takes any tuition, meaning paid classes outside school.

- If they take classes, then ask how much the parents pay for the child's tuition per month.
- If the respondent cannot tell you the payment made per month, then leave the box blank.
- If the child takes more than one paid tuition class, then add the payment for all the classes (per month) and write the total amount paid for the child's tuition classes per month.

Father's background information: At the end of the entry for each child, we ask for the age and schooling information of the child's father. We will only write this information if the father is alive and regularly living in the household.

If the father is dead or not living in the household, do not ask for this information. If the father has died or is divorced and the child's stepfather (mother's present husband) is living in the household, we will include the stepfather as the child's father. While recording the father's education, record the last class he has completed. For graduates, write B.A., B.Com. etc.

HOUSEHOLD INDICATORS

All information on household indicators is to be recorded, based as much as possible, on observation. If for some reason you cannot observe them, note what is reported by the respondent/household members only and not by others. In case of assets like TV and mobile phone, ask whether it is there in the household and whether it is owned by the household or not. Some households might be hesitant to give this information. Explain to them that this information is being collected in order to link the education status of the child with the household's economic conditions.

- **Type of house (the child lives in) are categorized as follows:**

- **Pucca House:** A pucca house is one which has walls and roof made of the following material:
  - Wall material: Burnt bricks, stones (packed with lime or cement), cement concrete, timber, ekra etc.
  - Roof Material: Tiles, GCI (Galvanised Corrugated Iron) sheets, asbestos cement sheet, RBC (Reinforced Brick Concrete), RCC (Reinforced Cement Concrete), timber etc.

- **Semi-Kutcha house:** A house that has fixed walls made up of pucca material but roof is made up of material other than those used for pucca houses.

- **Kutcha House:** The walls and roof are made of material other than those mentioned above, like unburnt bricks, bamboos, mud, grass, reeds, thatch, loosely packed stones etc.

- **Motorized 4-wheeler:** Ask the respondent and mark 'Yes' if the household owns a motorized 4-wheeler like a car, jeep etc., otherwise mark 'No'.

- **Motorized 2-wheeler:** Ask the respondent and mark 'Yes' if the household owns a motorized 2-wheeler like a motorcycle/scooter, otherwise mark 'No'.

- **Electricity in the household:**

- Mark 'Yes' or 'No' by observing if the household has wires/electric meters and fittings, bulbs or not.
- If there is an electricity connection, ask whether the household has had electricity at any time on the day of your visit, and not necessarily when you are doing the survey.

- **Toilets:** Mark 'Yes' or 'No' by observing if there is a constructed toilet in the house. If you are not able to observe, then ask whether there is a constructed toilet or not.

- **Television:** Mark 'Yes' or 'No' by observing if the household has a television or not. If you are not able to observe, then ask. It does not matter if the television is in working condition or not.

- **Mobile phone:** Mark 'Yes' if the household has a mobile phone, otherwise mark 'No'. In the next question, mark 'Yes' even if one mobile phone in the household is a smartphone. If there is no smartphone in the household, then mark 'No'. A smartphone is a phone with internet access.

- **Reading material:**

  - **Newspaper:** Mark 'Yes' if the household gets a newspaper every day. If not, mark 'No'.

  - **Other reading material:** This includes story books, magazines, comics, etc. but does not include calendars, religious books or textbooks. If any of the above reading material is available, mark 'Yes', otherwise mark 'No'.

- **Other questions for the household:**

  - Mark 'Yes' if anyone (apart from the mother(s) and father(s) whose background information has already been recorded earlier) in the household has completed Std. 12.

  - Mark 'Yes' if anyone in the household knows how to use a computer.

  - Mobile number of the household: Please note the mobile number in the box at the bottom of the sheet. Explain to the household members that the mobile number will only be used for the recheck process and not for any other purpose, and will not be shared with anyone else.

Note the end time of the survey.

If you do not get an answer for a question in the Household Survey Sheet, leave the appropriate box blank.

What to do with children?

After filling the household information in the household survey sheet, you must test all children aged 5-16 in the household. Use the testing tool booklet to test each child and record the responses in the household survey sheet.
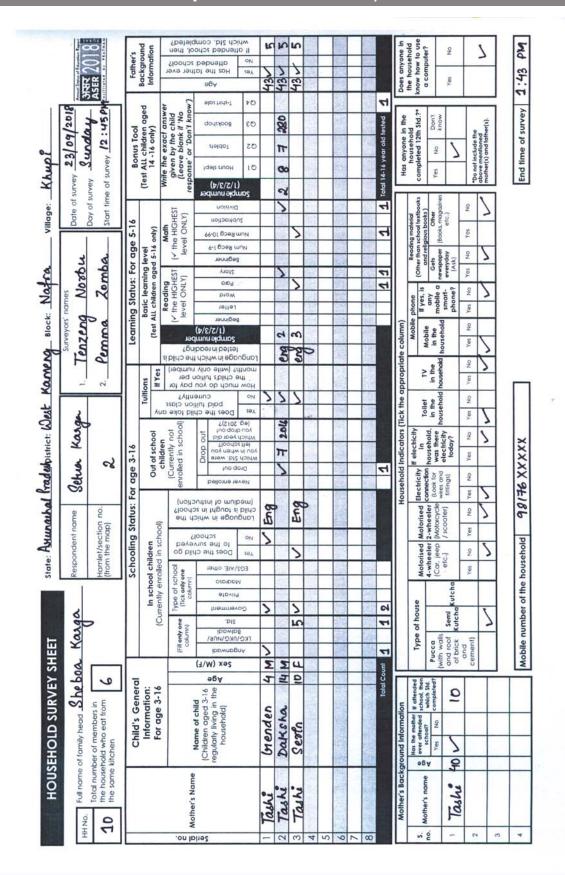
Who and what to test: You will test every child listed on the household survey sheet who is in the age group of 5-16 years, using the basic reading and arithmetic tool to find out the highest level they can do comfortably. In addition, older children in the age group 14-16 will also be tested on the bonus tool to assess their ability to apply basic arithmetic skills to everyday tasks.

How to we test: It is very important to be in the right frame of mind while assessing children. We are not going to the village/household as evaluators. **Our objective is to find out the highest level that the child can do comfortably.**

Therefore, it is important to follow the guidelines given below while testing children:

- **Relaxed environment for the child:** Establish a relaxed environment by having a friendly conversation with the child before you start assessing the child. For example, ask the child about her favorite game/ sport, food, friend, festival, story, song; whether she has been to a fair and what did she enjoy the most in it, etc. When you feel that the child is comfortable, show her the tool and tell her that the tool has simple activities you would like her to participate in and that it is not an exam or test. Make sure that you and the child are seated at the same level, i.e. if you are sitting on a chair, then the child should also be seated on a chair. Try not to administer the test while standing.

- **No pressure on the child from others:** Often family members and neighbors gather around to watch how the child is performing. This can make the child nervous. The surveyors should try to make sure this does not happen. One of the surveyors can talk to the adults or do some activities with the other children while the other surveyor assesses the child.

- **Encouragement and patience with the child:** Encourage the child by appreciating the effort she is making. Be patient with her while she is reading or solving arithmetic problems. Give the child ample time to read, think and solve. Do not hurry her.

- **Child's familiarity with the tool:** To establish the highest level at which the child can comfortably do different tasks, you may need to take the child through a series of tasks until you can decide the level at which she really is. Practice and familiarity with a task improves the child's performance. For example, the child may not be able to read a simple paragraph fluently, but after successfully attempting an easier task like reading words, she may be able to read the same paragraph better. This is because now she is more comfortable with the tool and tasks. Hence, we give her another chance at reading the paragraph. In the case of solving subtraction/division problems in the arithmetic tool, ask the child to check her work once again if you think she has made careless mistakes.

- **Different samples for different children:** Each testing tool has 4 samples. In order to ensure that the children are not copying from each other, please use a different sample of the tool for children in the same household. Make sure you use all 4 samples equally during the entire survey in the village. This means that if you have finished testing the last child in a household using sample 3, then start the testing in the next household with sample 4.

For a step by step explanation of the testing process, please refer to the 'ASER assessment task' section of this report on pages 32-36.

HOUSEHOLD SURVEY SHEET

State: Arunachal Pradesh District: West Kameng Block: Nafra Village: Khupi

HH No. **10**

Full name of family head: Sheboa Kaiga

Total number of members in the household who eat from the same kitchen: **6**

Respondent name: Sheboa Kaiga

Hamlet/section no. (from the map): **2**

Surveyors' names:
1. Tenzeng Norbu
2. Pemma Zomba

Date of survey: 23/09/2018
Day of survey: Sunday
Start time of survey: 12:45 PM

ASER 2018

Child's General Information: For age 3-16

Serial no.	Mother's Name	Name of child	Age	Sex (M/F)
1	Tashi	Grenden	4	M
2	Tashi	Daksha	14	M
3	Tashi	Seeln	10	F

Schooling Status: For age 3-16

In school children (Currently enrolled in school) — Government / Private / Madrasa / EGS/AIE other

Type of school: Government (ticked for children)

Language in which the child is taught in school (medium of instruction): Eng / Eng

Out of school children — Drop out / Never enrolled

Total Count: 1 1 2

Learning Status: For age 5-16

Basic learning level — Reading / Math

Language in which the child is tested in reading: eng 2 / eng 3

Bonus Tool (Test ALL children aged 14-16 only)

Sample number (1/2/3/4): 2 / 3

Q1 Hours slept: 8 / 7
Q2 Tablets: 7
Q3 Bookshop: 280

Total 14-16 year old tested: 1

Father's Background Information

Has the father ever attended school? Age / Yes / No / If attended school, then which Std. completed?

43 ✓ 5
43 ✓ 5
43 ✓ 5

Household Indicators (Tick the appropriate column)

Type of house: Pucca / Semi Kutcha / Kutcha

Motorised 4-wheeler (Car, jeep etc.): No
Motorised 2-wheeler (Motorcycle / scooter):
Electricity connection: Yes
If electricity in household, was there electricity today?: Yes
Toilet in the household: Yes
TV in the household: No
Mobile in the household: Yes
Mobile phone — If yes, is any mobile a smart-phone?: Yes
Gets newspaper everyday (AAK): No
Reading material (Other than school textbooks and religious books): Other (Books, magazines etc.): No

Has anyone in the household completed 12th Std.?: No

Does anyone in the household know how to use a computer?: No

Mobile number of the household: 99176 XXXXX

End time of survey: 2:43 PM

Mother's Background Information

s. no.	Mother's name	Age	Has the mother ever attended school? Yes/No	If attended school, then which Std. completed?
1	Tashi	40	✓	10
2				
3				
4				

What to do in a school?

Purpose: To collect information on school enrolment, attendance, and basic facilities.

Refer to pages 277 and 278 for the School Observation Sheet.

Visit any government school (Std. 1 to 7/8) in the village. If there is no school in the village which has classes from Std. 1 to 7/8, then visit the government school in the village which has the highest enrolment in Std. 1 to 4/5. If there is no government school in the village with classes from Std. 1 to 4/5, then do not visit any school. In the top left box of the School Observation Sheet, tick according to the school visited.

- Meet the Head Master (HM). If the HM is not present, meet the seniormost teacher. The HM/seniormost teacher is your respondent. Explain the purpose and importance of ASER and give him/her the letter. Be very polite. Assure the respondent and teachers that the name of the school will not be shared with anybody.
- Ask the respondent for his/her phone number for the purpose of recheck. Explain that the number will not be used for any other purpose.
- Note the time of entry, date and day of visit to the school.
- Ask the HM for the enrolment register or any official document for the enrolment figures in that school.

CHILDREN'S ENROLMENT AND ATTENDANCE

- Ask for the enrolment registers of all the classes to fill in the enrolment numbers. If a class has many sections, then take the total enrolment. If the enrolment register is not available or the HM refuses to show it, then write the enrolment numbers given by the HM.
- After filling in the enrolment, move around to the classrooms/areas where children are seated and note their attendance class-wise by counting them yourself. You may need to seek help from the teachers to distinguish children class-wise as they are often found seated in mixed groups. In such cases, ask children belonging to a particular class to raise their hands. Count the number of raised hands and accordingly fill the same in the observation sheet, class-wise. Please note that only children who are physically present in the class while you are counting should be included.
- Attendance of class with many sections: Take a headcount of the individual sections, add them up and write the total attendance.

OFFICIAL MEDIUM OF INSTRUCTION IN THE SCHOOL

- Note the official language used as the medium of instruction.

- If the school has more than 1 official medium of instruction, note all of them in the box provided.

TEACHERS

- Ask the following and mark accordingly. Do not include Anganwadi teachers or teachers appointed for pre-primary classes while counting teachers. Only include teachers for Std. 1 or higher.
- Ask the respondent and note the number of teachers appointed. Acting HM will be counted as a regular teacher. HM on deputation in the surveyed school will be counted under the regular HM category. The number of regular government teachers does not include the HM.
- Observe how many HMs/teachers are present and note the information.
- If the school has para-teachers, mark them separately. Para-teacher is a contract teacher with a different pay scale than that of a regular teacher. In many states para-teachers are called by different names such as Shiksha Mitra, Panchayat Shikshak, Vidya Volunteer etc.
- Do not include NGO volunteers in the list of teachers.

CLASSROOM OBSERVATIONS

This section is for Std. 2 and Std. 4 only. If there is more than one section for a class, then randomly choose any one to observe. You may need to seek help from the teachers to distinguish children class-wise as more than one class may be seated together.

Observe the following and fill accordingly:

- Seating arrangement of children: Are two or more classes sitting together in the same class or is a single class sitting separately?
- Is there a blackboard where the children are sitting? If yes, could you write on it easily?
- Was there any teaching material other than textbooks available like charts on the wall, picture/story cards etc.? Material painted on the walls of the classroom is not counted as teaching material.
- Where are children sitting? In the classroom, in the verandah or outside?

MID-DAY MEAL (MDM)

- Ask the respondent whether the mid-day meal was served in the school today.
- Observe if there is a kitchen/shed for cooking the mid-day meal.
- Observe if any food is being cooked in the school today.
- Observe whether the mid-day meal was served in the school today (Look for the evidence of the mid-day meal in the school like dirty utensils or meal brought from outside). Mark accordingly.

FACILITIES OBSERVATION

Observe the following and fill accordingly:

- Observe and count the total number of pucca rooms (excluding toilets). Also observe and count the total number of pucca rooms used for teaching on the day of the survey.
- Observe if there is an office/store/office-cum-store. Tick under 'Yes' if even one is present.
- Observe if there are library books in the school (even if kept in a cupboard).
- If there are library books, then observe if library books are being used by children.
- Observe if there is a hand pump/tap. If yes, check whether you could drink water from it. If there is no hand pump/tap or you could not drink water from it, check whether drinking water is available in any other way.
- Observe if the school has a complete boundary wall or complete fencing. It can be with or without a gate.
- Observe if the school has wires/electric meters and fittings, bulbs or not. If there is an electricity connection, ask whether the school has had electricity any time on the day of your visit to school, not necessarily when you are doing the survey.
- Observe if there are computers in the school to be used by children. If yes, then observe if computers are being used by children.

PHYSICAL EDUCATION

- Physical education includes all outdoor games with equipment (such as cricket, football etc.) or without equipment (such as yoga, kho-kho, kabaddi etc.) as well as indoor physical education games (such as table tennis, badminton etc.).

Observe/ask the following and fill accordingly:

- Ask the respondent if there is a timetable for the school and mark accordingly.
- If a timetable exists, request the respondent to show the timetable and observe if there is a physical education period in it. If you were able to observe the period in the timetable, then mark 'Yes', else mark 'No'.
- If there is no timetable, ask the respondent if dedicated time is allocated to physical education every week.
- Ask if a separate teacher has been appointed for physical education. A 'separate teacher' for physical education means a teacher who is responsible specifically for teaching physical education. Include this teacher even if he/she sometimes teaches another subject. For example, a physical education teacher who also takes a science class.

- If a separate teacher has not been appointed for physical education, ask if one or more teachers take the physical education class. 'Any other teacher' implies a teacher responsible for another subject who sometimes also teaches the physical education class. For example, a math teacher assigned with the additional responsibility of taking the physical education class would come under this category.
- Observe if there is a playground within the school premises. A playground is an area with a level playing field and/or playing equipment (e.g. slides, swings etc.). If there is a playground within the school premises, do not ask the next question.
- If there is no playground within the school premises, ask the respondent if there is any other playground where children play during school hours.
- Observe if any sports equipment is available in the school (even if kept in a cupboard). Do not include board games like ludo, chess, carom, and include indoor games like table tennis, badminton etc.
- Observe if the children were engaged in any physical education activity under the supervision of a teacher (physical education teacher/any other teacher). 'Under the supervision of a teacher' means that the teacher taking the physical education period was guiding the activity.

TOILETS

- Observe whether the school has a common toilet, a separate toilet for girls, a separate toilet for boys and a separate toilet for teachers.
- Ask the HM, any teacher or any child if you cannot tell who the toilets are for.
- For each type of toilet facility that you find at the school, note whether it is locked or not. If it is unlocked, note whether it is usable or not. A usable toilet is a toilet with water available for use (running water/stored water) and a basic level of cleanliness.
- If more than 1 common toilet or other types of toilets are there in the school, then take information about the toilet that is in a better condition.

SCHOOL MANAGEMENT COMMITTEE (SMC)

- Ask the respondent if currently there is an SMC for this school.
- If there is an SMC for the school, then ask when the last meeting of SMC was held.

PRE-PRIMARY CLASS

- Observe if there is an Anganwadi in the school.
- Observe if there is a separate pre-primary class in the school (not an Anganwadi). If you are unable to locate, ask the respondent and observe yourself.

ASER 2018

SCHOOL OBSERVATION SHEET

State: Arunachal Pradesh   **District:** West Kameng   **Block:** Nafra

Name of the village: Khupi   **Name of the school:** Kousamang Primary School

INSTRUCTIONS: Visit any government school (Std. 1 to 7/8) in the village. If there is no school in the village, then visit the government school in the village which has classes from Std. 1 to 7/8, then visit the government school in the village which has the highest enrolment in Std. 1 to 4/5. Do not visit a government school if it has no classes from Std. 1 to 4/5. If there is no government school in the village with classes from Std. 1 to 4/5 then do not visit any school. Meet the Head Master of the school. In the absence of the HM, meet the most senior teacher. Documents required from the school: Register with enrolment details of children.

Arrival time in school	School from which Std. to which Std.? (tick any one)		Respondent's information			Date of survey	Day of survey	Surveyors' names
	Std. No 4/5	Std. 1 to 6/7/8	Name	Puiya Sharma	Others	22/09/2018	Saturday	1. Tenzeng Norbu
11:00 AM	✓		Designation (Tick)	HM ✓ Teacher				2. Perma Zomba
			Phone number	97160 xxxxx				

2. OFFICIAL MEDIUM OF INSTRUCTION IN THE SCHOOL
1. English
2.
3.

1. CHILDREN'S ENROLMENT AND ATTENDANCE	Std. 1	Std. 2	Std. 3	Std. 4	Std. 5	Std. 6	Std. 7	Std. 8
Children's enrolment (Take from register yourself). If more than 1 section, write the total.	6	11	14	8	2			
Children's attendance today*	5	8	8	3	2			

*Note: Take headcount of children present. If more than one class is seated together, ask the children of each class to raise their hands separately and count accordingly. If more than 1 section, do headcount in all sections and write the total.

3. TEACHERS

(Do not include anganwadi and pre-primary teachers)	Number appointed (Ask)	Number present (Observe)
Head Master (Do not include acting HM)	1	1
Regular government teachers (Do not include Head Master)	1	1
Para-teachers	0	0

6. FACILITIES OBSERVATION

Total number of pucca rooms in the school excluding toilets (count yourself and write)	5
Total number of rooms being used for teaching today (count yourself and write)	3

Tick the relevant box	Yes	No
Did you see an office/store/office-cum-store?	✓	
Did you see library books in the school?		✓
If yes, did you see library books being used/read by children?		✓
Did you see a handpump/tap?		✓
If there is a handpump/tap, could you use it to drink water?		
If there is no handpump/tap or it is not usable, did you see drinking water available?		✓
Did you see a complete boundary wall or fencing?	✓	
Is there electricity connection in the school? (Look for wires & fitting)		✓
If yes, was there electricity in the school today? (Observe/ask)		
Did you see computers to be used by children in the school?		✓
If yes, did you see children using computers?		

4. CLASSROOM OBSERVATIONS

Tick the relevant box	Std. 2		Std. 4	
Observe (If more than 1 section, choose any 1)	Yes	No	Yes	No
Are the children of this Std. sitting with children from any other Std.?	✓			✓
Is there a blackboard for this class?	✓		✓	
If yes, could you easily write on the blackboard?	✓		✓	
Apart from textbooks, did you see any other TLM (e.g. other books, charts on the wall, picture/story cards etc.) in the room?		✓		✓

Where is the class seated? (tick one)	Classroom	✓	✓
	Verandah		
	Outdoor		

5. MID-DAY MEAL

Tick the relevant box	Yes	No
Was mid-day meal served in the school today? (Ask)		✓
Is there a kitchen/shed for cooking mid-day meal? (Observe)		✓
Did you see food being cooked in the school? (Observe)		✓
Did you see any evidence of the meal being served to the children today (Look for evidence like dirty utensils or meal brought from outside etc.)? (Observe)		✓

7. PHYSICAL EDUCATION*

Tick the relevant box	Yes	No
Is there a timetable in the school? (Ask)	✓	
If yes, were you able to observe a physical education period in the timetable? (Observe)	✓	
If not, is there a dedicated time allocated to physical education every week? (Ask)		
Has a separate teacher been appointed for the physical education class? (Ask)		✓
If a separate teacher has not been appointed, do any other teachers take the physical education class regularly? (Ask)	✓	
Did you see a playground in the school? (Observe)	✓	
If not, is there any other playground where children play during school hours? (Ask)		
Did you see sports equipment in the school? (Observe) (Do not include board games like ludo, chess, carrom etc.)		✓
Did you see children engaging in any physical education activity under the supervision of a teacher? (Observe)		✓
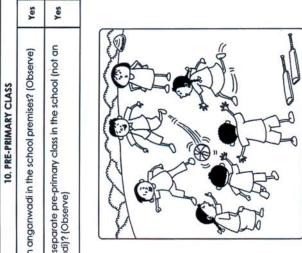
* Physical education includes all outdoor games with equipment (such as cricket, football etc.) or without equipment (such as yoga, kho-kho, kabaddi etc.) as well as indoor games (such as table tennis, badminton etc.).

8. TOILETS (by observation)

Toilets*	Is there a toilet?		If there is a toilet, was it locked?		If unlocked, was it in a usable condition?	
	Yes	No	Locked	Unlocked	Yes	No
Girl	✓		✓			
Boy	✓			✓	✓	
Common		✓				
Teacher		✓				

*Note: If there is more than one toilet of a particular type, then take information of the toilet in a better condition.

9. SCHOOL MANAGEMENT COMMITTEE (SMC)

	Yes	No
Currently is there a School Management Committee (SMC) for this school? (Ask)	✓	
If yes, then when was the last meeting of the School Management Committee (SMC) held? (Ask)	04_08_2018 (dd/mm/yyyy)	

10. PRE-PRIMARY CLASS

	Yes	No
Is there an anganwadi in the school premises? (Observe)		✓
Is there a separate pre-primary class in the school (not an anganwadi)? (Observe)		✓

Departure time from school 12:15 PM

ASER 2018 – Quality control

Quality control processes form an integral part of the ASER architecture, and quality control processes are reviewed and improved each year in order to ensure the credibility of ASER data. For ASER 2018 as well, these processes were laid out for every stage of the survey and were executed by the Master Trainers and ASER state team members in every surveyed district.

The quality control processes can be broadly divided into internal field-based processes, data entry processes and external partner rechecks.

FIELD PROCESSES

These comprise 'monitoring' and 'recheck' activities. Each year these processes are reviewed and strengthened in order to improve the quality of the data collected.

Monitoring: During the survey, quality was controlled via oversight of field activities in selected villages while the survey was in progress. As in previous years, the ASER 2018 monitoring process comprised two kinds of activities:

- **Field monitoring:** The ASER survey in each district was led by two Master Trainers who underwent training at the state level. Their responsibilities included personally monitoring survey teams who were evaluated during the district level training as possibly requiring additional support during the actual field survey. Master Trainers monitored approximately 6 villages out of the 30 villages surveyed in each district.

- **Phone monitoring:** Master Trainers made phone calls to all the surveyors as the survey rolled out in a district. Information regarding the progress of survey activities was collected during the calls and surveyors' doubts were clarified. This helped to provide immediate corrective action and to avoid repetition of mistakes in case of a two-weekend survey.

Recheck: Information collected during the survey was verified at various levels. The following recheck activities were conducted in ASER 2018:

- **Desk and phone recheck:** On the completion of the survey in a district, Master Trainers conducted desk rechecks of the survey booklets received for all surveyed villages, as far as possible in presence of the surveyors. In addition, Master Trainers telephoned at least 8 out of 20 surveyed households in each village. These procedures enabled quick identification of villages which were not surveyed correctly.

- **Field recheck:** Based on the information collected from the desk and phone rechecks, villages were identified for an in-person field recheck by the Master Trainers. In each such village, 50% of all surveyed households were rechecked. This process involved verification of the key parameters of the survey - sampling, selection of children and testing.

- **Desk and field recheck by ASER State Teams:** After a preliminary desk recheck by the Master Trainers, the ASER State Teams rechecked the survey booklets of most districts. Based on this desk recheck and the performance of Master Trainers, they also carried out a field recheck of selected villages.

- **Cross-state field rechecks:** As the last stage to strengthen the quality control process, ASER state team members switched states and conducted a cross-state recheck. Some districts were chosen purposively and others were selected randomly. The recheck process remained the same.

