FUNDING EDUCATION WITH IMPACT

A GUIDE FOR SOCIAL INVESTMENT IN INDIA

CREDIT SUISSE | SATTVA Delivering High Impact.

"... it is clear that education will play a critical dual role of addressing poverty and inequality while supporting the transition to a new model of sustainable development. For this to occur, all stakeholders, from civil society and non-government organizations ... to multilateral organizations, bilateral aid agencies and all levels of government, will need to make concerted efforts to reorient systems of education, skills development, and research and innovation."

- UNESCO

ABOUT THE REPORT

Building on the discussions initiated at the AVPN Conference in Bangkok in June 2017, this report is a deep dive into the social investment landscape in education in India. It has been designed as a guide for potential and existing social investors who would like to maximise impact in the education sector. It analyses gaps, desired outcomes and existing interventions by various social purpose organisations across the education segments - early childhood, primary, secondary, vocational and inclusive education. An overview of the current funding landscape, along with notable funding examples across the spectrum of funders, is also provided. Finally, the guide discusses ecosystem initiatives to identify potential synergies for funders.

We hope this report serves as a comprehensive and practical guide for education funders to inform strategy and facilitate decision-making.

Published by the Asian Venture Philanthropy Network and Sattva in August 2017

Email	knowledge@avpn.asia
Website	www.avpn.asia
Authors	Sattva Knowledge Centre and Consulting Rathish Balakrishnan, Aarti Mohan, Anita Kumar, Ritu George Kaliaden, Abhineet Singh Malhotra, Poorvaja Prakash
Production	Smriti Harsh, Hardik Verma, Vasudha Ramakrishnan, Abhishek Modi, Shruti Deora
Project Advisor	Azad Oommen (Central Square Foundation)
Editors	Martina Mettgenberg-Lemiere, PhD (AVPN) Nguyen Le Phuong Anh (AVPN)
Design and Typesetting	Ideasutra.in

TABLE OF CONTENTS

CREDIT SUISSE

FOREWORD

Beyond its core banking activities, Credit Suisse is committed to supporting inclusive growth through three pillars: Education, Microfinance and Employee Engagement. We see Education as a key driver to sustainable economic and social development. As part of our Corporate Citizenship strategy, we support a wide range of education initiatives delivered by non-profit organisations globally, both through financial grants and skills-based contributions from our employees.In India, Credit Suisse is currently supporting many local education programmes aimed at empowering children and youth from disadvantaged backgrounds.

In Asia-Pacific, the Education sector continues to attract a growing number of funders. In India specifically, a large portion of investment in the social sector is directed at education. Despite this large spend, the Education sector is still facing major gaps in quality and delivery, and a lack of alignment amongst funders causes duplication of efforts. This is why we believe that achieving Inclusive Access to Quality Education in an efficient, sustainable and scalable way requires a collaborative approach. This belief prompted Credit Suisse to initiate an Education-focused Collective Impact initiative in Malaysia (2014) and in Hong Kong (2015) by leveraging the participation of corporates, foundations, government and local authorities, non-profit organisations, social enterprises, academia and others in the private sector. One of the key features of the Collective Impact model is a common agenda shared amongst multiple stakeholders and it is therefore critical to get a clear understanding of the real gaps and funding opportunities before putting this type of collaboration in place.

This report gives an overview of the broader education landscape in India and sheds light on the most critical education gaps, with the aim being to identify opportunities for financial and technical support throughout all education segments. The objective is to help existing and potential grant makers and investors improve their decision-making and collaboration so as to achieve greater impact at scale.

We hope this report will encourage a vibrant conversation around the challenges and opportunities related to achieving efficient and scalable funding for education and be the first step towards strengthening the education ecosystem in India through a collaborative approach.

Credit Suisse Corporate Citizenship and Foundations

FOREWORD

With more than 1.5 million schools and 260 million enrolments, India is home to one of the largest and most complex education systems in the world. While an array of policies and initiatives have been put in place, they have not translated into universal enrolment, retention or better learning outcomes for students. Such gaps are even more pronounced in vocational education, where employability remains a pressing issue, and inclusive education, where about 28% of children with special needs are left out of school.