Overall, 54.6% villages surveyed in ASER 2018 were either field monitored, field rechecked or both by ASER teams.

DATA ENTRY

Data for the survey was recorded in hard copy survey booklets. To compile and then process this data for analysis, it was entered into a database (MS Access or MySQL). For each question in the survey, rules and validations were in place to control incorrect entries.

Once the software was ready, data entry centres were selected across the country. Due to the scale and short timeline of the survey, ensuring smooth movement of data to the entry centres was vital. The preference was to choose a centre that was within the surveyed state, so that the data could reach without delay. For ASER 2018, 11 data entry centres were selected across the country and their staff was trained in person on how to enter ASER data.

After data entry was completed, every 5th entry was cross-checked with hard copies to ensure that correct data had been entered. If more than 2 mistakes were found, data for the entire village was cross-checked. A final cross-check was done centrally between child-wise data and a sheet with compiled data. If there was more than a 2% difference between the two data sets, then the entire district's data was cross-checked. Additionally, this year, a few members from ASER state teams cross-checked the data entry for at least 5 districts for each state.

EXTERNAL RECHECK

An external recheck is periodically conducted to provide objective feedback regarding the quality of the data collected. In 2018, external rechecks were conducted in Himachal Pradesh, Punjab and Karnataka. 3 organizations conducted external field rechecks in selected districts and villages that had been surveyed.

At the end of all these layers of quality control checks, villages with poor survey quality were either resurveyed or dropped from the data set.

For a more detailed report on the quality control framework of ASER, please visit www.asercentre.org

Annexures

Age-grade distribution in sample 2018

All India

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	77.9	78.4	81.1	71.2	30.5	9.5	3.4	6.1	6.2				15.4
II			14.8	21.9	48.1	30.1	9.0						13.4
III					15.8	40.6	32.2	10.4		4.3	8.5	7.5	13.0
IV						14.1	40.0	29.4	9.0	5.0			12.6
V	22.1	21.6					11.5	38.0	32.1	11.0			12.8
VI			4.1	6.9	5.7			11.7	38.8	30.2	10.7	7.9	11.7
VII						5.8	3.8		11.2	36.4	33.3	19.8	10.9
VIII								4.4	2.7	13.1	47.5	64.8	10.1
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Andhra Pradesh

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	78.6	83.4	88.8	75.2	21.4	5.6	1.1	0.7	3.2				13.6
II			9.7	23.0	56.5	20.6	5.1						13.4
III				19.8	53.7	21.0	5.3			3.6			13.6
IV					17.4	54.5	24.4	6.4					13.5
V	21.4	16.6					15.7	54.1	22.6	5.2	2.5	3.2	12.4
VI			1.5	1.8	2.3			14.0	53.3	23.4	7.2		11.5
VII						2.8	2.5	1.4	12.9	54.7	27.1	18.2	11.3
VIII									1.7	13.0	63.2	78.6	10.7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Arunachal Pradesh

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	96.0	91.3	80.7	63.5	29.5	16.0	5.3	3.7	4.5	4.4	3.4	3.0	17.1
II			13.7	26.7	45.0	21.4	13.6	6.7					13.3
III			5.2	6.0	18.4	38.2	33.5	17.7	7.1	7.5			15.0
IV						17.6	30.7	26.9	14.6	12.8	5.3	6.5	13.5
V	4.0	8.7				5.2	14.8	28.8	32.3	15.3	10.2	7.2	13.0
VI			0.4	3.8	7.2			11.7	28.4	25.8	26.0	18.4	11.9
VII						1.7	2.1		10.6	20.4	28.3	20.4	8.4
VIII								4.6	2.5	13.8	26.8	44.5	7.8
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Assam

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	72.9	81.5	88.1	75.6	36.8	10.0	2.4	5.0	1.6	4.2	4.0	6.0	13.4
II			8.1	19.8	41.3	31.4	9.7						10.9
III					17.8	42.7	41.1	15.1	7.2				15.1
IV						12.6	35.7	36.3	14.1	6.5			13.9
V	27.1	18.6					9.2	32.9	40.3	14.8	6.2		13.6
VI			3.8	4.6	4.1			8.5	29.2	39.0	15.6	8.1	12.6
VII						3.3	2.0	2.3	6.4	28.2	40.9	22.8	11.1
VIII									1.2	7.4	33.2	63.1	9.4
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Bihar

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	70.4	70.0	71.1	61.1	32.5	14.4	7.8	4.1	5.8	7.7	6.5	5.3	16.5
II			21.4	26.1	39.4	29.7	13.8	7.6					14.3
III				8.5	17.4	29.1	30.2	14.1	6.9				12.9
IV					7.2	16.6	27.1	26.5	12.4	8.0			12.6
V	29.6	30.0				6.7	13.4	27.2	29.0	15.7	8.8	5.9	12.8
VI			7.6	4.3	3.6		5.7	13.6	28.8	28.3	16.5	10.5	11.9
VII						3.6	1.9	7.0	12.5	24.4	31.8	21.3	9.6
VIII									4.6	15.9	36.4	57.1	9.5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Chhattisgarh

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	69.0	59.4	87.2	82.0	23.6	3.1	4.3	0.9	5.9	2.4	2.3	6.2	13.6
II			10.5	14.7	61.6	30.1							13.2
III					11.7	51.8	28.9	5.2					12.1
IV						13.1	53.8	32.3					12.8
V	31.0	40.6					10.6	50.1	31.8	5.4			12.6
VI			2.3	3.4	3.1	2.0		9.9	49.0	29.5	5.2		11.6
VII							2.4	1.6	11.6	50.0	34.7	17.1	12.3
VIII									1.7	12.6	57.8	76.7	11.8
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Gujarat

Std	3	4	5	6	7	8	9	10	11	12	13	14	Total
	%	%	%	%	%	%	%	%	%	%	%	%	%
I	86.7	67.3	93.7	90.3	9.2	0.9	0.5						12.7
II			5.8	8.4	79.9	11.0		1.2					11.7
III					9.8	76.4	13.3		3.2				12.0
IV						10.7	75.6	15.3		3.0	3.3	6.3	11.9
V	13.3	32.7	0.5	1.3			9.1	75.1	13.6				12.3
VI					1.1			7.5	73.2	17.1			12.3
VII						1.0	1.5		9.1	70.6	17.6	15.4	13.0
VIII								0.9	1.0	9.3	79.1	78.4	14.1
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Haryana

Std	3	4	5	6	7	8	9	10	11	12	13	14	Total
	%	%	%	%	%	%	%	%	%	%	%	%	%
I	89.2	89.4	81.0	58.2	23.8	6.2	1.9	2.6					15.1
II			15.1	35.0	45.6	25.4	6.9		3.3				13.4
III				5.3	24.4	40.6	25.0	8.6		4.2	5.2	4.4	12.8
IV					5.1	22.4	39.4	21.8	6.7				11.9
V	10.8	10.6	4.0				22.6	41.6	22.9	6.5			12.4
VI				1.6				21.0	42.4	25.2	8.9	6.0	12.2
VII					1.1	5.5	4.1	20.7	38.9	30.5	16.9		11.1
VIII								4.5	4.1	25.3	55.4	72.6	11.1
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Himachal Pradesh

Std	3	4	5	6	7	8	9	10	11	12	13	14	Total
	%	%	%	%	%	%	%	%	%	%	%	%	%
I	33.9	60.1	95.7	66.9	12.2	1.2	1.5						12.1
II				31.3	59.1	11.2		2.4					12.0
III					26.8	60.5	19.3		3.6				14.2
IV						24.7	47.3	12.0		2.2			11.4
V	66.1	39.9	4.3				29.6	50.7	14.3		1.8	3.3	12.6
VI				1.8				31.2	50.2	11.0			12.2
VII					2.0	2.5	2.4		28.6	47.8	21.9	13.8	12.5
VIII								3.6	3.3	39.0	76.3	82.9	13.1
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Jammu and Kashmir

Std	3	4	5	6	7	8	9	10	11	12	13	14	Total
	%	%	%	%	%	%	%	%	%	%	%	%	%
I	68.2	72.6	79.3	65.4	39.9	15.8	5.4	6.6					14.6
II			17.8	26.5	35.5	37.9	14.5		6.4	2.9			13.3
III					17.5	25.8	37.0	12.4			1.9		11.8
IV						14.8	27.2	35.4	12.1	5.7		5.5	12.8
V	31.8	27.4	2.9	8.1			12.5	30.0	34.7	15.5	5.0		12.9
VI					7.1		12.0	32.9	35.1	12.1	6.2		12.3
VII						5.7	3.4		11.7	27.2	45.2	20.1	11.8
VIII								3.6	2.3	13.6	35.8	68.1	10.6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Jharkhand

Std	3	4	5	6	7	8	9	10	11	12	13	14	Total
	%	%	%	%	%	%	%	%	%	%	%	%	%
I	85.3	80.0	77.2	61.4	28.1	11.2	5.2	2.7	4.5				16.8
II			17.2	28.6	38.9	24.3	11.0	6.1		6.2			13.3
III				7.1	23.1	36.0	28.4	13.0	6.9		6.3		13.7
IV					6.7	18.0	32.6	25.9	12.1	7.9		6.0	12.7
V	14.7	20.0				7.6	14.9	31.7	29.7	15.3	8.2	5.3	13.1
VI			5.6	3.0			6.6	14.7	30.1	27.8	16.4	10.8	11.7
VII					3.2	2.8			12.7	29.0	31.0	23.2	9.9
VIII							1.3	5.8	4.0	13.8	38.0	54.8	8.8
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Karnataka

Std	3	4	5	6	7	8	9	10	11	12	13	14	Total
	%	%	%	%	%	%	%	%	%	%	%	%	%
I	84.0	67.1	85.1	91.9	43.8	2.2	3.8						12.9
II			13.2	6.5	48.4	49.3		4.6					12.0
III					6.5	39.4	54.3		5.1				13.0
IV						7.0	35.9	52.1		1.0			13.4
V	16.0	32.9					5.1	37.2	56.8	5.0	1.4	2.4	13.7
VI			1.8	1.6				5.0	32.2	55.6	5.0		12.7
VII					1.4	2.0			5.4	31.7	56.2	12.7	12.1
VIII							0.9	1.1	0.4	6.7	37.4	84.9	10.3
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Kerala

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	42.9	41.4	87.8	87.4	18.3	2.5	0.6	3.0					13.1
II			6.8	12.4	71.3	22.5			0.3				13.8
III				8.6	65.1	21.4				2.4	3.3	2.2	12.6
IV					9.5	68.2	18.9						12.2
V	57.1	58.7	5.5	0.2	9.3	70.8	20.5						13.4
VI					1.8	6.8	64.6	22.9					10.9
VII						0.4	0.5	13.7	61.2	22.3	5.3		11.7
VIII							0.6	0.9	13.5	74.3	92.5		12.3
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Madhya Pradesh

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	82.4	82.9	86.5	65.4	19.8	5.9	1.8	2.9	2.5	3.8	5.0	4.2	14.2
II			10.3	27.8	52.5	21.7	6.3						13.1
III			5.3	21.1	47.2	22.3	6.7						12.9
IV					17.2	46.9	20.7	6.2					11.7
V	17.6	17.1	3.2	1.5	6.7	6.0	16.8	46.4	24.2	8.6			13.3
VI								16.4	47.0	26.3	8.2	7.3	12.4
VII						1.9	6.0	5.1	15.9	43.9	29.0	18.5	11.6
VIII								1.9	4.2	17.5	57.8	70.0	10.8
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Maharashtra

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	52.7	39.5	89.1	92.4	44.9	2.2	4.0	5.2	5.7	5.6	5.7	2.3	13.2
II			8.7	6.3	48.7	55.2							12.3
III				6.0	37.8	59.4							13.1
IV						32.5	59.9						13.3
V	47.3	60.5	2.2	1.3	0.4	4.8	29.5	61.5					12.7
VI								28.4	58.3				12.4
VII							4.2	5.4		31.0	57.6	11.2	12.0
VIII								4.4		5.0	36.8	86.6	11.0
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Manipur

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	24.8	60.5	85.0	71.4	47.2	16.8	4.2	1.7	1.5	5.6	1.6	2.2	13.8
II			13.1	23.3	38.0	35.5	15.4	6.2					13.3
III					12.7	35.6	41.2	22.5	10.5				15.9
IV						9.7	30.7	36.0	20.5	10.5	5.6		14.8
V	75.2	39.5	1.9	5.2	2.1	2.5	7.3	23.2	30.6	18.1	11.1	5.3	12.3
VI							1.1	8.5	28.0	31.9	19.0	11.8	12.1
VII								2.0	8.7	23.9	31.9	27.1	9.7
VIII									0.3	10.0	30.8	53.7	8.2
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Meghalaya

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	74.1	56.7	67.7	77.0	45.4	16.3	11.3	5.1	2.4	6.6	2.1	1.6	12.1
II			25.5	17.4	30.9	38.6	17.4	13.7	8.2				12.8
III					16.6	35.8	44.6	29.7	20.5	15.3	7.1	6.2	20.6
IV						7.0	21.8	25.9	23.7	19.0	12.1	9.0	15.5
V	25.9	43.3	6.8	5.6				18.8	26.7	25.5	21.6	16.7	15.4
VI					7.1			6.1	15.9	20.7	25.4	20.5	11.8
VII						2.4	4.9			11.0	20.5	27.0	7.8
VIII								0.8	2.5	1.9	11.2	19.2	4.0
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Mizoram

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	100.0	78.9	76.3	70.0	40.6	10.7	1.3	1.2	3.9	3.9	2.8	2.2	15.8
II			17.8	22.5	38.7	39.6	14.8	6.7					15.5
III				5.8	14.8	31.7	49.1	20.9	14.3	9.1			17.9
IV						12.0	25.7	38.9	27.8	20.0	12.2	5.1	17.0
V	0.0	21.1	5.9	1.7	5.9		6.1	21.2	24.0	16.2	6.4	2.3	9.3
VI						6.0		7.3	24.4	25.6	13.8	11.9	8.8
VII							3.0	3.8	5.5	19.2	29.7	19.9	7.7
VIII										6.1	35.1	58.7	8.0
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Nagaland

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	30.2	66.5	69.3	74.4	43.3	13.2	5.3	2.8	4.4	2.1	5.4	6.7	13.6
II			25.0	19.1	43.1	32.1	12.8	7.1					13.2
III				5.4	10.8	45.5	40.1	18.8	9.5	5.1			17.1
IV						7.8	34.8	36.2	19.8	12.1	7.3		15.5
V	69.9	33.5	5.7				5.8	30.7	36.5	18.3	10.2	6.9	13.4
VI				1.1	2.8		1.3	4.4	25.9	32.9	16.3	14.0	10.7
VII						1.5			4.0	25.3	35.6	28.6	9.8
VIII										4.2	25.2	43.8	6.7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Odisha

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	95.3	88.1	84.8	82.9	19.1	2.6	2.9						19.1
II			12.8	15.3	68.6	19.1		3.6					12.8
III					9.6	64.1	20.7		2.6				11.5
IV						10.4	66.9	17.8		6.8			10.8
V	4.7	11.9	2.4	1.8			7.8	70.0	20.3		5.5	8.6	12.4
VI					2.8	3.7	1.7	6.5	67.6	21.4			11.1
VII								2.1	8.0	63.6	20.0	11.6	11.7
VIII									1.5	8.2	74.5	79.8	10.7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Punjab

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	78.4	73.4	79.2	64.1	33.8	8.5	1.3	2.4					12.9
II			14.3	30.0	39.2	29.3	8.4		3.3				12.1
III					20.4	38.9	27.6	10.3		3.2			12.5
IV					5.3	18.5	40.2	29.9	8.7		3.3	2.9	13.1
V	21.6	26.7	6.5	5.9	1.3	4.8	19.2	35.8	29.2	7.7			12.6
VI							3.3	16.8	38.4	26.3	9.4	7.3	12.3
VII									17.9	41.8	35.8	21.3	12.9
VIII									2.6	21.0	51.5	68.6	11.6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Rajasthan

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	70.6	76.0	76.6	54.6	21.9	7.1	2.6	4.3					16.4
II			20.0	33.4	40.7	22.6	8.1		4.9				13.9
III				9.0	26.3	37.6	23.6	8.9		7.2	3.0	7.1	12.8
IV					8.2	22.1	36.5	24.2	10.0				12.4
V	29.4	24.0	3.4	2.9		8.0	19.8	35.1	24.9	11.5	5.4		12.4
VI					2.9		7.4	19.2	35.8	25.2	11.4	8.0	11.4
VII						2.6		6.7	18.3	33.9	30.2	22.1	10.5
VIII							2.0	1.7	6.2	22.3	50.1	62.8	10.2
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Sikkim

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	18.1	56.7	73.0	61.0	35.0	8.1	0.5	0.8					10.4
II			23.8	28.8	43.7	26.5	8.9		1.1				11.2
III				7.4	17.6	38.6	31.4	9.0		4.5			11.6
IV						22.1	40.7	28.5	10.5		1.3	5.3	12.4
V	81.9	43.3	3.3	2.8			13.9	39.2	37.2	20.8	7.4		14.9
VI					3.7	4.8	4.6	13.6	39.6	33.9	17.0	9.1	14.2
VII								7.0	8.5	30.5	36.6	23.7	12.8
VIII								1.9	3.1	10.4	37.7	61.9	12.6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Tamil Nadu

Age	3	4	5	6	7	8	9	10	11	12	13	14	Total
Std	%	%	%	%	%	%	%	%	%	%	%	%	%
I	42.7	41.8	92.6	68.7	7.6	0.5	1.1						10.9
II				27.6	72.0	8.5		1.3					12.4
III					17.9	68.3	8.2		1.1				12.2
IV						20.5	78.4	8.7		1.7			13.2
V	57.3	58.2	7.4				11.6	79.2	9.7		2.3	11.1	13.9
VI				3.7	2.6			10.0	76.2	15.5			12.9
VII						2.2	0.7		12.0	72.3	14.9	8.7	12.3
VIII								0.8	1.0	10.5	82.8	80.2	12.2
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Telangana

Age / Std	3	4	5	6	7	8	9	10	11	12	13	14	Total
I	43.2	76.1	84.2	73.5	39.2	10.4	2.3	2.3	3.5				15.0
II			14.0	20.0	44.6	30.0	10.3			5.2			13.2
III					13.2	45.6	34.0	12.1			3.2		14.7
IV						11.7	41.5	31.2	9.7			8.8	12.8
V	56.8	23.9	1.8	6.5			10.0	41.5	29.0	10.5			11.8
VI					3.0			11.2	45.3	28.4	9.9		11.5
VII						2.3	1.9	1.6	11.4	43.8	28.3	26.5	11.0
VIII									1.2	12.0	58.5	64.7	10.1
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Tripura

Age / Std	3	4	5	6	7	8	9	10	11	12	13	14	Total
I	50.0		92.5	94.4	50.6	2.2	0.0	1.8					10.0
II			7.5	5.6	45.4	62.8	11.6		1.5				12.3
III						29.4	67.7	10.3		2.9			13.1
IV					4.0		19.5	65.7	11.3		3.8		14.3
V	50.0					5.6		17.4	58.9	12.8		3.2	11.9
VI							1.2		26.9	62.5	12.2		13.6
VII								4.8		18.0	65.7	15.0	12.4
VIII										3.8	18.2	81.8	12.5
Total	100		100	100	100	100	100	100	100	100	100	100	100

Uttar Pradesh

Age / Std	3	4	5	6	7	8	9	10	11	12	13	14	Total
I	80.4	85.3	80.2	64.3	35.0	17.4	7.7	3.9	5.7	4.0			17.7
II			15.7	25.5	40.5	29.9	17.7	8.9			9.4	6.4	14.9
III				7.5	16.4	30.4	27.5	16.7	8.4	5.5			13.4
IV					5.8	14.3	28.4	23.8	15.0	10.0			12.3
V	19.6	14.7	4.1			5.6	13.4	26.8	26.7	16.4	10.3	8.1	12.4
VI				2.7				13.5	29.1	26.7	18.6	13.8	11.7
VII					2.3	2.5	5.3		11.6	24.2	28.3	24.7	9.5
VIII								6.4	3.6	13.2	33.4	47.0	8.2
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Uttarakhand
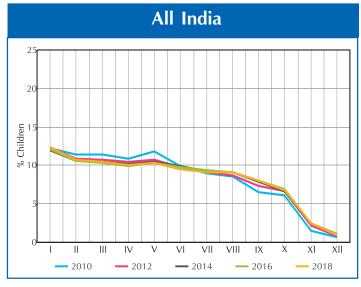
Age / Std	3	4	5	6	7	8	9	10	11	12	13	14	Total
I	85.6	71.3	86.6	68.8	29.3	9.3	4.4						13.1
II			12.4	24.6	48.0	30.3	11.1	5.2	5.9				12.8
III				5.3	17.3	42.7	34.7	10.4		7.9			13.2
IV					5.4	12.5	34.0	29.5	13.0		1.8		11.9
V	14.4	28.7	1.0				12.9	40.6	29.8	13.8	7.6	6.3	13.9
VI				1.4		5.1		10.1	34.5	27.9	13.0	11.7	11.9
VII							2.9	4.3	12.7	35.3	33.6	23.0	12.2
VIII									4.1	15.1	44.1	59.0	10.9
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

West Bengal
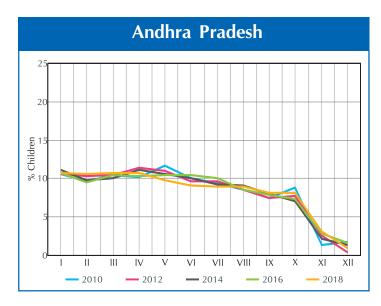
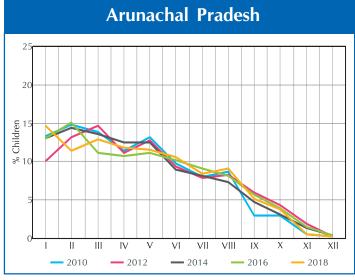| Age / Std	3	4	5	6	7	8	9	10	11	12	13	14	Total
I	38.0	70.5	90.9	83.2	58.1	15.4	2.5	3.1					17.3
II			5.9	13.3	32.3	52.0	13.6		4.4				13.7
III					8.1	26.9	54.7	15.4		4.7			13.0
IV							26.7	50.0	14.4		4.9		13.0
V	62.0	29.5	3.2	3.6				27.6	53.3	16.3		3.5	12.7
VI					1.5	5.7			18.2	30.6	10.7	6.1	7.9
VII							2.5	3.8	8.5	39.2	42.0	21.7	12.1
VIII									1.3	9.2	42.4	68.7	10.5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

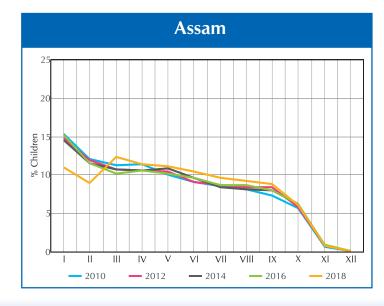# Grade-wise composition of children in sample over time

Because ASER samples households and not children, there is no control on the number of children from each grade who are surveyed each year. However, given the sampling methodology and the sample size, it is reasonable to expect that at the state level, similar proportions of children in each grade will be covered each year.
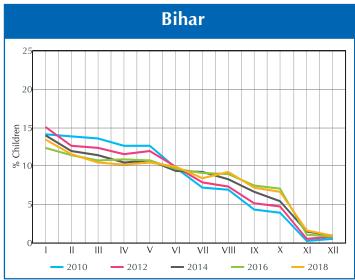
The graphs below show the distribution of the ASER sample in each state by grade of sampled children, in 2010, 2012, 2014, 2016 and 2018. As is evident, the distribution is similar across all years. This implies that trends in schooling and learning estimates presented by ASER reveal underlying population trends and are not an artefact of the sample or the methodology.
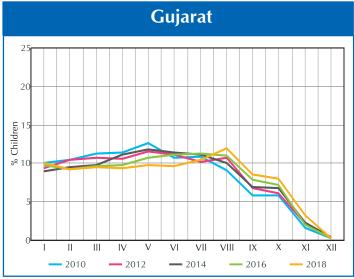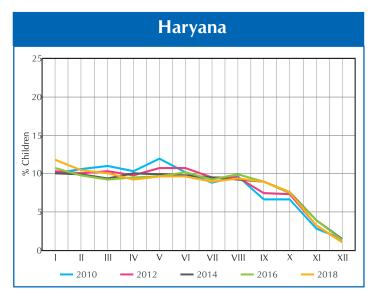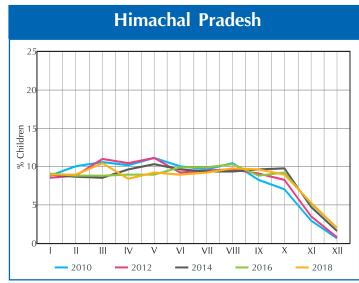
All India

Andhra Pradesh

Arunachal Pradesh

Assam

Bihar

Chhattisgarh

| | 2010 | 2012 | 2014 | 2016 | 2018 |

Gujarat

| | 2010 | 2012 | 2014 | 2016 | 2018 |

Haryana

| | 2010 | 2012 | 2014 | 2016 | 2018 |

Himachal Pradesh

| | 2010 | 2012 | 2014 | 2016 | 2018 |

Jharkhand

| | 2010 | 2012 | 2014 | 2016 | 2018 |

Karnataka

| | 2010 | 2012 | 2014 | 2016 | 2018 |

Kerala

% Children

I II III IV V VI VII VIII IX X XI XII

— 2010　— 2012　— 2014　— 2016　— 2018

Madhya Pradesh

% Children

I II III IV V VI VII VIII IX X XI XII

— 2010　— 2012　— 2014　— 2016　— 2018

Maharashtra

% Children

I II III IV V VI VII VIII IX X XI XII

— 2010　— 2012　— 2014　— 2016　— 2018

Manipur

% Children

I II III IV V VI VII VIII IX X XI XII

— 2010　— 2012　— 2014　— 2016　— 2018

Meghalaya

% Children

I II III IV V VI VII VIII IX X XI XII

— 2010　— 2012　— 2014　— 2016　— 2018

Mizoram

% Children

I II III IV V VI VII VIII IX X XI XII

— 2010　— 2012　— 2014　— 2016　— 2018

Nagaland

2010　2012　2014　2016　2018

Odisha

2010　2012　2014　2016　2018

Punjab

2010　2012　2014　2016　2018

Rajasthan

2010　2012　2014　2016　2018

Sikkim

2010　2012　2014　2016　2018

Tamil Nadu

2010　2012　2014　2016　2018

Telangana

| | 2010 | 2012 | 2014 | 2016 | 2018 |

Tripura

| | 2010 | 2012 | 2014 | 2016 | 2018 |

Uttar Pradesh

| | 2010 | 2012 | 2014 | 2016 | 2018 |

Uttarakhand

| | 2010 | 2012 | 2014 | 2016 | 2018 |

West Bengal

| | 2010 | 2012 | 2014 | 2016 | 2018 |

Paid additional tuition classes

All India

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

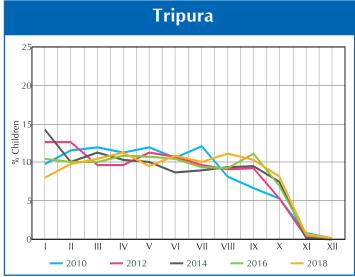| Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	61.5	55.8	52.3	51.1	49.8
	Govt + tuition	15.7	15.3	15.7	16.6	16.6
	Pvt no tuition	17.7	22.4	24.0	24.3	24.6
	Pvt + tuition	5.0	6.5	8.1	8.0	9.0
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	54.6	53.1	50.7	50.7	49.7
	Govt + tuition	20.3	19.3	20.2	21.2	21.0
	Pvt no tuition	19.2	21.6	22.6	21.9	22.4
	Pvt + tuition	5.9	6.0	6.4	6.2	7.0
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

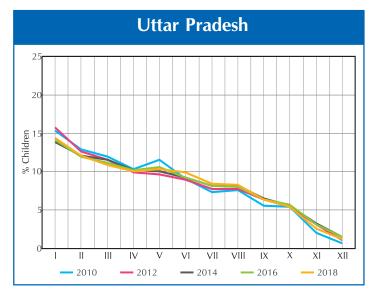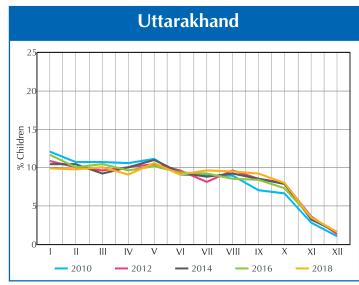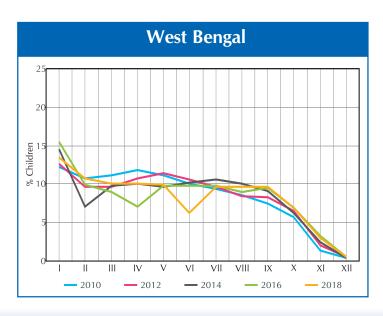| Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	38.1	42.6	11.6	7.7	100
	Pvt	20.3	35.0	19.7	25.0	100
Std VI-VIII	Govt	19.4	46.5	18.3	15.8	100
	Pvt	11.1	32.3	22.6	34.0	100

Andhra Pradesh

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	50.4	53.2	52.9	53.2	49.6
	Govt + tuition	12.0	9.7	10.3	7.5	8.3
	Pvt no tuition	25.8	26.5	28.0	32.3	34.6
	Pvt + tuition	11.8	10.5	8.8	7.0	7.5
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	58.9	62.3	62.4	64.7	60.7
	Govt + tuition	14.6	10.6	8.1	8.5	7.8
	Pvt no tuition	17.3	19.4	23.8	22.2	26.3
	Pvt + tuition	9.2	7.7	5.7	4.6	5.3
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	71.6	20.3	6.9	1.2	100
	Pvt	60.0	28.4	7.4	4.3	100
Std VI-VIII	Govt	50.8	39.4	7.1	2.7	100
	Pvt					

Arunachal Pradesh

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	78.5	63.8	67.8	61.2	54.7
	Govt + tuition	7.9	10.3	8.6	5.0	7.7
	Pvt no tuition	8.9	13.0	16.1	23.8	22.6
	Pvt + tuition	4.7	12.9	7.6	10.0	15.1
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	80.3	69.8	71.9	73.7	57.1
	Govt + tuition	8.6	14.4	9.7	6.3	12.3
	Pvt no tuition	7.2	7.3	13.2	13.8	19.0
	Pvt + tuition	4.0	8.5	5.2	6.2	11.6
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	1.5	13.1	35.8	49.6	100
	Pvt	1.6	6.7	28.0	63.7	100
Std VI-VIII	Govt	1.1	4.9	11.2	82.8	100
	Pvt	2.5	0.7	10.5	86.3	100

Paid additional tuition classes

Assam

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	75.3	73.5	71.7	66.9	63.5
	Govt + tuition	10.4	9.0	9.6	8.6	9.5
	Pvt no tuition	10.3	12.3	11.6	16.7	19.1
	Pvt + tuition	4.0	5.2	7.2	7.9	7.9
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	64.8	69.3	68.6	66.2	62.7
	Govt + tuition	18.6	15.1	14.9	14.0	13.1
	Pvt no tuition	11.8	9.3	9.4	12.2	15.8
	Pvt + tuition	4.8	6.4	7.1	7.6	8.4
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	7.3	41.0	32.4	19.4	100
	Pvt	3.1	13.0	27.3	56.6	100
Std VI-VIII	Govt	3.6	18.0	33.1	45.3	100
	Pvt	0.9	6.7	18.5	74.0	100

Bihar

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	53.8	52.4	45.3	40.9	33.6
	Govt + tuition	40.8	40.6	41.5	44.7	43.7
	Pvt no tuition	2.6	2.6	5.0	4.9	8.1
	Pvt + tuition	2.8	4.4	8.2	9.5	14.6
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	38.9	38.4	35.4	32.2	27.0
	Govt + tuition	56.8	58.0	57.7	60.0	62.5
	Pvt no tuition	1.4	1.2	2.4	2.3	3.4
	Pvt + tuition	2.8	2.5	4.5	5.5	7.1
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	41.5	44.2	9.0	5.3	100
	Pvt	22.3	35.1	17.4	25.2	100
Std VI-VIII	Govt	23.6	52.9	15.4	8.1	100
	Pvt	8.5	29.3	22.2	40.0	100

Chhattisgarh

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	88.3	82.7	77.8	76.0	75.1
	Govt + tuition	1.3	1.1	0.8	0.7	0.8
	Pvt no tuition	9.5	14.5	19.9	21.9	22.1
	Pvt + tuition	1.0	1.8	1.4	1.5	2.1
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	89.1	88.4	84.3	82.7	81.9
	Govt + tuition	2.1	1.6	1.2	0.7	0.9
	Pvt no tuition	7.9	9.0	13.0	15.4	15.9
	Pvt + tuition	1.0	1.0	1.5	1.2	1.2
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt					
	Pvt			Data insufficient		
Std VI-VIII	Govt					
	Pvt					

Paid additional tuition classes

Gujarat

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	83.1	82.8	80.3	81.6	77.3
	Govt + tuition	7.9	7.4	8.1	7.9	9.6
	Pvt no tuition	5.7	5.7	6.8	5.7	8.4
	Pvt + tuition	3.3	4.1	4.9	4.8	4.7
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	78.5	79.7	76.7	82.1	78.6
	Govt + tuition	9.1	9.3	10.3	9.3	11.5
	Pvt no tuition	8.2	6.3	7.6	5.1	5.8
	Pvt + tuition	4.2	4.7	5.5	3.6	4.1
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	27.4	53.0	14.4	5.3	100
	Pvt	10.5	31.3	23.6	34.6	100
Std VI-VIII	Govt	15.9	54.2	16.4	13.5	100
	Pvt	3.6	20.8	29.4	46.2	100

Haryana

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	50.0	42.9	37.4	33.1	35.6
	Govt + tuition	5.6	3.4	4.4	4.9	4.5
	Pvt no tuition	35.1	42.5	44.8	46.1	46.8
	Pvt + tuition	9.3	11.3	13.5	15.9	13.1
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	54.3	55.1	47.5	42.0	42.1
	Govt + tuition	7.7	3.1	5.1	5.9	5.7
	Pvt no tuition	29.3	34.7	38.4	39.9	40.8
	Pvt + tuition	8.7	7.1	8.9	12.2	11.3
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	17.7	41.6	25.9	14.8	100
	Pvt	4.3	22.5	32.1	41.1	100
Std VI-VIII	Govt	4.8	26.9	30.1	38.2	100
	Pvt	0.4	10.1	21.8	67.7	100

Himachal Pradesh

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	65.3	64.9	58.1	52.0	50.6
	Govt + tuition	3.3	2.1	1.6	1.9	1.8
	Pvt no tuition	25.5	28.2	35.4	41.9	42.5
	Pvt + tuition	6.0	4.8	4.8	4.1	5.1
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	75.1	72.2	66.8	66.8	61.2
	Govt + tuition	5.5	3.7	2.4	2.4	2.7
	Pvt no tuition	15.1	19.6	25.4	27.2	31.1
	Pvt + tuition	4.4	4.5	5.4	3.6	5.1
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt					
	Pvt	4.6	22.4	27.5	45.5	100
Std VI-VIII	Govt		Data insufficient			
	Pvt					

Paid additional tuition classes

Jammu and Kashmir

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2012, 2014 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition		48.6	42.9		52.3
	Govt + tuition		3.5	5.3		2.1
	Pvt no tuition		36.4	38.5		39.3
	Pvt + tuition		11.4	13.3		6.3
	Total		100	100		100
Std VI-VIII	Govt no tuition		55.5	47.0		59.5
	Govt + tuition		6.2	6.7		3.8
	Pvt no tuition		27.3	33.3		31.1
	Pvt + tuition		11.0	13.1		5.7
	Total		100	100		100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	11.1	27.6	33.9	27.4	100
	Pvt	4.8	16.3	27.6	51.4	100
Std VI-VIII	Govt	6.4	14.4	26.3	52.9	100
	Pvt	2.1	4.6	15.3	78.1	100

Jharkhand

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	70.0	62.9	59.9	59.2	53.0
	Govt + tuition	21.5	20.3	20.5	23.0	25.1
	Pvt no tuition	5.3	9.4	11.7	10.5	12.5
	Pvt + tuition	3.1	7.5	7.8	7.4	9.5
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	57.5	56.7	52.1	53.8	49.2
	Govt + tuition	32.8	30.4	33.3	32.6	34.5
	Pvt no tuition	5.3	6.6	8.4	8.3	9.2
	Pvt + tuition	4.5	6.4	6.2	5.3	7.1
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	53.3	40.5	4.6	1.6	100
	Pvt	22.2	48.1	16.9	12.8	100
Std VI-VIII	Govt	30.9	58.1	8.7	2.3	100
	Pvt	13.3	52.0	21.3	13.5	100

Karnataka

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	74.5	70.7	67.8	65.3	62.6
	Govt + tuition	5.4	7.0	5.1	6.1	6.0
	Pvt no tuition	16.2	17.3	21.6	22.6	24.7
	Pvt + tuition	3.9	5.0	5.6	6.1	6.8
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	75.9	71.5	72.9	71.0	69.8
	Govt + tuition	5.2	6.7	5.2	4.2	4.9
	Pvt no tuition	16.0	17.7	18.7	20.8	21.6
	Pvt + tuition	2.8	4.0	3.3	4.0	3.7
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	62.5	25.1	6.6	5.7	100
	Pvt	37.2	34.1	15.0	13.8	100
Std VI-VIII	Govt	54.3	28.0	10.9	6.8	100
	Pvt	27.0	36.9	17.2	18.9	100

Paid additional tuition classes

Kerala

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	26.4	27.8	27.2	33.2	38.6
	Govt + tuition	14.1	10.1	9.1	7.7	9.3
	Pvt no tuition	37.1	45.4	47.7	47.9	41.3
	Pvt + tuition	22.3	16.7	16.1	11.3	10.9
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	27.2	26.5	27.3	35.8	38.4
	Govt + tuition	21.4	13.7	12.4	13.2	15.7
	Pvt no tuition	29.5	38.0	39.0	39.1	32.3
	Pvt + tuition	22.0	21.8	21.3	12.0	13.7
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	9.8	37.5	28.8	23.9	100
	Pvt	1.4	20.0	32.2	46.5	100
Std VI-VIII	Govt	0.0	17.7	25.3	57.1	100
	Pvt	1.9	6.5	22.4	69.3	100

Madhya Pradesh

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	80.2	74.2	68.0	64.6	62.0
	Govt + tuition	4.0	5.7	6.7	6.0	6.5
	Pvt no tuition	13.5	17.1	21.6	25.2	27.5
	Pvt + tuition	2.4	3.1	3.7	4.2	4.0
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	76.4	76.8	73.2	70.4	68.2
	Govt + tuition	9.5	7.2	8.4	8.8	8.5
	Pvt no tuition	10.1	13.2	15.3	17.2	19.8
	Pvt + tuition	4.0	2.8	3.1	3.7	3.6
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	39.8	44.0	11.6	4.5	100
	Pvt	25.1	43.3	19.4	12.3	100
Std VI-VIII	Govt	27.4	54.0	13.0	5.6	100
	Pvt	11.6	46.1	25.1	17.2	100

Maharashtra

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	82.7	74.8	70.4	68.2	69.6
	Govt + tuition	4.6	5.1	6.0	6.0	5.0
	Pvt no tuition	10.4	15.8	18.2	19.8	19.9
	Pvt + tuition	2.3	4.3	5.4	6.0	5.5
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	46.9	38.7	40.3	39.3	40.5
	Govt + tuition	4.2	3.5	4.1	3.6	4.4
	Pvt no tuition	42.0	49.3	47.8	48.4	45.9
	Pvt + tuition	6.9	8.5	7.9	8.7	9.2
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	37.6	43.3	10.5	8.6	100
	Pvt	19.0	37.8	20.0	23.2	100
Std VI-VIII	Govt	24.6	41.0	17.8	16.6	100
	Pvt	14.1	36.4	23.2	26.3	100

Paid additional tuition classes

Manipur

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	30.1	25.3	19.9	21.5	20.6
	Govt + tuition	4.7	6.4	7.7	7.9	10.5
	Pvt no tuition	35.1	35.7	36.9	35.5	32.2
	Pvt + tuition	30.2	32.6	35.5	35.2	36.7
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	23.0	20.2	14.5	19.0	17.8
	Govt + tuition	5.6	7.8	7.1	5.3	7.6
	Pvt no tuition	30.1	37.2	44.2	43.5	41.6
	Pvt + tuition	41.3	34.8	34.2	32.3	33.0
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	0.9	17.5	41.1	40.5	100
	Pvt	0.9	4.9	25.0	69.3	100
Std VI-VIII	Govt					
	Pvt	1.6	2.1	15.8	80.5	100

Meghalaya

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	47.2	45.1	44.2	38.8	35.0
	Govt + tuition	4.1	3.7	2.7	5.1	4.8
	Pvt no tuition	39.3	41.1	42.7	44.8	47.5
	Pvt + tuition	9.4	10.2	10.5	11.2	12.8
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	34.7	38.7	34.3	35.1	31.7
	Govt + tuition	6.8	1.9	2.0	7.4	4.6
	Pvt no tuition	48.0	47.8	53.0	45.5	53.3
	Pvt + tuition	10.5	11.5	10.7	12.0	10.4
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	7.0	43.7	27.2	22.2	100
	Pvt	7.1	29.8	24.2	38.8	100
Std VI-VIII	Govt					
	Pvt	2.2	22.3	25.2	50.3	100

Mizoram

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	86.4	72.4	58.7	62.2	70.1
	Govt + tuition	2.3	2.5	0.3	3.7	0.8
	Pvt no tuition	9.7	22.3	37.7	30.9	27.1
	Pvt + tuition	1.6	2.8	3.3	3.3	2.1
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	74.2	70.6	68.3	71.6	74.7
	Govt + tuition	4.5	5.0	0.3	3.4	1.6
	Pvt no tuition	19.8	20.9	29.7	21.6	22.6
	Pvt + tuition	1.5	3.6	1.7	3.5	1.1
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	0.0	0.0	33.8	66.2	100
	Pvt	1.7	11.2	10.9	76.2	100
Std VI-VIII	Govt		Data insufficient			
	Pvt					

Paid additional tuition classes

Nagaland

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	61.5	57.7	62.0	54.6	47.3
	Govt + tuition	5.1	5.7	3.8	5.0	5.5
	Pvt no tuition	22.8	22.3	25.5	27.3	28.3
	Pvt + tuition	10.5	14.3	8.8	13.1	18.8
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	55.0	51.4	49.5	45.5	41.1
	Govt + tuition	4.5	6.9	4.0	5.6	8.2
	Pvt no tuition	25.7	24.3	31.3	31.9	31.2
	Pvt + tuition	14.8	17.5	15.2	17.0	19.4
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	2.9	18.3	46.3	32.5	100
	Pvt	0.5	6.5	25.8	67.2	100
Std VI-VIII	Govt					
	Pvt	0.3	3.7	17.9	78.1	100

Odisha

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	51.8	53.7	50.3	47.2	44.2
	Govt + tuition	42.6	39.2	38.9	40.5	41.0
	Pvt no tuition	1.9	2.4	3.3	2.8	3.9
	Pvt + tuition	3.8	4.8	7.5	9.5	10.9
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	43.8	49.4	46.6	46.7	44.6
	Govt + tuition	51.1	46.0	47.8	48.1	48.4
	Pvt no tuition	2.0	1.7	2.1	1.4	1.7
	Pvt + tuition	3.1	3.0	3.5	3.9	5.3
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	39.5	40.5	12.2	7.9	100
	Pvt	14.4	29.5	23.3	32.8	100
Std VI-VIII	Govt	10.6	40.6	28.0	20.9	100
	Pvt	3.2	18.9	23.8	54.1	100

Punjab

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	54.6	46.0	38.7	34.1	32.0
	Govt + tuition	6.0	6.2	6.5	8.3	8.3
	Pvt no tuition	28.1	32.5	36.4	36.6	35.4
	Pvt + tuition	11.3	15.3	18.5	21.0	24.3
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	59.8	58.6	51.1	47.9	43.3
	Govt + tuition	7.1	5.7	6.9	7.6	10.5
	Pvt no tuition	23.5	26.2	27.7	28.4	29.2
	Pvt + tuition	9.6	9.6	14.3	16.1	17.0
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	19.1	49.6	21.4	9.9	100
	Pvt	2.1	20.5	34.2	43.2	100
Std VI-VIII	Govt	6.3	20.9	37.3	35.5	100
	Pvt	0.9	4.3	22.8	72.0	100

Paid additional tuition classes

Rajasthan

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	62.2	54.4	52.2	54.5	59.5
	Govt + tuition	2.1	1.3	1.4	1.4	1.8
	Pvt no tuition	31.9	41.1	41.8	41.5	36.4
	Pvt + tuition	3.8	3.3	4.6	2.6	2.4
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	65.0	58.4	57.3	61.3	62.7
	Govt + tuition	4.2	1.9	2.3	2.6	2.5
	Pvt no tuition	25.7	36.3	36.3	33.3	32.3
	Pvt + tuition	5.2	3.4	4.1	2.7	2.5
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	22.7	46.8	20.2	10.3	100
	Pvt	14.7	25.4	25.4	34.5	100
Std VI-VIII	Govt	14.6	43.1	20.9	21.4	100
	Pvt	10.9	30.5	25.8	32.8	100

Sikkim

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	61.9	55.2	51.8	52.7	48.3
	Govt + tuition	16.0	16.4	11.8	12.2	8.4
	Pvt no tuition	11.5	14.4	18.5	19.0	24.5
	Pvt + tuition	10.6	14.0	17.9	16.1	18.8
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	67.5	69.7	75.3	70.1	68.5
	Govt + tuition	19.6	12.8	8.8	16.2	15.1
	Pvt no tuition	6.1	9.1	6.9	8.7	8.4
	Pvt + tuition	6.8	8.5	9.1	5.0	8.0
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	0.5	21.2	35.2	43.1	100
	Pvt	1.5	9.1	20.9	68.6	100
Std VI-VIII	Govt	0.0	1.9	27.7	70.4	100
	Pvt	0.0	6.9	10.2	82.9	100

Tamil Nadu

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	60.1	55.9	55.7	54.4	55.4
	Govt + tuition	11.4	8.7	6.6	7.6	6.9
	Pvt no tuition	20.6	26.3	29.1	29.0	29.7
	Pvt + tuition	7.9	9.1	8.6	9.0	8.0
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	65.4	63.9	65.9	63.6	65.4
	Govt + tuition	13.5	12.8	7.8	8.7	7.6
	Pvt no tuition	15.2	16.8	21.2	21.6	21.2
	Pvt + tuition	5.9	6.6	5.2	6.2	5.9
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	82.0	16.4	1.6	0.0	100
	Pvt	59.3	29.4	6.6	4.7	100
Std VI-VIII	Govt	61.5	31.2	5.3	2.1	100
	Pvt	39.5	45.9	8.4	6.2	100

Paid additional tuition classes

Telangana

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	55.2	55.7	53.8	52.0	46.8
	Govt + tuition	1.9	2.0	1.8	2.0	1.8
	Pvt no tuition	35.1	35.9	40.2	41.2	46.4
	Pvt + tuition	7.9	6.4	4.2	4.9	5.1
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	66.1	67.6	71.4	67.8	69.0
	Govt + tuition	4.0	2.0	1.4	1.8	2.0
	Pvt no tuition	25.0	24.7	25.3	29.0	26.7
	Pvt + tuition	4.9	5.7	1.9	1.4	2.4
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt					
	Pvt	25.1	43.1	17.9	13.9	100
Std VI-VIII	Govt			Data insufficient		
	Pvt					

Tripura

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	30.9	33.7	29.5	34.5	31.2
	Govt + tuition	66.2	62.8	59.1	54.3	50.0
	Pvt no tuition	0.2	0.4	1.9	2.7	4.3
	Pvt + tuition	2.7	3.1	9.5	8.5	14.5
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	19.3	21.6	24.1	30.6	22.3
	Govt + tuition	79.5	77.7	70.4	64.4	69.9
	Pvt no tuition	0.0	0.0	1.4	1.4	0.7
	Pvt + tuition	1.2	0.6	4.1	3.7	7.1
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	0.4	12.4	33.5	53.7	100
	Pvt	2.3	2.6	5.0	90.1	100
Std VI-VIII	Govt	0.9	5.3	31.8	62.1	100
	Pvt					

Uttar Pradesh

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	59.2	46.8	43.8	43.3	44.9
	Govt + tuition	3.2	2.7	2.9	2.8	4.1
	Pvt no tuition	32.5	42.7	42.7	44.6	40.0
	Pvt + tuition	5.2	7.7	10.7	9.4	11.0
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	50.2	44.6	42.6	41.8	42.9
	Govt + tuition	4.5	4.2	4.0	3.9	5.5
	Pvt no tuition	37.3	42.3	42.7	43.3	39.7
	Pvt + tuition	8.0	8.9	10.7	11.0	11.9
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	45.3	42.6	7.5	4.5	100
	Pvt	20.6	44.6	19.1	15.7	100
Std VI-VIII	Govt	28.1	52.1	14.7	5.2	100
	Pvt	10.5	43.7	25.4	20.5	100

Paid additional tuition classes

Uttarakhand

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	63.1	55.5	53.5	48.1	45.7
	Govt + tuition	4.1	4.1	3.0	3.3	4.0
	Pvt no tuition	24.8	27.8	29.5	33.3	33.6
	Pvt + tuition	8.0	12.6	14.1	15.3	16.8
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	70.4	65.1	65.3	60.6	57.5
	Govt + tuition	5.7	5.4	4.2	5.7	6.8
	Pvt no tuition	16.6	18.8	20.2	21.8	23.6
	Pvt + tuition	7.3	10.7	10.3	12.0	12.2
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	24.4	32.3	34.8	8.6	100
	Pvt	9.4	40.9	25.7	23.9	100
Std VI-VIII	Govt	9.2	41.8	34.1	14.9	100
	Pvt	3.9	21.8	32.3	42.1	100

West Bengal

Trends over time
% Children in Std I-V and Std VI-VIII by school type and tuition
2010, 2012, 2014, 2016 and 2018

Std	Category	2010	2012	2014	2016	2018
Std I-V	Govt no tuition	31.7	30.2	29.2	28.3	26.4
	Govt + tuition	61.4	60.4	58.4	59.3	61.9
	Pvt no tuition	2.4	2.9	3.8	3.3	3.6
	Pvt + tuition	4.6	6.5	8.6	9.2	8.0
	Total	100	100	100	100	100
Std VI-VIII	Govt no tuition	20.1	18.3	22.1	20.8	22.3
	Govt + tuition	78.5	79.6	76.2	76.6	75.6
	Pvt no tuition	0.4	0.7	0.6	0.8	0.4
	Pvt + tuition	1.0	1.4	1.1	1.9	1.8
	Total	100	100	100	100	100

Tuition expenditures by school type
2018

Std	Type of school	% Children in different tuition expenditure categories (in Rupees per month)				
		Rs 100 or less	Rs 101-200	Rs 201-300	Rs 300 & more	Total
Std I-V	Govt	26.8	46.3	15.2	11.7	100
	Pvt	6.6	31.7	19.6	42.1	100
Std VI-VIII	Govt	6.3	41.6	21.7	30.5	100
	Pvt					

Household characteristics over time

State	% Households which have a pucca house					% Households which have motorized two wheeler					% Households which have an electric connection					Of households with electric connection, % households with electricity avilable on day of visit					% Households which have a toilet				
	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018
Andhra Pradesh	61.6	59.3	65.8	71.1	73.6			33.6	38.7	48.0	96.9	96.8	97.6	98.1	98.7	84.6	76.3	94.3	96.1	97.3	53.2	52.8	55.3	64.1	83.9
Arunachal Pradesh	9.6	11.7	9.1	13.8	18.7			29.9	33.0	35.8	79.3	80.2	91.3	90.3	86.8	64.7	82.3	86.3	93.1	82.3	69.0	69.8	72.3	82.7	87.2
Assam	13.5	15.8	20.8	22.0	28.3			22.0	23.8	28.6	48.7	65.6	74.5	76.3	84.2	45.2	83.7	82.7	88.8	86.8	47.1	59.0	67.6	64.6	73.6
Bihar	22.7	27.6	39.1	43.2	49.2			16.4	21.0	27.9	38.2	39.9	49.8	69.5	91.3	23.5	55.2	73.8	83.3	88.8	22.1	20.1	26.5	33.3	57.2
Chhattisgarh	10.7	14.1	19.2	25.7	34.7			33.7	40.6	46.0	82.4	87.4	92.6	93.6	96.4	81.2	93.4	87.0	85.1	90.4	24.7	24.2	26.8	53.6	87.1
Gujarat	34.6	35.3	41.2	42.9	47.9			47.1	55.1	55.1	93.7	94.1	96.1	95.8	96.7	90.0	88.6	93.9	94.9	97.4	44.9	46.9	54.4	68.6	79.5
Haryana	58.4	68.3	75.3	75.2	75.9			55.4	57.8	65.2	90.4	93.2	95.1	96.4	97.4	63.4	75.3	78.8	77.3	80.7	75.3	76.6	85.3	90.9	94.2
Himachal Pradesh	50.5	61.4	66.7	72.2	69.0			31.2	30.7	32.7	99.1	97.9	99.0	99.2	99.4	96.0	98.5	96.3	98.2	96.6	77.3	81.1	84.1	89.1	92.3
Jammu and Kashmir		49.0	53.9	47.6	53.3			22.3	21.0	14.2		90.4	93.3	93.6	94.5		69.1	72.0	77.3	76.3		49.4	62.5	58.9	75.4
Jharkhand	13.4	16.7	18.7	20.4	22.1			21.2	23.0	28.0	56.4	65.5	70.9	71.2	81.3	42.8	62.2	67.3	78.6	77.4	15.0	10.6	9.7	21.5	56.4
Karnataka	34.8	35.9	36.1	39.8	67.2			43.1	46.4	57.7	94.3	93.7	95.3	96.4	97.9	75.7	74.0	90.0	90.0	93.9	35.0	38.6	44.9	56.8	75.2
Kerala	57.2	78.3	90.4	83.8	92.3			53.6	48.7	60.1	96.9	97.2	98.7	97.8	99.3	95.1	97.4	98.1	98.6	97.2	96.0	97.0	97.8	97.8	99.2
Madhya Pradesh	15.2	17.1	22.7	25.1	30.8			33.7	37.7	41.0	77.7	74.2	85.2	84.0	92.1	42.3	64.7	83.9	80.8	87.5	32.4	22.8	28.5	45.6	72.2
Maharashtra	38.9	38.7	51.0	48.7	57.7			41.2	44.8	51.3	88.5	89.9	92.5	93.1	95.5	76.8	82.8	89.5	90.7	90.3	48.7	47.0	52.6	62.1	78.1
Manipur	9.8	7.3	7.1	13.6	12.8			27.8	27.5	27.5	90.4	84.6	84.9	94.2	96.0	47.9	60.1	81.4	83.8	94.7	86.0	90.1	96.5	96.8	96.6
Meghalaya	13.4	13.4	15.8	14.8	15.4			14.4	12.9	14.9	77.2	73.9	88.4	83.5	87.9	67.7	85.3	72.2	82.2	87.8	63.3	60.0	76.3	79.6	85.1
Mizoram	6.7	4.9	5.9	5.4	7.3			27.5	28.1	32.5	91.3	91.4	95.5	96.1	96.2	78.7	85.7	87.6	92.5	81.1	63.5	79.8	91.9	86.5	87.5
Nagaland	11.0	11.0	12.1	7.4	11.1			24.3	18.0	18.1	97.1	97.5	96.6	96.2	96.6	82.4	86.0	88.3	87.2	86.4	76.3	82.4	94.9	91.6	96.9
Odisha	21.7	24.2	28.6	29.9	37.7			27.7	31.4	38.0	57.0	70.6	79.9	81.0	88.6	53.7	84.8	89.1	91.8	90.0	22.7	17.9	21.0	37.9	55.7
Punjab	53.1	56.9	74.5	76.2	77.4			71.0	74.0	77.7	96.0	98.4	99.2	99.3	99.4	93.3	96.1	94.4	98.3	97.3	81.2	88.0	90.8	93.3	94.9
Rajasthan	49.0	53.1	60.1	65.0	68.0			43.3	46.4	53.0	74.2	77.9	84.8	84.8	88.3	61.4	81.7	90.3	90.2	92.1	35.7	31.8	36.8	54.4	67.6
Sikkim	28.5	36.9	48.2	48.1	46.2			12.2	8.2	8.1	98.1	97.5	98.6	98.0	98.0	91.2	97.8	95.2	84.9	90.7	94.7	95.0	96.9	96.1	97.4
Tamil Nadu	61.6	77.4	83.3	84.6	85.1			54.5	61.0	67.5	96.9	96.5	97.4	97.9	98.0	92.1	76.4	93.6	96.8	96.5	33.2	36.6	41.2	53.1	71.0
Telangana	45.4	49.5	48.0	69.0	58.1			32.4	41.5	53.7	96.9	96.9	96.0	97.9	98.9	85.4	73.6	88.5	94.5	96.2	53.9	54.3	50.2	61.9	80.2
Tripura	2.4	2.0	6.9	13.0	15.5			21.4	23.2	29.4	82.8	85.0	90.2	91.9	95.2	80.6	88.3	96.0	94.4	86.5	88.0	85.1	85.6	90.5	88.0
Uttar Pradesh	18.5	34.1	55.8	57.4	62.6			32.7	32.8	42.2	41.5	48.3	52.4	57.0	74.4	30.7	61.5	63.8	77.2	82.9	25.9	27.5	34.2	34.6	57.7
Uttarakhand	63.3	59.3	72.6	73.1	76.9			27.8	31.9	36.4	90.6	89.1	93.3	94.0	95.5	82.4	83.9	89.2	94.9	92.8	67.9	68.7	74.5	81.8	89.0
West Bengal	21.1	24.5	33.0	30.8	39.9			20.7	23.9	38.5	60.5	79.7	90.0	91.9	94.7	57.9	91.5	92.7	91.7	92.0	56.1	53.6	60.9	66.2	76.2
All India	**31.8**	**38.1**	**47.3**	**49.2**	**55.1**			**34.9**	**37.7**	**45.2**	**70.6**	**75.4**	**80.5**	**83.6**	**90.9**	**61.3**	**78.6**	**86.0**	**88.8**	**90.4**	**40.8**	**40.3**	**45.5**	**53.5**	**71.5**

Household characteristics over time

State	% Households which have a television					% Households which have a mobile phone					% Households which have other reading material*					% Households with at least one member who completed Std XII**					% Households with at least one member who knows how to operate a computer				
	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018
Andhra Pradesh	74.5	78.4	82.5	84.3	87.3	72.4	74.8	77.7	81.1	92.1	9.2	8.1	14.1	13.4	6.6			34.2	36.2	40.4	13.8	13.9	21.5	23.5	26.8
Arunachal Pradesh	55.8	61.2	62.2	65.6	64.5	50.1	33.6	48.7	55.6	79.9	26.7	34.0	38.4	44.9	8.8			23.6	27.1	32.4	9.4	16.2	17.4	21.7	22.3
Assam	34.2	39.1	42.3	43.1	47.6	59.5	57.1	63.3	69.6	82.7	10.9	14.5	21.7	19.1	8.1			29.9	30.3	31.7	7.3	9.9	15.5	16.0	18.1
Bihar	18.3	13.8	18.3	22.8	32.6	48.1	61.2	78.0	84.8	93.2	12.0	19.9	28.3	15.8	6.5			31.1	32.1	36.1	3.8	5.4	12.9	13.9	17.6
Chhattisgarh	44.1	51.6	59.2	62.8	66.3	41.2	40.4	60.9	71.7	88.4	9.3	16.7	21.8	18.0	8.6			30.7	34.9	36.9	4.4	6.1	13.2	16.5	17.3
Gujarat	53.1	61.2	69.0	75.1	76.3	65.1	62.1	73.6	72.4	89.5	17.6	21.4	31.1	34.9	6.1			34.4	34.1	37.6	16.4	25.1	30.4	26.5	28.3
Haryana	74.9	77.9	83.9	85.0	85.4	82.5	85.8	87.9	89.8	96.5	24.3	25.4	22.5	17.6	9.0			54.6	55.9	58.5	20.6	28.9	36.8	39.5	41.2
Himachal Pradesh	87.6	85.8	90.8	92.6	93.2	90.4	85.1	89.9	93.2	98.4	24.6	33.2	28.9	26.8	7.8			57.1	63.2	63.0	20.7	32.1	41.5	45.5	41.4
Jammu and Kashmir		59.6	60.7	59.4	57.1		82.6	86.6	85.9	96.0		65.5	57.8	38.8	6.7			42.4	40.9	44.2		21.1	27.1	22.3	24.7
Jharkhand	25.5	21.7	24.8	25.9	30.7	36.2	51.3	56.8	64.1	79.3	10.2	17.0	16.9	16.3	4.1			21.1	26.6	25.2	4.2	5.8	9.0	12.4	10.8
Karnataka	64.5	71.0	77.3	82.0	85.6	73.5	65.4	78.5	86.5	96.1	3.7	4.7	3.8	4.8	3.5			36.5	37.2	39.7	12.9	15.2	19.0	20.4	18.9
Kerala	87.3	92.0	92.5	89.5	90.7	84.9	91.6	94.4	96.0	98.7	24.7	23.1	29.2	39.6	17.6			63.0	61.6	68.3	59.2	34.2	49.1	47.6	66.6
Madhya Pradesh	45.6	35.9	43.9	47.6	53.6	62.7	45.1	64.9	71.5	84.0	19.7	15.3	22.8	24.2	5.5			25.3	27.7	26.8	4.6	3.9	11.0	13.0	12.8
Maharashtra	60.6	64.6	69.7	74.8	78.8	67.5	66.1	80.4	84.7	92.0	22.2	23.0	24.5	24.2	11.4			43.2	44.5	47.5	15.7	15.6	28.5	30.4	30.8
Manipur	68.7	55.8	61.7	62.3	66.0	77.0	63.7	75.8	80.7	88.1	31.2	39.2	47.9	42.3	11.5			43.1	46.6	43.9	20.3	19.7	25.2	33.8	26.1
Meghalaya	47.6	43.4	49.8	44.7	45.9	55.6	47.4	53.0	52.3	70.9	45.1	58.5	69.8	70.8	19.0			20.2	19.4	20.8	9.7	9.1	15.5	13.3	12.4
Mizoram	53.5	68.1	80.7	75.7	78.9	67.6	59.4	70.0	68.7	84.5	62.3	72.5	82.7	87.1	11.9			25.6	28.0	26.9	16.1	15.8	15.5	17.6	20.5
Nagaland	49.6	49.3	55.6	52.7	57.8	63.9	51.2	53.8	69.1	87.3	53.6	79.2	87.0	77.3	11.1			25.9	23.6	24.6	18.4	18.7	20.3	22.1	20.1
Odisha	35.0	36.1	45.1	48.7	55.4	44.0	46.9	60.4	63.9	78.6	19.1	21.0	20.8	20.3	4.8			27.7	28.9	29.8	7.2	6.8	12.8	13.8	12.7
Punjab	87.0	92.8	92.9	94.8	94.6	82.8	85.3	87.3	90.6	96.7	20.4	16.9	18.4	15.2	5.7			52.4	54.3	56.4	23.1	35.9	46.8	45.5	44.6
Rajasthan	46.3	44.9	51.9	52.4	54.2	77.5	76.1	85.5	82.9	92.1	19.2	19.6	23.1	19.7	5.3			34.3	34.7	35.2	9.4	12.9	22.6	22.6	20.9
Sikkim	75.5	81.6	83.2	79.8	81.4	83.3	77.0	78.8	84.7	93.4	23.0	31.3	37.0	38.2	27.1			39.6	44.3	43.6	30.2	35.7	43.4	46.2	43.7
Tamil Nadu	93.0	92.7	93.0	93.6	93.2	77.7	74.8	83.1	86.3	91.2	6.7	6.1	8.4	7.1	4.6			37.9	39.3	43.1	14.3	20.9	30.1	29.8	30.6
Telangana	71.0	77.7	74.9	81.2	86.2	76.4	84.2	84.6	85.9	93.8	4.3	10.3	5.5	8.6	6.1			33.2	38.7	41.4	10.2	15.1	19.3	22.2	22.1
Tripura	62.1	60.5	67.6	69.6	68.6	60.8	54.2	66.3	78.3	89.2	16.7	19.4	43.3	35.2	4.0			24.5	28.0	29.0	5.8	8.1	17.1	21.3	16.0
Uttar Pradesh	30.4	29.9	34.7	34.2	44.8	69.7	71.2	75.0	79.9	91.7	18.2	31.5	29.3	26.8	5.7			42.4	42.2	45.4	5.6	8.9	19.3	16.3	18.8
Uttarakhand	71.3	69.0	75.8	76.6	79.8	76.7	77.3	76.1	82.7	93.3	19.7	24.1	26.5	21.8	12.8			52.4	52.3	52.5	15.4	20.5	30.4	33.8	31.6
West Bengal	39.1	44.4	54.4	54.8	57.0	54.9	63.3	71.1	76.6	87.8	16.7	23.0	26.4	23.8	4.7			29.0	30.1	31.3	9.4	11.8	19.3	20.3	20.9
All India	**49.5**	**50.9**	**55.8**	**57.7**	**62.6**	**64.8**	**66.1**	**75.6**	**79.8**	**90.2**	**15.9**	**20.5**	**23.3**	**20.6**	**6.6**			**36.4**	**37.1**	**39.5**	**11.7**	**13.6**	**21.8**	**21.5**	**22.9**

*Includes magazines, books other than school textbooks, etc.
**Excluding mother or father of the sampled child

Mothers' schooling over time

State	2010 % Mothers with:				2012 % Mothers with:				2014 % Mothers with:				2016 % Mothers with:				2018 % Mothers with:			
	No schooling	Std I-V	Std VI-X	Above Std X	No schooling	Std I-V	Std VI-X	Above Std X	No schooling	Std I-V	Std VI-X	Above Std X	No schooling	Std I-V	Std VI-X	Above Std X	No schooling	Std I-V	Std VI-X	Above Std X
Andhra Pradesh	47.2	20.0	27.5	5.3	43.1	18.3	32.0	6.6	39.8	17.6	34.9	7.7	37.4	17.2	35.0	10.4	30.3	17.1	38.7	13.9
Arunachal Pradesh	50.0	20.9	24.7	4.4	45.3	12.6	32.7	9.4	67.6	11.4	18.1	3.0	51.4	15.2	27.3	6.2	51.4	14.3	26.7	7.7
Assam	41.5	17.4	35.6	5.6	37.6	18.3	37.5	6.6	35.9	19.2	37.7	7.2	38.2	13.7	40.0	8.1	33.8	15.2	41.8	9.2
Bihar	59.9	18.1	18.9	3.1	64.9	13.1	17.9	4.0	62.7	12.4	19.2	5.6	58.7	13.7	20.8	6.8	57.2	13.1	22.1	7.7
Chhattisgarh	52.2	22.0	22.9	3.0	51.6	21.3	23.6	3.5	47.4	20.3	27.2	5.1	43.5	21.4	29.2	5.9	39.2	21.5	32.3	7.0
Gujarat	44.7	19.0	30.4	5.9	43.5	18.3	31.8	6.4	42.9	16.8	32.1	8.2	36.1	17.2	37.1	9.5	32.9	17.4	39.3	10.4
Haryana	40.3	18.0	32.8	8.9	39.5	15.8	34.3	10.4	33.2	15.2	36.6	15.0	31.5	14.8	37.9	15.8	28.5	14.3	37.4	19.9
Himachal Pradesh	16.6	20.2	46.0	17.3	19.3	16.3	44.7	19.7	12.9	15.4	46.5	25.2	10.6	13.0	45.7	30.7	8.5	11.7	44.4	35.4
Jammu and Kashmir					60.6	7.4	24.5	7.6	58.5	5.7	26.5	9.3	45.3	9.6	33.5	11.6	58.0	6.3	24.5	11.1
Jharkhand	63.1	18.2	16.7	1.9	64.3	14.0	18.8	2.9	64.0	13.6	19.4	3.0	59.0	13.8	23.0	4.2	56.9	14.5	23.4	5.2
Karnataka	41.6	17.5	34.7	6.1	39.4	15.3	38.6	6.8	39.0	14.1	39.0	7.9	33.0	13.6	43.2	10.2	27.3	14.2	46.3	12.2
Kerala	1.0	5.3	61.2	32.5	1.4	5.0	57.5	36.1	0.9	3.4	53.0	42.7	1.3	3.7	54.6	40.4	0.5	2.3	43.4	53.8
Madhya Pradesh	53.6	23.6	19.4	3.3	60.0	18.9	18.1	3.0	58.7	18.0	20.2	3.2	56.0	18.1	22.2	3.6	52.5	19.2	24.2	4.1
Maharashtra	27.9	18.7	43.4	10.0	26.6	17.6	44.4	11.4	24.9	15.9	46.5	12.7	20.4	13.7	50.1	15.7	17.0	13.6	51.4	18.0
Manipur	19.2	13.4	49.8	17.7	31.0	11.0	42.7	15.3	26.9	14.0	42.4	16.8	29.7	11.8	40.6	17.9	25.3	12.0	44.8	18.0
Meghalaya	39.8	26.7	27.4	6.1	40.8	27.9	26.1	5.2	37.4	26.3	30.6	5.7	38.3	26.7	29.0	6.0	40.3	25.9	28.5	5.2
Mizoram	17.9	21.4	47.3	13.4	14.4	30.1	49.9	5.6	12.0	27.6	53.8	6.7	15.0	28.8	48.2	8.1	9.2	25.2	56.6	9.0
Nagaland	17.5	22.5	51.4	8.7	27.4	16.8	48.3	7.4	30.4	17.4	44.7	7.5	26.1	17.0	49.3	7.6	27.7	19.0	46.6	6.7
Odisha	44.3	22.9	28.4	4.4	44.5	20.2	30.0	5.3	40.5	17.8	35.0	6.8	38.1	18.2	36.8	7.0	35.2	17.0	40.4	7.3
Punjab	32.8	18.7	37.6	10.9	27.4	16.5	42.2	13.9	26.5	13.8	41.6	18.1	23.2	13.9	41.9	21.0	21.3	14.1	42.0	22.6
Rajasthan	68.9	15.7	12.9	2.5	71.2	13.1	13.2	2.5	69.7	12.6	14.5	3.2	67.9	13.3	15.3	3.5	64.5	15.2	16.1	4.2
Sikkim	31.6	25.3	37.3	5.8	25.5	22.4	43.4	8.8	26.3	24.1	40.7	9.0	22.3	26.9	41.6	9.2	19.3	25.3	43.3	12.0
Tamil Nadu	28.6	22.4	39.7	9.3	23.1	21.5	43.3	12.2	23.7	17.4	44.4	14.4	18.7	15.2	48.7	17.4	14.2	13.6	51.3	20.9
Telangana	61.3	12.1	22.3	4.4	58.1	11.1	24.4	6.4	56.6	8.7	26.9	7.8	50.2	10.1	29.1	10.7	43.3	9.6	32.5	14.6
Tripura	27.8	24.6	41.6	6.1	22.0	28.4	42.4	7.3	18.0	25.4	50.9	5.7	18.3	21.3	52.4	8.0	14.7	20.8	56.7	7.9
Uttar Pradesh	66.7	14.0	15.3	3.9	68.0	11.8	15.1	5.2	62.7	11.5	18.0	7.8	63.4	10.5	18.1	8.0	57.2	11.5	20.5	10.9
Uttarakhand	39.1	20.4	29.8	10.7	38.6	18.5	29.3	13.5	34.4	16.0	32.9	16.7	33.2	15.1	33.7	18.0	30.8	15.3	34.7	19.2
West Bengal	40.3	23.9	32.4	3.5	37.2	22.2	36.8	3.9	25.1	28.4	40.7	5.7	30.8	21.2	41.6	6.4	26.3	22.9	43.1	7.6
All India	**49.2**	**18.1**	**26.7**	**6.0**	**50.4**	**15.6**	**27.1**	**6.9**	**47.9**	**15.0**	**28.6**	**8.4**	**46.6**	**14.4**	**29.9**	**9.2**	**42.7**	**14.7**	**31.6**	**11.0**

Fathers' schooling over time

State	2010 % Fathers with: No schooling	Std I-V	Std VI-X	Above Std X	2012 % Fathers with: No schooling	Std I-V	Std VI-X	Above Std X	2014 % Fathers with: No schooling	Std I-V	Std VI-X	Above Std X	2016 % Fathers with: No schooling	Std I-V	Std VI-X	Above Std X	2018 % Fathers with: No schooling	Std I-V	Std VI-X	Above Std X
Andhra Pradesh	36.8	16.9	32.2	14.1	34.9	14.9	34.7	15.5	33.5	14.2	37.4	14.9	31.1	15.6	36.3	17.1	27.4	14.8	38.1	19.8
Arunachal Pradesh	38.5	18.5	30.3	12.7	36.7	11.4	34.4	17.5	51.1	13.4	26.5	9.0	32.0	18.4	36.6	13.0	30.5	15.7	36.5	17.3
Assam	29.0	17.7	39.6	13.7	25.7	19.5	40.6	14.2	26.5	19.3	38.9	15.3	30.1	15.3	39.1	15.6	27.0	15.8	40.2	17.0
Bihar	38.3	13.7	35.4	12.6	36.6	14.0	35.3	14.0	35.0	13.0	34.8	17.3	32.2	13.1	37.0	17.7	32.2	12.4	37.3	18.1
Chhattisgarh	29.5	23.6	31.8	15.1	24.3	24.5	36.1	15.1	23.7	21.4	37.1	17.8	24.0	20.4	38.6	17.1	20.9	21.0	39.7	18.4
Gujarat	19.9	17.8	45.3	17.0	18.7	17.7	46.0	17.6	18.3	15.4	46.1	20.2	18.6	13.8	47.3	20.3	16.0	13.6	48.6	21.8
Haryana	17.0	10.7	46.2	26.1	16.6	10.1	45.5	27.8	13.3	8.7	44.9	33.2	13.2	8.9	44.0	33.9	11.9	9.4	41.1	37.6
Himachal Pradesh	5.0	11.9	54.0	29.1	7.2	11.7	50.8	30.3	5.7	9.5	50.6	34.3	4.2	8.4	49.0	38.5	3.7	8.8	46.6	40.9
Jammu and Kashmir					29.3	6.9	44.7	19.2	28.0	5.2	44.8	22.0	19.5	8.1	51.7	20.7	26.3	6.1	43.9	23.7
Jharkhand	38.3	17.0	35.6	9.1	34.6	17.0	37.6	10.8	37.4	14.8	37.0	10.8	33.7	14.0	39.9	12.4	33.0	14.1	40.7	12.1
Karnataka	36.1	15.1	34.7	14.1	31.0	15.6	37.0	16.3	31.7	14.7	37.1	16.5	29.9	13.9	38.1	18.1	24.1	14.7	41.8	19.5
Kerala	0.4	10.1	68.2	21.3	1.3	8.8	64.0	26.0	1.1	6.8	62.2	29.9	1.6	6.9	62.8	28.7	0.8	4.6	55.2	39.4
Madhya Pradesh	28.4	19.5	36.2	15.9	30.3	19.4	36.6	13.8	31.6	17.9	36.8	13.8	31.0	16.7	38.3	14.1	28.8	16.9	40.7	13.6
Maharashtra	14.8	16.7	45.1	23.4	14.0	17.1	44.3	24.6	14.1	14.6	44.6	26.7	11.8	14.2	45.8	28.2	10.8	12.4	46.1	30.7
Manipur	10.7	5.6	48.0	35.8	16.5	7.9	46.6	29.1	12.5	10.1	48.3	29.1	15.1	8.8	47.3	28.8	12.4	8.7	49.1	29.7
Meghalaya	42.0	17.8	29.3	10.9	41.5	21.0	28.4	9.1	39.4	19.8	31.2	9.6	41.0	19.1	32.0	8.0	41.9	20.3	29.8	8.1
Mizoram	13.8	15.9	49.2	21.1	8.6	23.6	54.6	13.2	6.2	21.2	60.0	12.6	9.2	23.9	51.1	15.8	5.9	17.1	61.2	15.9
Nagaland	12.6	15.8	53.8	17.8	19.8	13.6	52.6	14.0	21.9	13.1	49.5	15.5	20.3	13.9	50.9	14.9	19.4	15.8	52.6	12.2
Odisha	23.9	24.0	39.4	12.7	26.6	23.8	37.6	12.1	24.6	19.0	41.6	14.9	25.1	18.0	41.9	14.9	24.2	17.3	43.9	14.6
Punjab	21.0	12.3	47.9	18.8	18.4	10.5	49.2	21.9	18.0	9.0	48.5	24.6	15.7	10.0	47.4	27.0	15.4	8.8	47.0	28.7
Rajasthan	30.1	17.0	37.8	15.1	29.8	14.9	39.1	16.2	29.1	13.8	39.0	18.1	29.2	13.9	40.2	16.7	28.1	14.4	39.8	17.7
Sikkim	21.7	22.5	42.4	13.4	14.1	23.0	43.6	19.3	16.2	25.1	41.0	17.7	14.7	31.2	41.0	13.2	13.5	28.3	43.5	14.8
Tamil Nadu	22.0	19.5	44.3	14.2	18.5	18.2	46.1	17.3	17.4	16.7	48.2	17.8	16.5	14.6	50.4	18.6	14.0	13.9	51.4	20.8
Telangana	41.0	11.8	33.1	14.1	39.1	11.8	32.7	16.4	40.5	10.0	33.7	15.8	35.7	10.9	35.1	18.3	33.3	9.9	36.9	19.9
Tripura	20.5	23.5	42.5	13.5	18.0	27.9	41.2	12.9	16.2	25.5	46.4	12.0	12.9	22.3	50.5	14.3	11.9	19.5	53.5	15.1
Uttar Pradesh	30.7	14.0	37.4	17.9	29.4	13.7	38.6	18.3	27.0	11.3	39.6	22.1	30.5	11.5	38.4	19.5	26.3	11.2	39.3	23.3
Uttarakhand	11.0	12.4	45.6	31.1	12.2	10.4	48.3	29.1	12.9	9.1	45.0	33.1	13.8	9.2	44.8	32.2	13.4	9.6	45.1	31.9
West Bengal	29.1	24.7	36.2	10.0	28.3	23.1	37.8	10.8	20.4	28.3	38.5	12.9	26.4	22.1	39.6	11.9	23.4	23.8	40.0	12.8
All India	**27.1**	**16.8**	**39.9**	**16.1**	**26.2**	**16.3**	**40.5**	**17.0**	**24.9**	**15.1**	**40.8**	**19.2**	**25.9**	**14.4**	**41.0**	**18.7**	**23.8**	**14.2**	**41.7**	**20.4**

Aspirational districts

The 'Transformation of Aspirational Districts' programme (2017) anchored by NITI Aayog aims to improve the socio-economic status of 117 districts across 28 states in India. "The programme focuses on five themes which have a direct bearing on the quality of life and economic productivity of citizens. Each of the five themes have been assigned different weightages, of which education is one of the highest. 81 data points are being tracked by the government."[1]

Given below are the ASER learning levels in reading and arithmetic of all children (age 5-16) from ASER 2016 and ASER 2018.

State	District	Not in school		Private school		Learning levels: All schools							
						Std III-V				Std VI-VIII			
		% Children (age 6-14) not enrolled in school		% Children (age 6-14) enrolled in private school		% Children who can read Std II level text		% Children who can at least do subtraction		% Children who can read Std II level text		% Children who can do division	
		2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Andhra Pradesh	Visakhapatnam	3.0	1.7	39.3	38.4	44.1	30.0	57.8	44.4	64.0	53.2	48.3	33.9
	Vizianagaram	5.6	3.7	26.3	28.6	40.6	48.8	62.4	59.3	73.4	80.8	63.3	61.6
	Y.S.R.	2.8	1.0	36.0	42.2	38.6	32.4	68.1	51.9	69.8	54.3	51.9	37.2
Arunachal Pradesh	Lohit	2.4		33.6		20.5		28.7		55.3		31.6	
Assam	Baksa	0.4	0.7	22.3	21.6	26.5	40.5	15.9	35.8	41.2	72.7	6.5	27.3
	Barpeta	1.9	3.0	21.1	28.0	31.4	16.8	35.3	57.8	55.3	32.6	15.9	46.9
	Darrang	3.8	2.3	17.6	26.2	28.4	32.2	34.1	33.2	52.3	62.8	23.8	24.8
	Dhubri	4.3	2.1	19.8	23.9	24.3	19.9	39.2	40.2	51.4	51.9	27.5	34.9
	Goalpara	1.9	2.2	17.2	17.9	26.0	41.5	40.3	48.3	59.0	67.9	19.6	27.7
	Hailakandi	6.8	2.7	15.4	20.9	10.3	15.8	20.1	23.6	23.1	27.8	5.9	11.8
	Udalguri	2.8	1.6	22.2	34.1	28.0	36.4	24.4	45.7	41.7	52.7	12.5	17.1
Bihar	Araria	8.2	10.2	9.1	14.9	27.6	31.2	30.7	35.8	62.5	54.3	55.3	37.8
	Aurangabad	0.3	2.7	16.4	27.1	47.0	47.7	47.2	56.2	69.3	71.3	51.2	64.8
	Banka	3.3	6.8	11.3	12.3	26.8	30.3	39.0	36.7	57.7	53.6	54.0	50.0
	Begusarai	1.4	3.5	12.2	14.9	33.0	37.5	45.4	37.6	62.3	67.4	55.1	51.0
	Gaya	6.2	4.8	12.3	16.8	41.3	31.1	44.1	39.7	74.5	61.6	61.5	48.0
	Jamui	1.9	0.9	7.1	11.1	27.7	30.8	35.7	38.0	65.2	67.1	47.3	59.2
	Katihar	4.7	5.6	6.6	5.8	27.7	21.2	32.6	24.3	50.3	53.9	40.3	33.7
	Khagaria	3.2	2.4	10.0	12.0	29.8	37.6	41.7	53.1	62.5	71.6	57.3	67.4
	Muzaffarpur	2.5	2.5	15.6	21.3	35.1	36.7	29.6	39.1	67.8	62.8	52.6	54.2
	Nawada	3.0	4.4	6.2	14.9	31.3	24.9	48.0	36.6	66.3	56.8	62.2	43.4
	Purnia	9.5	6.0	6.3	6.0	28.2	18.4	34.6	26.0	60.8	61.4	40.9	43.3
	Sheikhpura	3.4	5.1	13.0	17.0	40.2	31.1	53.5	39.4	76.8	66.7	70.9	49.4
	Sitamarhi	3.4	5.4	9.2	17.7	25.8	33.8	32.4	36.5	68.5	58.5	57.3	43.5
Chhattisgarh	Bastar	5.2	7.4	7.7	7.1	35.2	37.2	26.8	15.6	63.8	63.9	18.0	11.7
	Dakshin Bastar Dantewada	22.7	16.8	4.0	5.7	18.3	30.9	28.0	21.1	58.7	63.2	25.0	26.4
	Korba	3.9	4.6	11.4	16.4	37.7	30.0	29.2	27.5	66.2	62.6	16.9	20.6
	Mahasamund	2.1	3.8	19.0	19.6	47.3	62.6	43.0	42.9	74.9	76.1	34.8	32.1
	Rajnandgaon	0.5	2.6	11.2	12.0	56.1	40.6	42.0	39.9	77.0	76.3	26.9	35.5
	Uttar Bastar Kanker	3.4	2.4	15.1	12.8	58.3	41.7	47.2	44.1	76.4	79.3	27.8	34.7
Gujarat	Dahod	1.0	1.3	9.3	16.8	33.3	40.4	21.6	30.5	61.3	67.6	20.9	35.5
	Narmada	2.2	1.2	10.9	6.9	31.6	38.1	15.3	23.4	59.7	64.8	23.7	20.0
Haryana	Nuh	14.3	9.6	15.9	22.8	24.5	24.1	24.6	38.8	54.4	52.0	28.0	36.1
Himachal Pradesh	Chamba	1.1	1.1	12.2	10.9	54.2	55.4	56.3	43.5	84.9	77.5	43.0	38.5
Jammu and Kashmir	Baramulla		1.3		48.8		36.7		57.1		63.8		32.2
	Kupwara		0.8		48.8		38.3		53.0		59.6		34.5

[1] http://niti.gov.in/writereaddata/files/FirstDeltaRanking-May2018-AspirationalRanking.pdf

Aspirational districts

State	District	Not in school % Children (age 6-14) not enrolled in school		Private school % Children (age 6-14) enrolled in private school		Learning levels: All schools Std III-V % Children who can read Std II level text		Std III-V % Children who can at least do subtraction		Std VI-VIII % Children who can read Std II level text		Std VI-VIII % Children who can do division	
		2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Jharkhand	Bokaro	0.6	1.8	17.3	21.6	33.3	36.4	36.4	45.6	55.5	61.2	45.3	41.4
	Chatra	3.3	0.8	18.4	14.3	19.5	26.5	27.3	27.5	49.2	66.2	34.0	41.5
	Dumka	4.7	3.9	8.9	9.9	19.3	26.4	34.0	39.0	45.6	51.6	36.3	31.3
	East Singhbhum	2.1	2.1	17.3	12.1	37.0	27.6	34.2	32.4	67.7	56.4	40.1	30.8
	Garhwa	1.7	1.2	10.5	15.8	23.9	25.2	25.3	33.1	57.8	67.1	30.4	52.6
	Giridih	2.7	2.1	20.5	21.7	40.5	20.7	42.7	25.9	71.7	56.2	43.1	33.2
	Godda	1.8	1.1	15.7	10.8	24.2	26.9	39.0	40.9	67.3	51.4	48.1	32.4
	Gumla	4.0	3.2	24.2	31.6	18.1	29.4	22.2	36.0	57.5	61.0	24.0	31.6
	Hazaribagh	1.3	0.6	37.3	28.1	40.5	32.8	41.0	35.1	65.8	62.2	50.3	39.3
	Khunti	4.1	4.3	24.5	22.5	29.7	34.5	28.4	26.4	77.4	64.5	23.3	23.3
	Latehar	4.0	1.2	13.1	13.8	27.3	27.1	26.8	27.2	63.2	53.5	35.3	28.7
	Lohardaga	2.0	0.9	19.2	29.0	21.6	37.5	25.7	36.5	49.7	70.0	19.9	39.3
	Pakur	16.7	11.0	12.0	16.8	12.0	16.1	24.0	20.3	34.0	46.2	24.3	32.5
	Palamu	1.3	3.3	10.2	14.7	30.3	25.9	33.2	31.7	62.1	52.3	41.3	35.8
	Ramgarh	1.9	1.1	33.5	35.1	35.2	40.2	40.2	42.7	52.2	66.9	28.9	43.8
	Ranchi	9.9	2.4	40.1	39.0	36.9	37.4	39.7	32.6	75.3	63.3	28.2	28.3
	Sahibganj	8.9	4.3	7.8	11.8	13.3	14.6	23.6	15.6	43.6	34.1	36.5	19.5
	Simdega	4.4	1.5	26.6	30.1	15.1	23.4	17.0	27.7	54.7	63.6	19.5	25.8
	West Singhbhum	6.5	7.6	11.3	8.1	8.3	12.8	16.6	18.7	34.5	37.6	18.6	22.2
Karnataka	Raichur	4.7	1.2	16.4	13.1	17.8	26.8	19.8	28.1	54.4	56.5	20.5	26.6
	Yadgir	5.8	4.7	17.6	17.4	16.6	22.0	29.5	30.6	47.1	57.8	22.2	33.2
Kerala	Wayanad	0.8		39.5		49.4		43.7		79.7		37.1	
Madhya Pradesh	Barwani	16.6	21.7	10.4	15.1	12.8	26.5	12.3	18.5	43.5	55.1	12.6	20.6
	Chhatarpur	3.3	5.9	12.8	11.2	22.4	24.1	24.9	30.9	51.8	59.6	31.2	42.6
	Damoh	2.7	2.1	22.5	20.1	31.0	39.2	15.9	31.6	50.0	58.8	20.3	38.2
	Guna	9.1	4.8	18.2	20.1	29.2	24.1	30.3	20.9	42.5	53.8	24.2	30.1
	Khandwa	5.1	2.8	25.2	14.6	23.8	23.2	19.1	20.2	61.8	62.6	15.8	29.1
	Rajgarh	5.8	2.9	32.6	44.0	30.3	30.0	25.0	31.9	56.6	68.1	24.8	27.3
	Singrauli	3.2	2.2	16.5	25.0	22.8	25.9	18.0	27.7	54.3	54.8	28.5	29.9
	Vidisha	3.2	5.8	26.4	22.5	21.8	24.6	18.5	19.7	47.7	38.7	19.1	21.7
Maharashtra	Gadchiroli	1.1	0.5	21.5	24.4	30.2	34.2	30.2	38.6	56.0	55.3	19.5	26.2
	Nandurbar	2.4	4.1	21.0	37.2	28.4	33.9	14.7	19.4	46.4	62.9	7.8	6.3
	Osmanabad	0.2	0.7	30.1	30.7	45.7	53.4	38.1	31.3	73.3	75.2	37.7	27.6
	Washim	0.8	0.0	36.4	34.6	52.1	47.1	22.2	40.2	78.3	77.8	16.4	30.6
Manipur	Chandel	2.5	6.6	67.3	64.7	64.7	63.3	64.7	66.7	89.5	90.0	52.6	30.0
Meghalaya	Ri Bhoi	1.7	3.4	76.1	55.2	29.1	48.8	30.7	43.8	63.4	91.5	24.6	25.5
Mizoram	Mamit	0.0	0.4	15.1	24.6	34.6	33.7	67.2	68.7	80.9	86.5	89.1	55.6
Nagaland	Kiphire	3.1	4.5	33.6	29.5	45.3	6.5	57.3	10.1	67.7	26.3	43.6	0.9

Aspirational districts

State	District	Not in school % Children (age 6-14) not enrolled in school		Private school % Children (age 6-14) enrolled in private school		Learning levels: All schools							
						Std III-V				Std VI-VIII			
						% Children who can read Std II level text		% Children who can at least do subtraction		% Children who can read Std II level text		% Children who can do division	
		2016	2018	2016	2018	2016	2018	2016	2018	2016	2018	2016	2018
Odisha	Balangir	1.2	0.3	0.2	7.8	18.5	30.2	21.0	21.4	36.9	51.6	13.5	20.5
	Dhenkanal	0.5	0.6	13.4	13.4	58.6	54.3	39.6	43.6	77.6	71.4	35.8	37.6
	Gajapati	3.4	1.9	9.6	7.9	31.4	33.6	43.2	34.4	51.5	50.8	38.8	20.2
	Kalahandi	3.8	1.5	5.1	6.8	38.4	42.0	22.8	32.8	53.5	54.9	19.8	27.0
	Kandhamal	2.2	0.9	7.0	3.2	34.3	35.9	31.6	38.7	71.7	52.9	26.3	26.1
	Koraput	8.5	7.4	1.5	1.4	9.7	19.5	11.6	12.7	33.0	43.5	12.5	9.4
	Malkangiri	10.2	7.1	3.2	2.6	15.5	14.0	7.3	16.4	41.5	53.2	5.7	28.4
	Rayagada	5.9	7.8	3.1	3.0	35.0	15.8	18.6	8.5	81.6	40.3	17.2	5.4
Punjab	Firozpur	2.1	2.0	44.8	45.1	58.9	63.8	59.3	62.4	82.8	89.8	50.8	58.7
	Moga	0.0	1.2	51.2	57.5	53.9	59.4	66.4	68.3	80.9	81.5	58.2	58.8
Rajasthan	Baran	4.5	4.0	29.3	24.0	34.6	32.0	36.9	29.2	66.2	65.3	47.2	33.0
	Dhaulpur	3.6	2.4	45.5	40.1	35.9	29.3	47.3	36.9	76.4	65.0	54.8	40.9
	Jaisalmer	15.2	8.2	22.1	19.3	30.9	18.9	33.8	14.4	68.8	51.2	41.4	17.0
	Karauli	2.0	2.5	55.8	43.6	45.1	32.9	47.5	35.0	72.8	66.5	58.2	34.6
	Sirohi	9.9	7.0	34.2	19.3	32.5	24.0	30.4	15.6	68.4	62.2	24.0	12.8
Sikkim	West District	0.3	0.8	30.2	30.1	48.4	33.3	58.9	52.5	79.3	65.3	30.4	29.3
Tamil Nadu	Ramanathapuram	0.4	0.5	36.3	30.9	42.4	21.7	41.9	50.4	70.6	68.6	44.5	28.9
	Virudhunagar	0.4	0.6	24.1	22.9	43.0	27.9	54.1	49.4	80.6	57.5	54.9	45.7
Telangana	Adilabad	3.0	2.6	31.0	40.0	21.0	28.7	42.5	39.3	52.3	53.2	33.9	34.8
	Khammam	2.8	0.0	32.7	36.9	50.0	34.2	69.4	63.1	74.0	74.4	49.4	62.0
	Warangal	0.3	0.0	47.1	54.9	30.0	47.0	70.0	59.8	72.8	75.0	58.3	56.9
Tripura	Dhalai	0.8	2.8	10.7	11.0	38.2	22.3	44.1	41.3	51.9	57.7	16.8	29.4
Uttar Pradesh	Bahraich	6.2	9.4	25.6	26.6	12.0	31.4	11.3	28.6	39.2	55.8	15.3	25.4
	Balrampur	9.1	9.1	34.1	38.0	26.4	22.3	22.3	29.4	46.0	52.2	20.6	39.1
	Chandauli	2.0	5.0	47.9	43.7	33.5	52.5	36.5	41.9	57.6	77.3	37.9	45.4
	Chitrakoot	4.4	3.2	37.6	36.4	32.2	36.3	17.3	37.7	74.5	64.5	23.9	34.7
	Fatehpur	5.8	2.9	50.8	50.4	21.7	47.7	24.0	45.0	47.5	67.8	22.3	40.0
	Shravasti	11.3	14.3	22.9	27.8	11.7	21.5	9.7	18.1	41.8	48.1	18.2	26.8
	Siddharth Nagar	4.7	5.2	44.7	39.1	23.0	24.9	24.1	31.7	49.5	54.2	22.0	28.9
Uttarakhand	Haridwar	3.1	4.6	52.5	52.6	39.9	46.2	41.3	38.4	66.7	77.2	34.1	41.4
	Udham Singh Nagar	2.5	1.4	49.1	62.1	44.0	40.7	43.1	42.4	62.7	71.1	30.9	32.7
West Bengal	Birbhum	4.5	1.4	2.8	4.3	26.3	44.1	36.7	36.3	50.0	66.0	22.8	32.3
	Dakshin Dinajpur	1.6	0.9	6.3	8.7	42.3	31.7	42.3	45.0	56.5	46.4	32.2	24.7
	Maldah	4.7	4.4	14.7	14.6	27.3	32.4	27.3	30.3	57.0	51.5	16.9	19.2
	Murshidabad	3.4	2.8	10.9	7.0	28.4	38.9	33.3	35.4	53.9	50.5	21.3	29.0
	Nadia	0.0	1.5	7.9	5.1	53.9	48.7	50.6	37.7	69.1	66.2	29.4	24.7

From assessment to action: ensuring foundational learning for *ALL* children

The child in this picture is reading. The text is in Hindi and it translates as: *The sun has come out. Light is spread everywhere. Darkness is gone. Children are going to school.*

This picture symbolises the promise of education to brighten lives and create happiness. Together we must ensure that all children can read and understand simple texts like these and do basic math.

But it is not enough to hope that they will acquire these skills just by staying in school.

From measuring schooling to measuring learning

The Millennium Development Goals (MDGs) adopted in the year 2000 created a push for universal access to education. Since then, many countries have acted to expand school enrollments.[1] But improvements in the quality of education outcomes have not kept pace.[2]

More recently, Goal 4 of the Sustainable Development Goals (SDGs), defined by world leaders in 2015, calls for a greater focus on inclusiveness, equity and quality in education. Learning outcomes feature prominently in SDG 4, with five targets and six indicators calling for data on learning outcomes and skills (UNESCO Institute of Statistics (UIS), 2018a).[3]

Within SDG 4, the first target - Target 4.1- states: *"By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes."*

In particular, Indicator 4.1.1 will measure the *"proportion of children and young people:*

(a) in Grade 2 or 3;

(b) at the end of primary education; and

(c) at the end of lower secondary education

achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex".

In order to enable monitoring of these new global education targets under the SDGs, specifically Target 4.1.1, robust, regular, and comparable (both within a country over time as well as cross-nationally) data are needed on children's learning outcomes.

Insufficient evidence on learning gaps in the early grades

New estimates from UNESCO Insititute for Statistics (UIS)[4] show that 617 million children and adolescents worldwide

are not achieving minimum proficiency levels in reading and mathematics (though robust estimates are missing for many countries, particularly low and middle-income countries). About two-thirds of these children and youth are in school (UIS, 2017a). The gap between what children can do and what is expected of them often appears in the very first years of school. Almost all education systems expect children to acquire foundational abilities of reading and mathematics[5] by Grade 2 or 3 so that they can negotiate more difficult content in higher grades. In most school systems, classroom teaching is guided by the need to cover an ambitious curriculum. Keeping pace with children's learning, especially struggling learners, is seldom prioritised (Banerji, 2017). Children who lag behind in early grades are usually not offered a chance to catch up.

In the most recent World Development Report, the World Bank (2018) highlights that learning outcomes will not change unless learning is used as a guide and metric. The importance of assessments is emphasised by the fact that assessing learning is visualized as the first step in a 3-step strategy to tackle the learning crisis.[6] The other two being:

1) Acting on evidence collected from learning assessments; and

2) Aligning all actors to make the system of education work for learning.

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[1] See United Nations (2015) to understand progress made under the Millennium Development Goals.
[2] For instance, see World Bank (2018) for a detailed discussion on the crisis of learning.
[3] See UIS (2018b) for a list of all targets and indicators for SDG 4 on education.
[4] UIS is the custodian UN agency for SDG 4 data. The UIS not only has the mandate to produce the global monitoring indicators but also to help all stakeholders - countries, donors, civil society groups, and technical partners - use the findings to get all children in school and learning by 2030.
[5] Acquisition of these foundational skills in early grades is strongly positively associated with later school performance. For instance, see Glick & Sahn (2010).
[6] Some critics would argue that in recent times a lot of assessments have mushroomed leading to a risk of an overemphasis on assessment data. But in many countries the problem is still availability of too little relevant and actionable assessment data - not too much.

Intuitively, it seems reasonable for all countries to assess learning in early grades (Grades 2 or 3) to ensure that all children are acquiring foundational abilities of reading and mathematics that are critical to successfully negotiating the curriculum in higher grades. Evidence from such an assessment would ensure that learning gaps are identified in time to provide effective remedial action where needed.

Currently, none of the major international assessments measure foundational learning abilities for Grades 2 or 3.[7] And out of several regional assessment initiatives,[8] only the Programme for the Analysis of Education Systems of CONFEMEN (PASEC) and the Latin American Laboratory for Assessment of the Quality of Education (LLECE) assess learning outcomes for children in Grades 2 and 3, respectively. Some countries cover early grades in their national assessment programs. A recent review by UIS and UNESCO's International Bureau of Education (UNESCO-IBE) found that around 50 countries have assessment frameworks for Grades 2 or 3, but only a few publish learning outcomes or successfully complete the administration of their assessments (UIS, 2017b).[9] One reason for this absence of attention to foundational skills is that they are much more difficult to assess.

Is there a viable assessment of foundational learning to produce actionable evidence as well as track progress on learning outcomes under SDG 4.1.1?

The Annual Status of Education Report (ASER) assessment: Relevant, robust, and replicable

Much before international acceptance of the existence of a learning crisis came about, Pratham,[10] one of the largest civil society organizations working to improve quality of education in India, realized the problem of low learning outcomes while working with children in its intervention programs. Pratham developed a simple assessment tool to help understand and track children's reading and numeracy levels. The assessment is oral, administered one on one with each child, and quick and simple both to do and to understand. This assessment fed directly into Pratham's instructional practice as children were grouped for instruction based on their level. It was also helpful in explaining to parents what their children were able to do and where they required more assistance, and for tracking children's progress over time. This assessment was later standardized and scaled up to form the core of a large scale household survey that collects data on schooling status and learning outcomes of children in rural India known as the Annual Status of Education Report, or ASER (ASER Centre, 2015).

Pratham pioneered the ASER assessment model in 2005. Since then, the ASER survey has been conducted every year across rural India using simple[11] but robust one-on-one assessment tools.[12] It engages citizens and local organisations/institutions in evaluating and understanding basic learning outcomes in reading and mathematics of a representative sample of over 600,000 children in approximately 16,000 villages and over 565 rural districts each year (Banerji, 2016).[13]

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[7] Progress in International Reading Literacy Study (PIRLS) is an international study of reading (comprehension) achievement in Grade 4. Similarly, Trends in International Mathematics and Science Study (TIMSS) is a series of international assessments of the mathematics and science knowledge of students around the world in Grades 4 and 8. Both PIRLS and TIMSS are conducted by the International Association for the Evaluation of Educational Achievement (IEA) using a pencil-and-paper format. The Programme for International Student Assessment (PISA) is a worldwide study by the Organisation for Economic Co-operation and Development (OECD) in member and non-member nations, intended to evaluate educational systems by measuring 15-year-old school pupils' scholastic performance in mathematics, science, and reading.

[8] The Latin American Laboratory for Assessment of the Quality of Education (LLECE) is a regional assessment led by UNESCO's Regional Bureau for Education in Latin America and the Caribbean (OREALC/UNESCO). It has been administered in mathematics and language (reading and writing) in Grades 3 and 6, and in natural sciences (Grade 6 only).
The Programme for the Analysis of Education Systems of CONFEMEN (PASEC) is a regional assessment for monitoring the quality of education systems belonging to the CONFEMEN. It measures student competencies at the beginning (Grade 2) and end (Grade 6) of primary education, in language (oral/listening comprehension, decoding and reading) and mathematics.
The Pacific Islands Literacy and Numeracy Assessment (PILNA) is a regional assessment that measures language/literacy and mathematics/numeracy skills in Grades 4 and 6. The Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) is a regional assessment that assesses performance levels of students and teachers in Grade 6 in language/literacy, mathematics/numeracy, and health.
The Southeast Asia Primary Learning Metrics (SEA-PLM) is a regional assessment developed to assess Grade 5 students in language, mathematics, and global citizenship.

[9] Due to lack of existing and clear methodologies, SDG 4, Target 4.1, Indicator 4.1.1(a) was only recently upgraded to a Tier II indicator (an indicator which is conceptually clear, established methodology and standards available but data are not regularly produced by countries) from a Tier III indicator (an indicator for which there is no established methodology and standards available or methodology and standards are being developed or tested).

[10] For more information about Pratham, see - http://www.pratham.org

[11] In ASER survey, children in the age group of 5 to 16 years are assessed in their homes. All children are assessed using the same tools as the objective of the survey is to ascertain whether or not children have attained foundational abilities of reading and mathematics. The ASER reading assessment has 4 tasks: recognizing letters, decoding words, decoding a Std I level text, and a Std II level text. The ASER mathematics assessment also has 4 tasks: recognizing numbers (1 to 9), recognizing numbers (11 to 99), subtraction, and division. For both reading and mathematics, each child is marked at the highest level of the assessment based on the tasks she completes successfully. A child who cannot even do tasks at the easiest level is marked as a "beginner".
For more details, see ASER assessments tasks - http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER%202016/aserassessmenttasks.pdf and ASER process for conducting the survey - http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER%202016/aservillageprocess.pdf.

[12] See Vagh (2016) for a discussion on validity of ASER assessment tools. Also, see Banerji & Bobde (2013) to understand the development and evolution of ASER English tool.

[13] See ASER's Trends over Time report that presents trends in enrolment, reading, mathematics, and English for children in rural India from 2006 to 2014 - http://www.asercentre.org/Keywords/p/236.html

Over the past 13 years, the ASER assessment model has been borrowed and adapted by many countries. In 2015, the People's Action for Learning (PAL) Network - a partnership of member countries working across three continents to assess the basic reading and numeracy competencies of children, in their homes, through regular citizen-led assessments was formally established with a Secretariat based in Nairobi, Kenya.[14] The PAL Network believes that citizen-led, household-based ASER-like assessments of basic reading and numeracy competencies are the only way to find out whether ALL children are acquiring the foundational skills that are necessary for future progress.

By consistently producing data on low learning outcomes for the PAL Network member countries,[15] ASER and its family of assessment initiatives have been pushing to shift the focus from access and provision to learning for all and to bring children's learning to the centre of all global discussions and debates on education.

Assessing foundational learning for ALL children: ASER architecture and its relevance for developing country contexts

Current knowledge of and experience with learning assessments is largely based on models and methods that have evolved over time in high income developed countries. Not surprisingly, these respond to the needs and capabilities of the contexts in which they originated. These contexts have characteristics that are often very different from those of developing countries. For example, they typically have child populations that are stable over time, several decades' worth of experience with universal enrollment, comprehensive records of all schools in the country, and significant proportions of parents who have themselves been to school. It is also the case that in these education systems, assessment is usually an integral part of the larger teaching-learning framework that guides the functioning of schools. Data on students' progress feeds into decisions and plans for improvements in the education system (ASER Centre, 2017a).

In the light of the widespread learning crisis and the recent push to assess learning for SDG 4.1.1 monitoring, as countries develop and experiment with metrics and measurement, they need to consider the extent to which the existing assessment approaches and models are appropriate, relevant or useful for their current context. Should they modify or adapt existing paradigms? Or do they need to develop/adapt different indicators, tasks and processes that better serve their current needs and are more aligned to existing capabilities?

The architecture of ASER and its family of assessments is based on ground realities that need to be taken into consideration if assessment data is to be translated easily into effective interventions. The points below summarize and explain some of the key decisions that were taken as the ASER assessment was evolved. These decisions are relevant for countries that have just started thinking or are in early phases of designing assessment programs to measure foundational learning.

1. **Assessments conducted in the households, in order to include ALL children -** Despite making significant progress in increasing enrollments, not all children in the school going age-group in most developing countries are currently enrolled in school. Of those who are enrolled, many attend unrecognized schools. Education systems in many countries lack a comprehensive list of all kinds of schools. Attendance rates also vary vastly across and within countries, and school-based assessments generate estimates of learning that are biased towards students who attend more regularly. Hence, only a household-based assessment can adequately represent ALL children.[16]

2. **Oral one-on-one assessments -** Even after several years of attending school, many children in developing countries lack foundational skills like reading. For instance, in Ghana and Malawi, more than four-fifths of students at the end of Grade 2 were unable to read a single familiar word such as 'the' or 'cat' (Gove & Cvelich, 2011). In Peru (a middle-income country) before the recent reforms only half of all children could do so. In 2016, national level ASER assessments in India and Pakistan[17] revealed that even in Grade 5 about half of all children could not read a Grade 2 level text (ASER Centre, 2017b; ASER Pakistan, 2017). Over 25% children in grade 5 in the Mexican state of Veracruz could not comprehend a simple story that they read (Medición Independiente de Aprendizajes (MIA), 2016).

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[14] See http://palnetwork.org for more information about the PAL Network.
Also, see http://palnetwork.org/our-growth/ for information on the growth of the Network over the years.
[15] See http://palnetwork.org/wp-content/uploads/2017/11/2017_COMMS_InformationBrief_CLA4PagerSDG4.1.1_VO2_EN.pdf for a quick snapshot of foundational learning levels in reading and mathematics in various PAL Network member countries across Africa, Asia and Latin America.
[16] Is a sample based learning assessment appropriate, or is a census required? This is a question that often comes up in assessment-related discussions. To answer this question, it is important to consider the purpose of the assessment. If the objective is to obtain reliable estimates at a systemic level, then, statistically well designed and carefully administered assessments can provide reliable estimates of most variables of interest. Such assessments can also be administered more often. Schools/children participating in these assessments do not have to be identified. This helps lower the stakes, making the assessments less susceptible to biases and ill practices. However, if the objective of the assessment is to use these estimates for targeting of specific actions or interventions, then a census may be needed.
While deciding the sampling design (for sample-based assessments), care should be taken to ensure that learning assessment data that is generated is representative at the level of decision-making. In India, the unit for planning, allocation and implementation in the elementary education sector is the district and the city. Hence, the ASER survey in India aims to reach all rural districts to provide useful data for decision-making at district level as well as state and national levels.
[17] For more information about ASER Pakistan, see - http://www.asercentre.org/#alu7g

Children who cannot read cannot be assessed using pencil-and-paper tests. Oral one-on-one assessment is the only meaningful option for understanding learning outcomes of a majority of children in the developing world at least at the primary school level.

3. **Assessment of foundational abilities of reading and comprehension (in own language) and mathematics -** Learning outcomes are far below grade level for many children currently enrolled in school. For instance, in rural Bangladesh, after completing Grade 9 about 80% of students attain Grade 5 competencies in oral and written mathematics. The fact that written mathematics competency is significantly lower than oral, points to the difficulties that children have in reading, understanding, and writing (Asadullah et al., 2009 as cited in Dundar et al., 2014). Therefore, in many developing countries, it will be useful to begin assessment programs with a focus on basic reading and comprehension (in own language) and mathematics, rather than implementing subject-wise tests. As the system becomes increasingly capable of implementing, analysing and effectively using data, more subjects and more levels can be incrementally incorporated.

4. **Common, frequent, and consistent assessment in early grades and beyond to ensure tracking of foundational abilities -** As elaborated earlier, most international assessments target children in older age groups. But learning deficits are harder to address for older children. Basic data on children's foundational skills in early grades can be linked to quick corrective action, thus preventing the accumulation of learning deficits if taken at the right time and at the appropriate level. Assessment of foundational abilities should also be continued for older age-groups (in addition to any other metric) to ensure that all children have successfully acquired these skills.[18] Also, to make such assessment data useful for monitoring and planning action, findings should be available at regular and predictable intervals.[19] The use of uniform methodologies, approaches, and psychometrics across different rounds of assessment is crucial for education systems to understand trends in learning over time.

5. **Simple instruments, processes and data to generate awareness and build capacity -** Assessment of children's learning has a relatively long history in developed countries, making sophisticated measurement systems

for data collection and different levels of analysis possible. A culture of measurement is not well developed in most developing countries, where the capacity to design assessments, analyze learning outcomes data and link assessment results to action on the ground has yet to be built. Simple, easy to use assessment tools and processes, easily understandable data, and evidence that can effectively be translated into action are all important elements that can fuel policy dialogue and action in the developing country context. Concerted and consistent efforts using a hands-on approach over time will build assessment capacity of government officials at different levels. Simple tools can also engage teacher and parents to understand learning goals expected of children at different stages of the school system.

6. **Collaboration with stakeholders -** In most developing countries, years of schooling are not highly correlated to value-addition in terms of learning for each year spent in school. Involving a wide cross-section of stakeholders in the assessment is useful, given the need to highlight the fact that the issue of learning needs focus and national attention. Often it is only first-hand experience of a problem that changes mindsets. Assessments that are developed and administered with the collaboration of various stakeholders are more likely to be considered valid and relevant at local levels.[20] Local partnerships and simple tools and processes also help reduce the overall cost of assessment.[21]

Looking ahead

The SDGs ushered in a new era of ambitions for education aiming to ensure that every child is in school and learning well. The reporting format for SDG 4.1.1 has two basic requirements for assessment programs:

1) Content/skills covered that can be aligned to minimum proficiency levels (MPLs). The minimum proficiency levels agreed for monitoring under SDG 4.1.1(a) for Grades 2 and 3 are as follows (UIS, 2018c):[22]

   - Grade 2 reading - Children read and comprehend most of written words, particularly familiar ones, and extract explicit information from sentences.

   - Grade 3 reading - Children read written words aloud accurately and fluently. They understand the overall meaning of sentences and short texts, and identify the topic of texts.

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[18] ASER 2018 indicates that even in Grade 8, close to a quarter of enrolled children are unable to read fluently at Grade 2 level and less than half of all children in Grade 8 can correctly solve a simple numerical division problem (3-digit number divided by 1-digit number). Similar trends can be seen from ASER Centre's research studies with children in the post-primary age-group.

[19] Since its inception in 2005, the ASER survey was done annually for 10 years till 2014. Two more rounds have been completed in 2016 and 2018.

[20] In India, ASER partners with local institutions and organizations in each district to carry out the ASER survey and also to discuss and disseminate the ASER results. Partners are from varied backgrounds but a large proportion comprises teacher training colleges, other colleges and universities.

[21] For instance, participation in one round of a large international assessment programme (such as TIMSS and PISA) costs a country around US$800,000. The figure is lower - US$200,000 to US$500,000 - for regional cross-national programmes, such as LLECE and PASEC (UIS, 2018a). In comparison, despite a design that yields estimates at district, state and national levels covering over 550,000 children, ASER 2016 cost less than US$1,000,000.

[22] ASER Centre and the PAL Network played a critical role in shaping these MPLs (to include foundational learning) and achieving global consensus by actively participating in the UIS-Global Alliance to Monitor Learning (GAML) initiative. For more details on GAML see http://gaml.uis.unesco.org.

- Grade 2 and 3 mathematics - Children demonstrate skills in number sense and computation, shape recognition, and spatial orientation.

2) Stringent quality control processes to ensure procedural consistency with data from other assessment programs/countries.

ASER and its family of assessments are well aligned to both these requirements for successful reporting on SDG Indicator 4.1.1.[23]

In addition, though it is mostly known for its use in large-scale ASER survey in India, the ASER assessment tool is also widely used for formative purposes in classroom intervention programs[24] and for program evaluation purposes.[25] Due to its rapid and simple design, ASER assessments can also be conducted along with existing school-based assessments to gain deeper insights on foundational learning levels.[26] ASER assessments can also be included at little additional cost with existing household surveys conducted both nationally (such as income and consumption surveys) and internationally.[27]

Lastly, the links from assessment to action are neither automatic nor straightforward. For learning to improve, not only does evidence from learning assessments need to be available, but also someone needs to act on them. The SDGs have provided a catalyst for focusing on learning; an assessment like ASER is available to provide relevant and actionable evidence that can kick-start the process of change. Now we need a concerted effort to ensure that education fulfills its promise of bringing light and happiness in every child's life.

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[23] See page 279 of this report for a discussion on the ASER survey's quality control process.
Also, in May 2018, the PAL Network published network-wide Data Quality Standards Framework (see https://palnetwork.org/wp-content/uploads/2018/04/2018_PAL-Network_DQSF_FINAL.pdf) as a central element to the network-wide commitment to producing high-quality and robust assessment data.
[24] For instance, see Banerji & Chavan, 2016
[25] For instance, recently, the ASER reading assessment was used along with Early Grade Reading Assessment's (EGRA) oral reading fluency measure to evaluate USAID funded early grade reading programs in 7 states of India.
[26] In a school-based assessment conducted by ASER Centre in partnership with UNICEF in the state of Bihar, oral ASER assessment tools were used in addition to curriculum-pegged pencil-and-paper assessments. See - http://www.asercentre.org/Keywords/p/252.html for more details.
[27] For instance, UNICEF's Multi Indicator Cluster Surveys (MICS) included a foundational learning module similar to the ASER assessment for its 6th round conducted in 2016-2018. Like ASER, MICS is also a household survey. For more details on MICS, see - http://mics.unicef.org/about.

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Annual Status of Education Report (ASER) and National Achievement Survey (NAS): different metrics with a common goal

Overview

The economic and social climate of the globe is changing faster than ever. Through a series of 'global conversations' UN has put many goals/targets at the focal point of action for governments and citizens. Education is a key goal in the list of Sustainable Development Goals. With SDG 4[1], the international community has pledged to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." The World Bank's World Development Report 2018[2] warns of a 'learning crisis' in global education. The report offers three policy recommendations: assess learning, so that it becomes measurable goal; make schools work for all children; and mobilize everyone who has stakes in learning.[3]

In India, NITI Aayog's vision and strategy document, Three-year Action Agenda (2017-18 to 2019-20),[4] seeks to orient the system towards outcomes and implement a time-bound program with focus on ensuring that all children attain basic skills. Focusing on quality education, the central RTE (Right of Children to Free and Compulsory Education Act 2009)[5] rules have been amended in 2017 to include class-wise, subject-wise learning outcomes for all elementary classes and also prepare guidelines for putting into practice Continuous and Comprehensive Evaluation, to achieve the defined learning outcomes.

All of this indicates a clear global and national mandate for quality education, in general, and for improving learning outcomes in particular.

In India, there are two large-scale nationwide learning assessments currently conducted periodically to track children's learning outcomes at the elementary stage. Pratham/ASER Centre's Annual Status of Education Report (ASER) has been published annually from 2005 to 2014, in 2016 and now in 2018.[6] The National Council for Educational Research and Training (NCERT) has conducted National Achievement Survey (NAS) periodically since 2001 for Classes III, V, VIII and X. NAS was most recently conducted in 2017, with major changes in scope, scale, methodology, and reporting, as compared to earlier versions.

The table below compares the implementation cycles of NAS and ASER:

National Achievement Survey (NCERT)				
Class / Cycle	Class III	Class IV	Class VIII	Domains assessed
Cycle 1	2003-04	2001-02	2002-03	Class 3- Language, Maths
Cycle 2	2007-08	2005-06	2007-08	Class 5- Language, Math, EVS
Cycle 3	20012-13	2009-11	2010-13	Class 8- Language, Math, Science, Social studies
Cycle 4	2015-16	2014-15	2015-16	
NAS 2017	November 2017			
NAS 2018	Not conducted			

ASER Survey		
Year	Age group[7]	Domains assessed
2005-2014	5-16	Basic reading, arithmetic and English (2007, 2009, 2012, and 2014)
2015	Not conducted	
2016	5-16	Basic reading, arithmetic and English
2017[8]	14-18	Application of basic arithmetic skills to everyday tasks
2018	5-16	Basic reading and arithmetic + Bonus tool (age 14-16)

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1 https://www.un.org/sustainabledevelopment/sustainable-development-goals/
2 http://www.worldbank.org/en/news/press-release/2017/09/26/world-bank-warns-of-learning-crisis-in-global-education
3 The Global Partnership for Education (GPE2020) - the global fund solely dedicated to education in developing countries is committed to upholding education as a public good, a human right, and an enabler of other rights. It is essential for peace, tolerance, human fulfillment, and sustainable development. It also believes that it is essential to focus resources on securing learning, equity, and inclusion for the most marginalized children and youth, including those affected by fragility and conflict. GPE 2020 is a five-year strategic plan commencing January 1, 2016 and ending December 31, 2020. It aligns with the vision and mission of the Global Goals for Sustainable Development.
4 http://niti.gov.in/writereaddata/files/coop/ActionPlan.pdf
5 http://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/RTE_Amendment_2017.pdf
6 In 2015, ASER was conducted only in two states - Punjab and Maharashtra. In 2017, ASER was conducted for youth age 14-18 in 28 districts of the country. See http://www.asercentre.org/Keywords/p/276.html
7 Since ASER is a household survey, a representative sample of children of the specific age groups were assessed. These children could be enrolled in various grades in government, private or other kinds of schools. There could also be children of that age gorup who were not enrolled in school.
8 http://www.asercentre.org/Keywords/p/305.html

Both ASER and NAS are large scale and national assessments. Although, they have a common overarching goal to measure learning outcomes in elementary grades, there are many important differences from objective to methodology to procedures. Since the purpose of each exercise is different, consequently, key elements like sampling, location of testing, test design, questionnaire content, methodology, and timeframe of assessment are also different. Results of NAS and ASER are computed, reported, and disseminated very differently. Since estimates generated by ASER and NAS neither cover the same population nor assess the same content, their results are not comparable.

However, it is worth highlighting that both ASER[9] and NAS[10] results over the years have brought the 'learning crisis' at the forefront of policy discussion and debate in India. For example, the Economic Survey of India has cited ASER results for several years. In fact, in 2017-18, they generated a "learning poverty headcount" and a "learning poverty gap".[11] NITI Aayog's Three-year Action Agenda (2017-18 to 2019-20), focuses on the urgent need for improving learning outcomes and reiterates this point using both ASER and NAS data.[12]

Key Features of ASER and NAS

Since the data on learning levels from ASER and NAS surveys have been used in policy formulation and advocacy, it is crucial to understand the key features of the two surveys. This part of the note summarizes and makes comparisons between ASER and NAS (for elementary grades). It is based on ASER 2005-2018[13] and a set of NAS documents available in the public domain[14] as well as official press releases pertaining to elementary education.[15] For NAS, this note largely focusses on NAS 2017 which had a number of key features that were improvements over previous NAS rounds.

Institutions

ASER is facilitated by Pratham, a non-governmental organization (NGO), and carried out by partner institutions in almost all rural districts of the country. These partner institutions include colleges, universities, District Institutes of Education and Training (DIETs), teacher training institutes, NGOs, and other types of organizations.

While many government institutions participate in conducting ASER, no funds are accepted from any government source. External evaluations and process audits of the ASER methodology are conducted from time to time by independent organizations.

NAS is carried out by the Educational Survey Division (ESD) of the NCERT. The design and implementation of NAS 2017 included in its ambit school leaders, teachers, and a network of officials at the cluster, block, DIET, State Council of Educational Research and Training (SCERT) and Directorates of Education in various states and union territories.[16]

Field investigators from outside the government education system were engaged to conduct the assessment, with preference given to DIET students. A monitoring team comprising observers from inter-ministerial departments was tasked with observing the implementation of the survey.[17]

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[9] See http://www.asercentre.org/Keywords/p/236.html

[10] Based on comparison of state-wise results of NAS - Class V (Cycles 3 and 4), it was found that 19 out of 31 states/union territories which participated in both cycles show a significant decline in learning outcomes in language and math. The steepest declines were observed in Uttar Pradesh, Madhya Pradesh, and Maharashtra. Learning levels in both subjects were found to be stagnant in 10 states/union territories, while significant improvement was observed only in Andaman and Nicobar Islands and Puducherry.

[11] The Economic survey 2017-18 used ASER data to estimate a Learning Poverty Headcount (LPC) as well as a Learning Poverty Gap (LPG). "....on math and reading, India's absolute LPC is between 40 and 50 percent: in other words, roughly 40-50 percent of children in rural India in grades 3 to 8 cannot meet the fairly basic learning standard ....". The LPC simply measures the number of children who do not meet the basic learning benchmark, whereas the LPG additionally takes into account how far each student is from the benchmark.

[12] NITI Aayog's Three-year Action Agenda (2017-18 to 2019-20), reiterates this using both ASER and NAS data. "...the proportion of children in grade III who can read at least a grade I level text dropped from 50.6 in 2008 to 40.3 in 2014, before increasing marginally to 42.5 in 2016 according to Pratham's Annual Status of Education Report (ASER) data. The proportion of children in grade III who can do at least subtraction fell from 39% in 2008 to 25.4% in 2014, and again increased slightly to 27.7% in 2016. Poor learning outcomes are reflected in multiple other sources as well, including the National Achievement Survey (NAS), which found worse results in Class V Cycle 4 (2015) compared to Cycle 3(2012)...."

[13] See www.asercentre.org for ASER reports from 2005 to 2018, and related documentation.

[14] While NAS reports, communication documents and sample items have been published by NCERT (available at http://www.ncert.nic.in/programmes/ education_survey/Education_survey.html), assessment tools and technical specifications relating to NAS 2017 are not available in the public domain as of December, 2018.

[15] Two cycles of NAS for Class X have been conducted in 2014-15 and 2018. However, these have not been considered in this note, as they do not pertain to elementary education.

[16] MHRD Press Release (26-07-2018): http://pib.nic.in/newsite/PrintRelease.aspx?relid=181119

[17] NAS 2017: Operational Guidelines cum Training Manual, retrieved from http://www.ncert.nic.in/programmes/NAS/pdf/ Operational_Guidelines_Training_Manual.pdf

Objectives

ASER's objective is to provide annual, reliable, current, and actionable evidence relating to enrollment and basic learning outcomes of children in rural India. It is designed to generate district, state, and national level estimates of children's schooling status for all children aged 3-16 years, and estimates of basic reading and arithmetic ability for all children aged 5-16 years.

ASER is designed as a household survey so as to include all children: those enrolled in government schools, private schools, other schools, as well as those not enrolled in school or not attending school on the day of the survey. It is a foundational assessment or "floor test". ASER 2018 also included additional "bonus" questions on application of basic arithmetic skills to daily tasks, for the age group 14-16 years.

The major objective of conducting NAS is to have a system level reflection of the effectiveness of the government education system in India.[18] The findings from NAS 2017 are intended to guide education policy, planning and implementation at national, state, district, and classroom levels for improving learning levels of students and bringing about qualitative improvements.[19]

NAS 2017 is designed as a school-based survey of students enrolled in Std III, V and VIII in government and government-aided schools. It is a grade-level assessment based on class-wise, subject-wise learning outcomes developed by NCERT.[20] The attainment of learning outcomes in terms of competencies was tested. These learning outcomes have been incorporated into the central rules for the Right to Education (RTE) Act[21] in 2017, to serve as a guideline for states.

Sampling and coverage

ASER aims to reach all rural districts each year. It is a nationwide sample-based household survey. It employs a two-stage sample design. At the first stage, 30 villages are selected in each rural district from the Census[22] directory using Probability Proportional to Size (PPS).[23] In the second stage, 20 households are randomly selected in each village. Volunteers are provided with standardized instructions on sampling of households from various sections/hamlets within a village.

All children aged 3-16 years who regularly reside in the sampled households are surveyed. Of these, all children aged 5-16 years are assessed.[24]

ASER 2018 reached 354,944 households in 596 districts. 546,527 children aged 3-16 years were surveyed, of which 390,830 children aged 5-16 years were assessed using the ASER reading tool and 389,496 children were assessed using the ASER arithmetic tool. 62,245 children aged 14-16 years were assessed using the ASER bonus tool.

ASER also collects background information on parents, households, and village characteristics. One government school in each sampled village is also visited during the

NAS covers rural as well as urban districts of India. NAS 2017 is a school-based nation-wide survey and focuses on Std III, V and VIII. While earlier versions of NAS involved sampling of districts at the state level, districts served as the basic sampling unit in NAS 2017 which included nearly all districts of India. In each district, a fixed number of schools[25] for each class were sampled using the Probability Proportional to Size (PPS) method. Within each school, 30 students from any one section of the class were selected through random sampling.

Although the issue of students' attendance is not explicitly addressed in NAS documents, the sampling procedure at the school level[26] seems to suggest that if a sampled child was not present on the day of the survey, she would be replaced by one who was, resulting in a self-selection bias.

NAS 2017 was implemented in 701 districts across 36 states/union territories. It covered a total of 2,121,173 students from Std III, V and VIII. A total of 116,534 schools were surveyed. Previous NAS surveys had a much smaller sample size. Cycle 3 of NAS included around 4.2 lac students from elementary grades.[27]

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[18] Post NAS Interventions: Communication and Understanding of the District Report Cards, 2017 (p.2), retrieved from http://www.ncert.nic.in/programmes/NAS/pdf/DRC_report.pdf

[19] MHRD Press Release (12-11-2017): http://pib.nic.in/newsite/PrintRelease.aspx?relid=173462

[20] NAS 2017: District Workshop Module, retrieved from http://www.ncert.nic.in/programmes/NAS/pdf/NAS_District_Workshop_Module.pdf

[21] MHRD Press Release (02-04-2018): http://pib.nic.in/newsite/PrintRelease.aspx?relid=178287

[22] Census 2001 frame was used for ASER surveys 2005-14 and Census 2011 frame was used for ASER 2016 onwards.

[23] Except in ASER 2005, wherein 20 villages were sampled in each rural district based on PPS.

[24] For more details on the ASER sampling methodology, see http://www.asercentre.org/overview/basic/pack/history/etc/p/56.html

[25] 60 schools per district for Class III and V; and 50 schools per district for Class VIII

[26] NAS 2017: Operational Guidelines-cum Training Manual, retrieved from http://www.ncert.nic.in/programmes/NAS/pdf/Operational_Guidelines_Training_Manual.pdf

[27] http://www.ncert.nic.in/programmes/nas/nas.html

ASER survey to collect information about school characteristics such as infrastructure, student attendance, School Management Committee (SMC) and finances. In 2018, 15,998 government schools were visited by ASER volunteers.

NAS 2017 also collected background information on schools, teachers and students with the help of separate questionnaires. A total of 287,393 teachers were covered during NAS 2017.

Tools and testing

ASER assesses basic reading and arithmetic ability, which are foundational skills for language comprehension and mathematics.[28] Basic reading ability implies the acquisition of letter knowledge, ability to decode common everyday high-frequency words and to fluently read simple passages. Similarly, basic arithmetic implies the ability to recognize numbers and perform basic operations such as subtraction and division. Assessment tasks are developed based on analysis of state textbooks and curriculum framework documents.

All children aged 5-16 years are administered the same basic tests, regardless of age, grade or schooling status. ASER tools are designed to assess mastery of these foundational skills and are not intended to differentiate within each mastery level.[29] The highest level tested in reading is the ability to fluently read a Std II level text. The highest level tested in arithmetic is the ability to correctly do a 3-digit by 1-digit division question, usually taught in Std III or IV.

Additionally, ASER 2018 also included "bonus" questions on application of basic arithmetic skills to daily tasks, for the age group 14-16 years.

NAS assesses grade-level competencies.

Students are administered grade-specific tests based on class-wise, subject-wise learning outcomes developed by NCERT. These learning outcomes have also been incorporated into the central rules for the Right to Education (RTE) Act in 2017, to serve as a guideline to states. The range of learning outcomes assessed by NAS 2017 varies with class and subject.

The test instruments of present National Achievement Survey (2017) are competency-based and linked to learning outcomes recently developed by NCERT[30]. NCERT developed two sets of test forms for each class, and the duration of the NAS test was roughly 2 hours. Students of Std III and V were required to attempt 45 questions on language, mathematics, and EVS. Students of Std VIII were required to attempt 60 questions on language, mathematics, science, and social science.[31]

While limited information is available regarding the tool design methodology and technical specifications of the NAS assessment, NCERT states that "internationally accepted technical standards and practices are being adhered to while planning, designing, and implementing of NAS to ensure its robustness and sustainability."[32]

Test administration

ASER is a household survey. Children are tested at home. ASER reading and arithmetic assessments are administered orally, one on one. All children aged 5-16 years who reside regularly in the sampled household are given the same test, regardless of schooling status, age, or grade. Within each household, different children are administered different samples of the testing tool. The highest level of proficiency in reading and arithmetic is recorded.

NAS is conducted in school (government and government-aided schools). Students of different classes are given grade-specific tests in different subjects. Following an orientation by the Field Investigator, students answer a set of multiple choice questions and record their response in an Optical Mark Recognition (OMR) sheet. While the test for Std VIII was entirely pen-and-paper based, the test for Std III and Class V included an oral component, with questions and options being read aloud (not the reading passage) by Field Investigators.[33]

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[28] Additionally, ASER has periodically included elements of assessment relating to time, money, measurement, problem solving, listening comprehension, and English reading and comprehension.

[29] ASER 2006 and 2007 included testing of reading and comprehension. The data indicates very high correlation between the ability to read a passage fluently and the ability to comprehend it. See http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER%202014/Articles/ashokmutumsavitribobdeketanverma.pdf

[30] http://www.ncert.nic.in/programmes/NAS/pdf/DRC_report.pdf

[31] NAS 2017: Module for Test Administration (Field Investigator), retrieved from http://www.ncert.nic.in/programmes/NAS/pdf/Module_Administration_Field_Investigators.pdf

[32] NAS 2017: Operational Guidelines-cum Training Manual, retrieved from http://www.ncert.nic.in/programmes/NAS/pdf/Operational_Guidelines_Training_Manual.pdf

[33] NAS 2017: Module for Test Administration (Field Investigator), retrieved from http://www.ncert.nic.in/programmes/NAS/pdf/Module_Administration_Field_Investigators.pdf

Process implementation and monitoring

The **ASER** implementation process begins with a national workshop attended by the ASER central team and state teams. Subsequently, state level trainings are held in each state wherein the state ASER team trains Master Trainers from each district. The Master Trainers in turn conduct district level trainings for volunteers from local partner organizations such as colleges, universities, teacher training institutes, DIETs,[34] NGOs, and others. Volunteers receive intensive training over 2-3 days in preparation for the survey, including a day of practice in the field. They are then paired into teams and tasked with surveying the sampled villages. After conducting the survey, volunteers submit the survey booklets to Master Trainers for their districts.

ASER devotes considerable time and resources to ensure data quality through carefully designed training, monitoring, and recheck procedures, details of which are provided in each year's report and on the ASER Centre website.[35] A multi-layered system of field monitoring, desk recheck, and field recheck has been established wherein Master Trainers as well as ASER state and central teams travel to surveyed villages in order to check for adherence to survey process and protocols. Computer rechecks are also incorporated at the data entry and data consolidation stages. In addition, external process audits of the ASER data collection methodology are periodically conducted by independent bodies. 54.6% of all surveyed villages were monitored/rechecked in ASER 2018.

NAS is coordinated by NCERT at the national level, with the support of agencies such as SCERTs, State Institutes of Education (SIEs), and State Project Directorate (SPDs) in the states and union territories. Coordinators at state and district level are trained on administration of the survey. In each district, Field Investigators are briefed by the district coordinators on field survey processes such as selection of students in the sampled schools, administration of tools, use of OMR sheets by students etc. It is not clear whether field practice is included as a part of the training of Field Investigators. After data collection, the filled OMR sheets, questionnaires and field notes are collected, scanned, verified, and uploaded at the district level. A web application enables data collation, monitoring of state implementation, and timely generation of reports.[36]

Monitoring guidelines were laid out by NCERT for NAS 2017. The State Project Director - Sarva Shiksha Abhiyan (SPD-SSA) was tasked with coordination of monitoring activities at the state level. In each district, a District Monitoring Unit (DMU) was constituted to monitor day to day activities relating to the survey, such as training and implementation. Additionally, observers drawn from inter-ministerial departments were tasked with observing the implementation of the survey at the block level. However, there is no information in the public domain regarding the actual extent of monitoring during NAS 2017, or technical details regarding the reliability of NAS data.

Precision of estimates

ASER estimates are self-weighting at the district level. At the divisional, state, and national levels, estimates are weighted by the appropriate population weights. While ASER reports standard errors and margins of error at the divisional level, these are not reported at the state or national level. However, a study done on the precision of ASER enrollment and learning estimates shows that margins of error are well within 5% at the state level.

For every variable, sample sizes are checked and where the number of observations is found to be insufficient, estimates are not presented in the report.[37]

In earlier versions of **NAS**, weights were assigned as per the student response data, and standard errors were estimated using the jack-knife replication procedure.

Detailed district level report cards were generated by NAS for the first time in 2017. District reports included data on sample coverage, overall learning levels by grade and subject, and disaggregated learning outcomes by gender, location and social group, etc. However, since no standard errors are presented at the district level or at the state level, the precision of these estimates cannot be commented upon.

Note that while the average sample size per class in each district is stated to be approximately 1000, it is noted that several districts had much lower sample sizes, which may affect the precision of estimates at the district level.

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[34] 236 DIETs from 14 states participated in ASER 2018.
[35] See http://www.asercentre.org/p/136.html
[36] NAS 2017: Operational Guidelines-cum Training Manual, retrieved from http://www.ncert.nic.in/programmes/NAS/pdf/Operational_Guidelines_Training_Manual.pdf
[37] See Ramaswami, B. & Wadhwa, W. (2010). Available at: http://img.asercentre.org/docs/Aser%20survey/Technical%20Papers/precisionofaserestimates_ramaswami_wadhwa.pdf

Availability of tools and results

ASER findings are made available in the same school year in which the data is collected. The survey is conducted between September and November of each year and the report is published the following January. District, divisional, state, and national level estimates are made available in the public domain.

All ASER tools,[38] testing procedures and findings are available in the public domain.[39] All ASER data sets are available to researchers and research institutions upon request.

NAS 2017 was conducted on 13th November, 2017 and district report cards were published in the same school year for the first time. Since then the state reports have also been published. However, an aggregated national report for NAS is yet to be published as of December, 2018.

While NAS reports, communication documents, and sample items have been published by NCERT, assessment tools used in NAS 2017 are not available in the public domain as of December, 2018. NCERT published "Data Sharing and Accessibility Policy"[40] in June, 2016, to facilitate public access to NAS data through a web-based portal. This portal has not been set up as of December, 2018.

Test reliability and validity

ASER testing tools assess achievement of mastery rather than the performance of children relative to their peers. Reliability in this case refers to the consistency of the decision making process in assigning children to a mastery level, across repeated administrations of the test. In addition, since examiners assign each child to a mastery level, it is important to estimate the consistency of the decision making process across examiners. This is referred to as inter-rater reliability. A series of studies[41] indicates substantial reliability of decisions across repeated measurements (test-retest) and satisfactory inter-rater reliability.

Validity of a test means the extent to which the test actually measures the constructs it is intended to measure. The validity of the ASER Hindi language tool was examined using the Fluency Battery test.[42] The ASER language assessment is strongly associated with the Fluency Battery, with magnitude of the correlation coefficients ranging from 0.90 to 0.94.[43]

Earlier versions of **NAS** used the Item Response Theory (IRT) model for designing test forms and analysis of data, and reliability coefficients were published. While no information is publicly available regarding the reliability and validity of the NAS 2017 assessment tools, NCERT states that "internationally accepted technical standards and practices are being adhered to while planning, designing and implementing of NAS to ensure its robustness and sustainability".[44]

Comparisons over time

ASER has used the same sampling procedures since 2006. The reading assessment framework has not changed since the first survey in 2005, and the arithmetic assessment framework has not changed since 2007. In addition, the survey is conducted at the same time during the school year. Therefore, ASER estimates are comparable over time, enabling the study of trends in elementary education in India.[45]

NAS 2017 is not comparable with earlier versions due to changes in sampling, test design, and content of assessment. NAS 2017 is intended to provide a baseline for competency-based learning linked to learning outcomes recently developed by NCERT in different districts.[46]

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[38] In ASER 2018, testing was conducted in 19 languages across India.
[39] See http://www.asercentre.org/p/141.html
[40] See http://www.ncert.nic.in/pdf_files/ESDDataSharingPolicy_24.6.2016.pdf
[41] See papers by Shaher Banu Vagh (2009 & 2013). Available at http://www.asercentre.org/sampling/precision/reliability/validity/p/180.html
[42] The Fluency Battery is a test of early reading ability adapted from the Early Grade Reading Assessment (USAID, 2009) and the Dynamic Indicators of Basic Early Literacy Skills (University of Oregon Center on Teaching and Learning, 2002).
[43] A correlation coefficient of 1 indexes a perfect and positive association between two measures.
[44] NAS 2017: Operational Guidelines-cum Training Manual, retrieved from http://www.ncert.nic.in/programmes/NAS/pdf/Operational_Guidelines_Training_Manual.pdf
[45] See http://www.asercentre.org/Keywords/p/236.html
[46] Post NAS Interventions: Communication and Understanding of the District Report Cards, 2017 (p.3), retrieved from http://www.ncert.nic.in/programmes/NAS/pdf/DRC_report.pdf

Concluding thoughts

Robust national scale assessments generate great value by monitoring learning outcomes. Both, ASER and NAS with their advantages and limitations align with global efforts to monitor SDGs in education. Both, NAS and ASER survey exercises continue to evolve and improve over time. However, there are many aspects of the ASER effort that can be considered for adoption or adaptation for government or state mandated assessments.

1. On assessment frameworks: While it is essential to assess a broad range of domains and competencies in order to get a comprehensive picture of what children know and can do, there remains an equal, if not greater, need to establish whether children possess foundational skills such as literacy and numeracy. These skills are a prerequisite for mastery of specific content in EVS, science, and social studies. Given the wide disparity of learning levels in the same grade, it may be useful to incorporate foundational skills regardless of grade.[47] For example, ASER assesses mastery of specific foundational skills which include NCERT learning outcomes listed for Std I and II. These include tasks like "Identifies orthography and sound of alphabets" and "reads and understands written alphabets, words, and sentences."

2. On sampling design: ASER has been criticized for not following a school-based survey design. However, an important limitation of the NAS 2017 model, as indeed of any school-based assessment, is that it excludes several categories of children such as those enrolled in private schools, unrecognized schools, institutions of religious learning, out of-school children as well as those children who are absent on the day of assessment. On the other hand, a household-based survey is more inclusive in coverage by design, aiming to reach a representative sample of all children in a given age group. This is crucial to ensuring that no child is written off.[48] Additionally, ASER is simple, understandable and rapid, in adherence to the requirements of a good quality household survey.

3. On implementation, participation, and testing method: NAS is implemented with the help of state machinery - SCERTs, SPDs, DIETs etc. Although the government school system is an important component of education, the task of improving educational outcomes requires the collective participation of all actors involved in children's lives. ASER is a citizen-led participatory exercise, with the involvement of local partners and volunteers from diverse backgrounds. In addition to collection of field data, there is an organic element of engaging parents, ordinary citizens and a wide range of stakeholders in a debate around the quality of education in our schools. The eighth meeting of the Inter-agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs) was held from 5 to 8 November 2018 in Stockholm, Sweden.[49] UIS proposed a set of definitions of the skills and performance levels that all children should acquire. Performance descriptor at Std III is - *Students read aloud written words accurately and fluently and they understand the overall meaning of sentences and short texts.* ASER's method of one-on-one testing can generate reliable estimates against this descriptor.

4. On reporting and actionability: NAS 2017 results are communicated through State and District Report Cards with the help of generic parameters such as "average score" and theoretical concepts such as "learning outcomes". NAS has also developed a Data Visualisation Application, with technical support from UNICEF. NAS 2017 has made significant changes compared to earlier years in demystifying and dissemination of findings. Detailed guidelines have been laid down regarding dissemination of report cards to various educational functionaries, for qualitative improvement in learning levels in the government school system. ASER attempts to simplify the process of understanding learning assessments by displaying snapshots of the actual testing tool alongside proportion of children bucketed in various levels of proficiency. ASER continues to remain India's sole source of annual information regarding foundational abilities of children across all elementary grades. Notwithstanding criticism for its simplicity, ASER continues to serve as a resourceful source of educational information in India, as its findings are easy to understand and act on for policymakers, educationists, teachers, parents, and indeed children themselves.[50]

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[50] Oza & Bethell-Assessing Learning Outcomes: Policies, Progress and Challenges, Sarva Shiksha Abhiyan DFID funded research study, 2015. Another important aspect of these surveys lies in their effective reporting and advocacy- " ... Whilst the Class V NAS report is technically superior and visually more attractive than its predecessors, there are still many lessons that can be learnt from the reporting formats used by, for example, Pratham/ASER and Educational Initiatives. Notwithstanding any technical limitations, these agencies consistently produce reports which are attractive and eminently readable. ASER in particular has been extremely successful in extracting from its studies "headline findings" which catch the attention of the media and, hence, generate a great deal of press coverage....". Also, ASER survey, over the years have made significant contribution to provide complementary data on learning outcomes (12th JRM) and annual snapshot of learning in rural areas.

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Frequently asked questions about ASER

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Overview

1. What is ASER?

ASER stands for Annual Status of Education Report. It is a household-based survey of children's schooling and learning status. Schooling status is recorded for children in the age group 3 to 16, and children in the age group 5 to 16 are tested for their ability to read simple text and do basic arithmetic. Except for 2015, ASER has been conducted every year since 2005.

2. Why ASER? Isn't information on children's learning outcomes already available?

Traditionally, government policy and statistics have focused on inputs and enrollment - how many schools and teachers, how many children in school, and so on. When ASER began in 2005 there was very little focus on what children were actually learning. It is true that today many more large scale assessments are conducted in India as compared to 2005 when the first ASER survey was carried out. The National Achievment Survey (NAS) is conducted by NCERT, a central government institution, every few years with children in Grades III, V and VIII. Additionally, most states/UTs conduct their own State Learning Achievement Survey (SLAS). However, ASER remains the only annual source of data on children's learning outcomes available on scale in India. It is also the only large scale assessment that focuses on children's foundational skills. Most other assessments focus on grade level competencies and assume that children's foundational skills are in place.

3. What is the geographical coverage of ASER?

ASER is a rural survey. Urban areas are not covered. In most years, ASER has attempted to reach every rural district of the country (although in some years certain states have been excluded for logistical reasons, such as Arunachal Pradesh in 2013 and Jammu and Kashmir in 2010). However, every year ASER is unable to reach some rural districts. Generally, this is due to natural disasters, situations of unrest or conflict in the district.

4. Why is ASER done every year?

For several reasons. First, in addition to presenting district, state, and national level estimates each year, ASER also presents trends over time. Comparable measurements are needed periodically in order to see how the situation is changing. The ASER measurement is done annually because government plans and allocations for elementary education are made every year. If children's learning outcomes are to improve, then evidence on how much children are learning needs to be fed into the process of review and planning. Second, longer gaps between assessments can have serious implications for children currently in school. It is well known that falling behind in school often leads to dropping out altogether. If several years go by between assessments, opportunities are lost to take rapid corrective action in order to ensure that children who are falling behind are able to catch up. Third, it takes time to shift the focus from schooling to learning. When ASER began in 2005, the issue of children's learning was rarely discussed. But after ten years of ASER, the topic of children's learning is very much on the national agenda.

5. ASER completed 10 years in 2014. Since then, the same report has not been coming out every year. There was no ASER in 2015 and a different one ('Beyond Basics') in 2017. Why these changes?

When we started ASER in 2005, we made a commitment to do it every year for five years because we believe that for data to feed into policy, it needs to be reliable, comparable, and available on a regular basis. At the end of five years the consensus was that it was too soon to discontinue ASER.

In 2014, we completed 10 years and so we decided to take a year off to reflect and consolidate our learnings. So in 2015, ASER was done only in two states - Punjab and Maharashtra - at the specific request of the respective state governments. There was no national ASER 2015 report.

Then in 2016, ASER began its second decade. Much had changed since 2005: there was far more awareness of the learning crisis, and learning assessments were being conducted regularly by the central and state governments. But despite all this attention, the problem of poor foundational reading and arithmetic abilities is still widespread. Even in 2016, less than half of all children in Std VIII could solve a simple division problem. Taking all these factors into account, we decided that for the next ten years (2016-25), ASER would switch to an alternate-year cycle. The basic ASER will be conducted every other year - it was conducted in 2016 and again this year. The next basic ASER will be in 2020. And in alternate years ASER will focus on a different aspect of the education system. So, in 2017, we conducted 'Beyond Basics', focusing on the abilities, experiences, and aspirations of youth in the 14-18 age group. In 2019, ASER will retain the focus on learning but will aim to shine the spotlight on a different segment of the population.

6. What is the survey calendar? Why was this timeline selected?

The ASER survey calendar is provided at the beginning of this report. ASER is carried out in the middle of the school year - roughly between September and November. By this time children's enrollment patterns have settled down for the year. Data entry and analysis happens in November

and December, and survey results are released in mid January of the following year. This calendar is designed to enable ASER data for the current school year to be available in time to feed into the district level annual planning process for the following year. Planning for elementary education takes place at the district level, and before ASER there was no source of district level data on children's learning outcomes that could provide inputs into this process.

7. Who collects the data?

ASER is conducted by volunteers from local partner organizations in each district. A wide range of institutions partner with ASER each year. These include universities and colleges, self-help groups, non-government organizations, and government institutions, among others. For example, in 2018 ASER was conducted by students from the District Institutes of Education and Training (DIETs), the government teacher training colleges, in about 40% of all districts. ASER is facilitated by Pratham. The process of finding, training, and monitoring ASER partners and volunteers is led by ASER Centre, the research and assessment unit of Pratham.

8. What is the per child cost of ASER?

An external evaluation of ASER conducted in 2013-14 calculated that the ASER survey costs a little over Rs 100 per child (approximately U.S. $1.40). Compared to other large scale learning assessments, this is an extremely low cost.

9. How can the ASER results help plan action to improve children's learning?

A close look at any ASER table of results shows that even within a single grade, children's ability to read or do simple arithmetic varies enormously. Teaching from a grade level textbook will not work for children who are not at that level. In traditional classrooms, these children get left further and further behind as they move up through the system. Improving children's foundational learning levels requires an understanding of what children are currently able to do, so that teaching methods and materials can be designed to enable them to start from their current level and build towards the learning levels appropriate for their age and grade. ASER data tells us where most children are getting stuck, so that resources can be allocated accordingly. Children from different grades who are at the same level of reading ability can be grouped together. This approach has come to be known as 'Teaching at the Right Level', in other words teaching children based on what they know and can do, rather than based on their age or grade. Many schools and education programs already implement this approach. So do several state governments.

Understanding children's current learning status is the critical first step, and the ASER results can provide this. If data is required on a specific geography or group, the ASER tools and testing process can easily be used to generate this understanding for any class, school, or group of children.

About sampling

10. What is the purpose of sampling, and why does ASER do it?

Assessing foundational reading and arithmetic abilities of every child in India would be an enormous task, requiring a huge amount of resources. Fortunately, it is not necessary to do so. The careful selection of a sample of villages and households enables us to generate data that is just as accurate and reliable as testing every child in the country - provided that the process of sampling is done carefully by experts and strictly followed on the ground. This is why no large scale surveys cover every single unit in their target population, other than the Census of India, which is conducted every ten years. In the case of ASER, the sampling methodology used has been designed by experts and is standard for large scale surveys.

11. What is the sample size of ASER? How does this compare with other large scale surveys?

ASER aims to generate district level estimates of children's schooling status, basic reading and arithmetic. Each year, ASER reaches close to 570 rural districts. In each district, 30 villages are selected and in each sampled village, 20 households are randomly selected. This gives a total of 30 x 20 = 600 households in each rural district. Depending on the exact number of districts surveyed, a total of between 320,000 and 350,000 households across the country are sampled for each year's ASER. In each surveyed household, all children in the age group 3 to 16 are surveyed and children in the age group 5 to 16 are tested. The same sample size is used in all districts regardless of population or socio-economic characteristics. Refer to Sample design of rural ASER 2018 on page 261. This design is the same across all ASER years.

The National Sample Survey (NSS) Survey conducted by the Government of India's National Sample Survey Organization is the main source of official data for estimating poverty, employment, and other socioeconomic indicators. The ASER sample of villages is about twice as large as the NSS sample for rural India. In 2011-12, the NSS Employment Survey was done in 7,469 villages across India with 8 households per village. In contrast, ASER 2018 surveyed 17,730 villages with 20 households per village. The National Achievement Survey 2017 conducted by

NCERT was implemented in 701 districts across 36 states/union territories. It covered a total of 2,121,173 students from Classes III, V and VIII. Students were tested in language, math, science, and social studies in schools. A total of 116,534 schools were surveyed.

12. Why does ASER select 30 villages per district and 20 households per village? How are villages selected? What happens if a village no longer exists, or has become an urban area?

ASER uses a two-stage sampling strategy which enables us to generate a representative picture of each district. Almost all rural districts are surveyed in ASER each year. The estimates obtained are then aggregated (using appropriate weights) to the state and all India levels. In the first stage, 30 villages are sampled from each district using Probability Proportional to Size (PPS). From 2005 to 2014, villages were sampled from the Census 2001 village list. From 2016 onwards, Census 2011 village directory has been used. In the second stage, 20 households are randomly selected in each sampled village following a procedure known as the "every fifth household rule". The total sample size for each district is thus 30 x 20 = 600 households. This two-stage design ensures that every household in the district has an equal probability of being selected.

In previous years the 30 villages surveyed in a district comprised 10 villages from the last year's survey, 10 more from two years earlier, and 10 new villages selected from the Census village directory using PPS. The 20 old villages and 10 new villages gave us what is known as a "rotating panel" of villages, which generates more precise estimates of change. Having a rotating panel of villages means that every year some old and some new villages are included, which ensures that there is both continuity and change in the sample from previous years. Since 2016 was the first year of a new series of ASER reports that use Census 2011 as the basis for sampling, no villages from previous ASERs were retained. A fresh sample of 30 villages was generated from the Census 2011 village directory.

To maintain randomness of the sample, which is important in order to obtain reliable estimates, every year ASER Centre generates the ASER village list from the Census village directory. This village list is final. However, every year there are certain situations where replacement villages are required, such as when a village is affected by natural disasters, if it has been reclassified as a town, or due to insurgency. In such cases, ASER Centre provides the name of a replacement village.

13. How can I find out which villages have been surveyed?

You can't. This information is not in the public domain; the ASER village list is confidential. In all large scale surveys and research studies, it is standard practice to maintain the confidentiality of respondents. This means that all information that could enable someone to identify particular individuals, households, or villages is removed. This includes village names, respondent names, and so on.

14. Is ASER data representative? At what levels?

ASER data is representative at district, state, and national levels.

15. Why does ASER aim to generate district level estimates?

Most official statistics in India produce estimates only at the state and national level. Even poverty estimates in India, obtained from the National Sample Survey Organization, are available only at state or regional level, not at the district level. However, planning and allocation of resources is often done at the district level. For example, in elementary education, annual work plans are made at the district level. While information for enrollment, access, and inputs is available annually for each district, estimates of children's learning are neither available at the district level, nor are they available annually. ASER aims to help fill these gaps.

16. Who designed this sampling strategy?

The ASER sampling strategy was designed in consultation with experts at the Indian Statistical Institute, New Delhi. Inputs were also received from experts at the Planning Commission of India and the National Sample Survey Organization (NSSO).

17. Do the ASER estimates for a district also apply to individual villages or blocks in that district?

No, they don't. ASER estimates for a district are representative only at the district level, and provide a snapshot of children's schooling and learning status for the district as a whole. The sampling is not representative at the village or block level. The situation in individual villages or blocks can be different. To understand the status of a particular village or block, a different sampling strategy would have to be used.

18. ASER 2016 sampled villages from the 2011 Census village directory, whereas ASER 2005-2014 used the 2001 Census. Is data from ASER 2016 onwards comparable with earlier years?

ASER is representative at the state and district levels and a change in the sampling frame does not affect this feature of ASER. ASER 2006-2014 provided representative estimates of state and district boundaries as represented in

the Census 2001 frame, and ASER 2016 and ASER 2018 do so for the Census 2011 frame. In the case of states, since there has been no change in geographical boundaries, the state estimates are comparable. However, estimates for districts may not be comparable if geographical boundaries have changed. Census 2011 has added 31 rural districts. These new districts have been carved out of the old districts and are, therefore, not comparable. Since divisions are defined by grouping districts together, in ASER 2018 we present divisional estimates only for 2016 and 2018.

19. Is enrollment data for children age 3 and 4 comparable across all years?

Due to a change in the way this data was collected, ASER 2018 data for enrollment of children age 3 and 4 is not comparable with previous ASER years.

About design

20. Why does ASER test children at home and not in school?

The ASER survey generates estimates of schooling and basic learning levels for all children in rural India in the age group 5 to 16. This includes children enrolled in different types of schools (government, private, and others) as well as children currently not in school. The first problem with school-based testing is that there is no complete list of all schools in the country. In particular, there are many low cost private schools which are not found on any official list. Without a complete list of all schools, it is not possible to select an unbiased sample of schools. The second problem with school-based testing is that not all children are in school. Some have dropped out, some have never enrolled, and others are absent from school on the day of the survey. Testing in school would mean that all these children would be excluded. ASER tests children at home so as to include all these different kinds of children. Household-based testing is the only way to ensure that all children are included. In the Indian context, it is not possible to do this if testing is done in school.

21. How do you ensure that children are at home on the day of the survey?

The household survey is usually conducted on a Sunday and/or at other times when children are not in school. If a child is not found at home at the time of the survey, surveyors are asked to note down the child's details and return to the household at a time when family members say she will be available.

22. Why is the target age for children's assessment 5 to 16 years?

ASER was designed to capture the learning status of children in the elementary school age group. Many states allow children to enter Grade 1 at age 5, but children can start school much later. They can also drop out and then return to school, repeat grades, and so on. Therefore, although the official elementary school age range that is specified in policy documents is 6 to 14, in practice, large proportions of children who are younger than 6 and older than 14 continue to be in elementary grades.

23. Why is ASER not done in urban areas?

For several reasons. First, many urban areas have large low income populations that are undocumented and therefore not included in the available sampling frames. These areas would be left out of a sample-based survey. Second, a representative sample of the urban population in any state would include not just metros but also a diverse range of urban habitations. Whereas for rural districts, the estimates generated by ASER can be shared with the district administration, there is usually no equivalent single urban authority in a state with whom educational planning can be discussed for the state as a whole.

24. What is the definition of 'rural' that is used in ASER data?

ASER uses the Census village directory as the sampling frame. When we say ASER (rural), we refer to the definition of rural habitations as used in the Census. It does not refer to rural districts, since the Census itself does not define districts as either rural or urban.

25. Do you also collect information about the household?

Yes. In addition to children's schooling and learning status, some basic information about the household is collected (such as number of members, household assets, and parents' education). Household information collected can vary from year to year; details of what is asked are provided in each year's ASER report.

26. Do you collect information about schools?

ASER has been doing school visits every year since 2009. Survey teams visit the largest government school with primary sections in each sampled village, and collect basic information on enrollment, staffing, and school infrastructure. Details of the specific questions asked are provided in each year's ASER report. However, learning assessments are always done during the household survey, not in school.

27. Why don't you collect information on children with disabilities/special needs/working children?

The ASER approach is designed to be rapid and easy to do. Assessing children with special needs requires more time, training and expertise than ASER surveyors have. Also, since ASER is a household survey, the sampling may not be suitable for reaching working children. While it is important to have data on children with disabilities, special needs and on working children, among others, ASER may not be the appropriate vehicle to collect it.

ASER Centre is developing a separate foundational literacy and numeracy assessment tool for children with disabilities. Implementation of this tool will be separate from the regular ASER survey.

About tools and testing

28. Why does ASER assess only reading and arithmetic?

Since its inception, Pratham's work has focused on basic reading and arithmetic. Since the early years of our work we noted that a surprisingly large number of children in primary grades were struggling to acquire these basic skills. Difficulties in these two domains prevent children from acquiring higher level skills. A weak foundation of basic learning also weakens performance in other subject areas and adversely impacts children's academic outcomes. When ASER started in 2005, no estimates for learning for early grades were available in India. For these reasons assessment of basic reading and arithmetic ability came to be the primary focus of the ASER survey.[1] While these two competencies are assessed every year, additional competencies have been assessed in some years. For example, basic English was tested in 2007, 2009, 2012, 2014, and 2016. Additional arithmetic questions were asked in 2008 and 2010. Because our first priority is to ensure that the assessment process is simple and quick to administer, only a limited number of additional tasks are included in any given year.

29. What guidelines are followed in developing the reading and arithmetic assessment tools?

By design, ASER is a 'floor' test which aims to evaluate children's basic reading and arithmetic ability. The reading and arithmetic assessments, first used in 2005, were developed taking into account the state mandated curriculum for each state. The content of the reading assessment, i.e. the selection of words, the length of sentences and reading passages was aligned to the Grade 1 and 2 level textbooks in each state. At the letter level, recognition of only simple letters is assessed. At the word level, simple one and two syllable words, commonly used every day and appropriate for Grade 1 are included. In the development of Grade 1 and 2 level passages, orthography specific indicators such as the use of simple letters, secondary representations of letters, and conjoint letters have been considered along with sentence and passage length. Vocabulary used in the reading passages is aligned to the state mandated curriculum for appropriateness.

Since ASER 2010 we have also calculated the type-token ratios for the reading passages as an additional index to ensure comparability. A type-token ratio indexes the lexical diversity of a text. It is calculated by obtaining a ratio of the total number of unique words in the text (types) to the total number of words in the text (tokens). A higher type-token ratio indexes greater lexical diversity, which is important in the measurement of fluency, as children who read passages with many repetitive words (lower type-token ratio) are likely to have an easier time and read faster than children who read passages that are more lexically diverse (higher type-token ratio) who have to decode a greater number of different words through the passage.

The ASER arithmetic assessment measures children's foundational skills in numeracy such as one- and two-digit number recognition and the ability to perform basic arithmetic operations such as subtraction (with borrowing) and division (3-digit by 1-digit). The content of the arithmetic assessment is aligned to grades 1, 2 and 3 or 4 level of the state mandated curriculum. 3-digit by 1-digit numerical division is expected of children in Grade 3 in some states and Grade 4 in others.

30. What languages do you test in? Are the reading assessments comparable across different languages?

The ASER reading tool is available in 19 languages including English.[2] The ASER reading assessments do not strive to be comparable across different languages. The objective is to develop a tool that assesses the most basic foundation skills for literacy acquisition, i.e. letter recognition, the reading of simple words and reading words in connected text that are of Grade 1 and Grade 2 level for each language. Consequently, the inference based on the ASER reading assessment is not about comparing performance across

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[1] The ASER reading assessment contains four levels: letters; common two-letter words; a simple four line "para" (Grade 1 level text); and a longer "story" (Grade 2 level text). The fifth level is that when a child has not yet learnt to recognize letters. The ASER arithmetic assessment also contains four levels: number recognition (1-9); number recognition (10-99); subtraction (2-digit by 2-digit); and division (3-digit by 1-digit). The fifth level is that when a child has yet to learn to recognize numbers. The testing process is explained at the beginning of this report.

[2] Assamese, Bangla, Bodo, English, Garo, Gujarati, Kannada, Khasi, Hindi, Malayalam, Manipuri, Marathi, Mizo, Nepali, Odiya, Punjabi, Tamil, Telugu, and Urdu

different languages but to evaluate children's level of reading in relation to the state mandated curriculum for Grades 1 and 2.

31. Why does ASER test children individually and in an oral format?

Over the last decade, reading has come to be recognized as an important skill. The assessment of early reading can only be done orally and for each child individually. Assessments of early reading ability in other countries are also administered in this format, for example the Early Grade Reading Assessment (EGRA) and the Dynamic Indicators of Basic Literacy Skills (DIBELS, developed by the University of Oregon Center on Teaching and Learning)[3]. A typical pen-and-paper test of comprehension assumes that the child can read. Thus the oral format has emerged as the only way to separate 'reading' and 'comprehension'. A paper-and-pencil test is not a viable option for a child who is a beginning reader or a struggling reader as it places additional cognitive demands on the child to read and comprehend instructions. In ASER, to minimize the cognitive demands of reading and comprehending instructions and to maintain a standard administration approach, both the reading and the arithmetic assessment are administered individually in an oral format. However, children are provided a paper and pencil to solve the subtraction and division problems.

32. Why does the ASER assessment of reading begin at the Grade 1 passage level? Why does the ASER assessment of arithmetic begin at the Grade 2 subtraction level?

The content of the ASER assessments is aligned to Grades 1 and 2 for reading and Grades 1, 2, and 3 or 4 for arithmetic. Since the same assessments are also administered to children in Grade 3 or higher, an adaptive testing approach is used. Administration of the reading test begins at grade 1 passage level and the administration of the arithmetic test begins at Grade 2 subtraction level. If the child performs to a satisfactory standard, the child is given the task at the next level, i.e. Grade 2 passage for reading and Grade 3 or 4 level division for arithmetic. If the child does not perform to a satisfactory standard, the child is given the task at the lower level, i.e. reading simple words for reading and two-digit number recognition for arithmetic. Hence, the level of the task administered is adapted to match the child's ability. In this administration format, each child attempts only two or three tasks for each assessment instead of all four tasks, making the assessment quicker to administer without compromising the objective of identifying the child's reading and arithmetic level.

33. Why does the arithmetic testing process not include addition or multiplication?

Pratham's extensive experience of working with children indicates that when children are given all four basic numeric operations (addition, subtraction, multiplication, and division), practically every child who can do subtraction (2-digit operations with borrowing) can also do addition with carry over. Similarly, with division and multiplication. These trends were also observed in preparatory data work done for the ASER survey and in other data collection efforts.

34. Why are all children in the age group 5 to 16 assessed with the same tools? Why does ASER not assess children at their grade level?

All children are assessed with the same tools as the objective of the ASER survey is to ascertain whether or not children have attained early foundational skills in reading and arithmetic. This is irrespective of age or grade level. It is not designed to be a grade appropriate assessment, but rather to provide an understanding of school aged children's early reading and basic arithmetic ability.

35. What do we know about the reliability and validity of the ASER assessments?

Reliability is the consistency with which a test measures any given skill and thereby enables us to consistently distinguish between individuals of differing ability levels. Given that the ASER assessments evaluate mastery at different reading and arithmetic levels, reliability here is the consistency of the decision-making process. Validity indicates whether the test measures what it aims to measure - in other words, is the inference based on the ASER reading assessment about children's mastery of basic reading valid? Is the inference based on the ASER arithmetic assessment about children's mastery of basic arithmetic valid? Three studies have been conducted to explore the question of reliability and validity of ASER measurements. The findings from these studies provide favourable empirical evidence for the reliability and validity of the ASER assessments. The findings indicate (a) substantial reliability of decisions across repeated measurements, i.e. consistency in the level assigned to a child assessed by the same examiner on two different occasions and (b) satisfactory inter-rater reliability, i.e. consistency in the level assigned to a child assessed by different examiners. In 2010, an impact evaluation study of Pratham's Read India program was conducted by Abdul Jameel Poverty Action Lab (JPAL). In this evaluation, the measurement of children's learning outcomes included several literacy and arithmetic assessments including the

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[3] Technical analyses comparing ASER and EGRA have been carried out. See
http://img.asercentre.org/docs/Aser%20survey Tools%20validating_the_aser_testing_tools__oct_2012__2.pdf

ASER reading and arithmetic assessments. This allowed us to correlate children's performance on the ASER assessments with the additional assessments of reading and arithmetic. This empirical study provided compelling evidence for the validity of the ASER assessments.

36. How long does the process of testing a child take?

ASER is designed to be easy and quick to administer. Depending on the age and ability of the child, the assessment of reading and arithmetic takes an average of about ten minutes per child.

About implementation

37. Why does ASER use volunteers?

ASER is a citizens' initiative, implemented by partner organizations in every rural district across the country. One of the major aims of the survey is to generate awareness and mobilize people around the issue of children's learning. The entire design of ASER thus revolves around the fact that it aims to reach and involve 'ordinary people' rather than experts. All tools and procedures are designed to be simple to understand, quick to implement, and easy to communicate.

38. Which organizations partner with ASER? How do you find them?

Participation in ASER is open to any institution, organization, or group that can provide volunteers who are comfortable spending time in rural locations. Many different kinds of institutions participate. In the months leading up to the survey, ASER Centre staff travel extensively around their respective states to find institutions that are interested and willing to participate and that meet the criteria required of all ASER partners. Institutions often partner with ASER for more than one ASER cycle. Partner organizations sign a Memorandum of Agreement that lists their responsibilities and those of Pratham. A complete list of ASER partners is published in each year's ASER report.

39. Are the volunteers capable and well trained to do the survey? How do you ensure data quality?

Yes! Volunteers are trained intensively prior to the survey, including a field pilot where they practice every procedure that they will be required to implement during the actual survey. During training, their performance is carefully monitored and documented. Once the survey is underway, trainers monitor their performance and help sort out any problems that are encountered. For more details, a training

report is available on the ASER website at www.asercentre.org/p/136.html.

Even though ASER tools and procedures are simple and intuitive, enormous effort is dedicated to ensuring that the data produced by the survey meets stringent quality standards. Quality monitoring processes have been put in place at every stage of the process, from training of trainers and surveyors, to monitoring survey implementation in the field, to recheck of the data collected once the survey is complete. Every year these procedures are carefully reviewed, refined and improved. Details are available in each year's report. For more details, a quality control report is available on the ASER website at www.asercentre.org/p/136.html.

40. How do volunteers collect the data?

To conduct the survey, a pair of volunteers is assigned to each sampled village. They work together to complete the survey of 20 households, usually over a period of two days. Usually village and school information is collected on the first day, and the household survey is conducted for the rest of that day and all of the next day. In each household, the survey team records basic household information and schooling status for all children age 3 to 16. They then assess the reading and arithmetic ability of children in the household age 5 to 16, one at a time. For more details, see the ASER village process section of this report on page 266.

About ASER results

41. Why don't you provide district level reports on reading and arithmetic?

District level data is not published in the ASER report for reasons of space. However, divisional estimates are included in the report and district level data is available for download from the ASER Centre website.

42. Why don't you rank states? How can I compare my state with others?

ASER doesn't rank states because state rankings will vary depending upon the indicator that is selected - for example, children in Std I and II might be doing better in one state relative to others, but children in Std VII and VIII might be doing worse. Or, the proportion of children who can do arithmetic in a state could have improved, but the proportion of children who can read may not have. By providing the data, those wanting to compare states can choose the parameters on which to do so. However, the inference based on the ASER reading assessment is not

about comparing performance across different languages but to evaluate children's level of reading in relation to the state mandated curriculum for Std 1 and 2.

43. What if the data I am looking for is not in the published report? Is the raw data available in the public domain?

ASER publishes this national report annually, which includes selected estimates at district, state, and national level. There is also an ASER Trends over Time report on the website which presents data on selected indicators from 2006 to 2014. All of this information is available for individual states as well as for India as a whole. ASER reports can be downloaded from the ASER Centre website (www.asercentre.org). Some additional data is available on the ASER Centre website, including estimates at district level. Data queries on some key parameters can also be run through the query function on the website. Beyond these options, ASER Centre makes the ASER data sets available for research purposes on request.

44. ASER collects household information, so why does the ASER report not publish it? What is the relationship between household indicators and children's learning?

Information on selected household indicators is included in an annexure in each year's ASER report. The body of the report focuses on children's schooling and learning status because these are the main objectives of the survey. While it is true that household information is collected in order to understand the relationship between household characteristics and children's learning, unpacking these relationships requires more time and deeper analysis. The ASER report simply presents the findings of the survey, but these data have been used by researchers in India and abroad to explore many important questions about the nature of the influences on children's learning.

About impact

45. What impact has ASER had on education policy in India?

ASER has had a major influence in bringing the issue of learning to the centre of the stage in discussions and debates on education in India. In 2005, when ASER began, most people, from parents to government functionaries, were concerned with getting children into school. The assumption was that if children were in school, they must be learning. Today, the fact that large proportions of children are not learning even the basics is widely recognized. For example, ASER has been cited in major Government of India documents such as the XI and XII Five Year Plan and the Economic Survey of India. Most recently, ASER data

has been used in following reports: Three Year Action Agenda of NITI Aayog, Economic Survey of India 2017-2018, and The World Development Report-Learning to Realize Education's Promise to make the learning crisis visible and advocate for remedial steps towards improving learning outcomes.

Many state governments are now implementing their own learning assessments, sometimes using tools very similar to the ASER tools; and some are implementing programs aimed at improving learning outcomes. A great deal remains to be done to ensure that every child in India is in school and learning well. But the first step is for the problem to be recognized. The second step is to have reliable evidence on the nature and extent of the problem. Only then can workable solutions be found.

46. What response do you get from the parents of children you test, or from the community in general?

In the village there is usually a great deal of curiosity and discussion as the ASER testing is being done. People crowd around to observe and talk about what is going on. The simplicity of the tool helps parents and community members to engage with the effort and also to engage with the question of whether their children are learning. Very often parents assume that because their children are going to school, they must be learning. ASER is sometimes the first time that parents become aware that their children may be lagging behind.

47. Has ASER had an impact in other countries as well?

Yes, it has.

The ASER model is increasingly being recognized on global education platforms. The simplicity of ASER's tools and processes coupled with the rigor of its sampling methodology and low cost makes it an interesting option for many countries with contexts similar to India. The ASER methodology has spread organically to several other countries, all of which follow the same set of basic guiding principles while adapting the model to their own context. There is an ASER in Pakistan, conducted since 2008. The initiative is called Uwezo in East Africa (Kenya, Tanzania, Uganda), where it has been implemented since 2009. In Mali, the Beekungo initiative began in 2011 and Jangandoo in Senegal in 2012. In Mexico the Medición Independiente de Aprendizaje (MIA) began in 2014, and LearNigeria in 2015. The People's Action for Learning (PAL) Network was established in 2015 in order to strengthen, coordinate, and promote the work of these countries, and Bangladesh, Cameroon, Ghana, Mozambique, Botswana and Nepal joined the network in 2016.

In the lead up to the establishment of the post 2015 Millennium Development Goals, members of the extended ASER network in many countries made concerted efforts to ensure that indicators of learning and not just schooling are included in the new Sustainable Development Goals. ASER and ASER-like initiatives are mentioned in documents of Global Education Monitoring Report brought out by UNESCO, the Learning Metrics Task Force (coordinated by Brookings Institution and UNESCO Institute of Statistics), and other UNESCO-UIS documents such as the recent Data Digest. The importance of large scale community-based assessments carried out by citizens has been recognized in international policy and advocacy circles as a viable alternative to other existing assessment models, especially with respect to providing data for Indicator 4.1.1a of the Millennium Development Goals, which examines children's proficiency in reading and arithmetic in Grade 2/3. The ASER model is designed to provide exactly this information.

The ASER survey model has been used by governments, international development organisations, and civil society groups in other contexts as well. For example, BRAC has used the ASER tool to test children of Rohingya refugees in Bangladesh to understand the learning levels of children in conflict zones. Similarly, the International Rescue Committee adapted the ASER tool into Arabic to assess children of Syrian refugees.

About resources

48. Who funds ASER?

ASER is a citizens' initiative, designed by Pratham/ASER Centre and implemented each year by partner organizations in every rural district. Approximately 25,000 volunteers participate in ASER each year. People who conduct ASER each year donate their time to ASER and are compensated only for their local travel and food costs. The ASER survey receives support from a variety of sources including foundations, development agencies and corporates. Significant funding also comes from individuals. Each year the names of the partner organizations and sources of support are listed in the ASER report. ASER does not receive funding from any government institution.

49. Can I volunteer for ASER or participate in any way?

Yes, you can; ASER depends on volunteers! You can reach out to us at ASER Centre by sending an email to contact@asercentre.org. Depending on your location, your interests, and your availability, we can figure out how best you can join in this effort.

50. How can I contribute towards ASER surveys?

As a user of good quality data, you will appreciate the effort that goes into it. It takes about a lac of rupees (Rs 100,000) to conduct ASER in a district. While ASER reports and tools are available free of charge, donations of any amount are welcome and will help us continue to generate evidence on learning outcomes in India.

For online payments, please visit: http://www.pratham.org/get-involved/donate-now

For cheque payments, please send to our mailing address: ASER Centre, B4/54, Safdarjung Enclave, New Delhi - 110029

Cheques can be written in favour of "ASER Centre NFC". All donations are eligible for tax exemptions under Section 80G.

My ASER 2018 Experience

From the ASER 2018 blog

Sucheta Ray

Sucheta Ray volunteered to be an ASER 2018 Master Trainer in West Bengal. She is a trained statistician and computer scientist from the Indian Statistical Institute, Kolkata. After spending more than a decade in the corporate sector she has made a switch to the development sector.

I have just completed the ASER survey in one of the districts in West Bengal as a Master Trainer(MT). After working in the corporate sector for more than 14 years I left my job with a genuine interest to work for the people in need. I wanted to see the direct impact of my work in the society. But I was completely driven by emotions. So within a few months I realized that it is not easy to reach people as an individual. I could help a few individuals by helping financially, but if I really want to add some value to the society then I have to be a part of some organisation for whom it's a mission to work toward the benefit of people in distress.

One of my friends told me about Pratham and ASER. Then I checked their websites and went through all blogs and videos. I was simply moved by the unique concept of ASER. I made up my mind that I have to be a part of this survey. When I contacted their Delhi office they were a little confused about what exactly I was looking for. I did not know the exact format of ASER so I could not tell them exactly what I wanted and that made them confused too. But they gave my reference to the West Bengal team. They asked me to attend the Master Trainers' workshop in Bolpur to know more about ASER.

Before attending the training, I was a little skeptical about how I would be welcome as I was not a regular participant. But once the training started I had no uneasy feeling. From the very beginning I was treated as a regular participant by the state ASER team. I was included in every test and exercise and was given equal attention by them just like other participants.

The entire training module and the training process were very methodical and well thought. The way each step was designed and timed, it clearly showed the efforts and research put behind them by the ASER and Pratham teams.

And I must mention that I had never seen such energetic trainers. Whether it was 8 am in the morning or at 10 pm at night, the trainers' energy level remained the same. This is really commendable which I would certainly try to emulate in my professional life.

Personally I am grateful to Pratham for trusting me and assigning me as one of the MTs for district level training and survey for South 24 Parganas. I do not know if I could meet all the expectations and standards of ASER survey as an MT but I tried my best to do my part with utmost sincerity. It has been a long time since I have felt so content with my work. This survey gave me the opportunity to know the grim situation of education in the remote villages of our country and how Pratham is trying to address the issue at the grass root level. This whole experience enriched me in many ways, both personally and professionally.

Thanks Pratham.

My ASER 2018 Experience

From the ASER 2018 blog

Panchendra K. Naik

Head of Department, Department of Economics,

Vikram Dev Autonomous College, Jeypore, Odisha

I had been introduced to Annual Status of Education Report (ASER) during the time of my MPhil programme, way back in 2012. Since then I have been ardently following it. To my knowledge, ASER remains the only comprehensive database on the health of elementary education - enrolment characteristics and learning outcomes - in India. It was through one of my students that I learnt about the activities of ASER in Koraput, Odisha. I took no time to call upon the ASER coordinator to discuss any possibilities of engaging my Department - PG Department of Economics, Vikram Dev (Autonomous) College, Jeypore, Odisha - with the survey processes. The coordinator agreed. Soon after, they conducted a training programme at the Department, where around 60 students, including teaching staff, have participated. The training session was quite interactive and illuminating; it could convince all the participants to join for the survey. For the participants, the survey experiences were educating. I may say that the engagement with the ASER survey helped my students not only learn methodological integrities to carry forth any survey as this, rather it also conscientized them. I am truly grateful to ASER team for this.

My ASER 2018 Experience

From the ASER 2018 blog

नवीन कुमार झा

प्रशिक्षु

डायट (सीतामढ़ी)

गांवों में "असर"

जब से नींद टूटी हैं, स्वप्न की तलाश में हूँ

शिक्षा दूत हूँ समाज का, शैक्षणिक आंकड़ो की तलाश में हूँ।

बदहाली में गुम हो गई हैं गांवों की शिक्षा

अँधेरो में उम्मीद की चिराग जला, आईना दिखाने की तलाश में हूँ।

गांवों के असर में रह न जाएँ कोई कसर, उस असर की तलाश में हूँ।

शिक्षा के हुनमान हैं हम सब मगर मन ही मन किसी विभीषण की तलाश में हूँ।

डायट के प्रशिक्षण ने हम पर किया हैं ऐसा "असर",

ढाह देंगे अज्ञानता की लंका को बस उन मौकों की तलाश में हूँ।

बेबसी – तंगहाली से सुनी हुई कई आँखों में, उम्मीद की किरण जगाने की तलाश में हूँ।

प्रशिक्षु हूँ डायट का सुकून से कैसे बैठूँ जिले में "असर" का असर दिखाने की तलाश में हूँ।

नींद से जागा हूँ स्वप्न की तलाश में हूँ असरदार रहे "असर" उन पलो की तलाश में हूँ।

ASER

Evidence for Action