While the Indian government is still the largest funder and provider of education, there is a growing recognition that greater involvement of other stakeholders, especially philanthropic funders and social investors, is critical. Simultaneously, private funders have increasingly come to appreciate the power of partnerships in catalysing impact in education. Collaboration across various stakeholders is imperative to diffuse social innovations and create systemic change.

Recognising this, this report on Funding Education with Impact – A Guide for Social Investment in India aims to provide a practical and actionable guide for existing and potential funders in the Indian education space to identify funding opportunities and synergies for partnerships. Covering 5 different education segments spanning a student's learning journey between 3-18 years of age – early childhood education, primary education, secondary education, vocational education and inclusive education, the report analyses gaps, interventions and barriers to funding in addition to funding examples to arrive at meaningful recommendations for funders. With a dedicated section on Ecosystem Funding, we hope the report will stimulate discussions around collective impact and bring together funders across the spectrum to maximise impact.

We are grateful to Credit Suisse for their generous partnership and Sattva Consulting for the research support, as well as our members, advisors and social purpose organisations who have contributed in various ways to the report.

Asian Venture Philanthropy Network (AVPN)

ACKNOWLEDGEMENTS

We thank the following individuals and organisations for sharing their experiences and insights:

Aarushi Prabhakar	Educational Initiatives
Amitava Pal	Hippocampus Learning Centres
Amitav Virmani	The Education Alliance
Anamara Baig	Pratham Education Foundation
Anuja Kadian	Rolls-Royce
Archana Chandra	Jai Vakeel Foundation
Ashutosh Tosaria	QUEST Alliance
Bikkrama Daulet Singh	Central Square Foundation
Dhvani Doshi	Global Fund for Children
Dipa Nag Chowdhury	MacArthur Foundation
Dr. Gayathri Vasudevan	LabourNet
Gaurav Arora	Salaam Bombay Foundation
Harish Mamtani	SEED Schools
Kamal Kaur, Amalia Noelle Rebello	Save the Children
Sriram Kumar Venkataraman	Nadathur Foundation
Mary Ellen Matsui	ATMA
Dr. Meenu Bhambhani	Mphasis
Mohit Saxena	Kaivalya Education Foundation
Naghma Mulla, Atul Joshi	EdelGive Foundation
Natasha Joshi	NITI Aayog
Neelam Makhijani	Childfund India
Paresh Parasnis	Piramal Foundation
Ruchi Khemka	Deutsche Bank
Safeena Husain	Educate Girls
Sagarika Bose	Godrej Industries
Siddhi Lad	Dewan Housing Finance Corp. Ltd.
Subodh Kumar Mahapatra	DS Group
Vikram Jain	FSG Advisory Services Pvt. Ltd.

We are grateful for the support of and comments from Credit Suisse and would like to thank in particular:

- Angeline Chin
- Laetitia Lienart
- Liza Green
- Ashima Suri
- Kevin Teo
- Valerie Koh
- Long Pham
- Andrew Lee

We are also grateful to the following AVPN staff members and associates who helped with connections, comments, discussions and research to shape this publication:

- Naina Subberwal Batra
- Binali Suhandani

Finally, we are thankful to the participants of the 'Workshop on Investing to Improve Quality of Education across Asia' during the 5th annual AVPN Conference in Bangkok in Thailand in June 2017, themed 'Collaborating for Impact'.

HOW TO USE THIS REPORT

Designed as a practical guide for funders and other stakeholders within the education sector in India, this report serves as a snapshot of possible areas for funding and non-financial support.

The first five chapters of this report correspond to different education segments. Each chapter is structured around five sections moving from a macro-level policy view, to an outcome-oriented analysis of gaps and trends, and further to a finer-grained investigation of the interventions and funding landscape with on-the-ground examples. The five sections are:

- **Policy Framework:** provides a timeline of landmark policy developments pertinent to the education sector in India.
- **Gaps and Trends:** provides an overview of prevalent challenges and general trends as a guide to the pressing needs within the sector today.
- **Outcomes and Interventions:** provides a sample of interventions in the space and SPOs working on them with their respective legal structures, which provides a quick insight into their eligibility for funding and partnerships.
- **Funding Opportunities:** assesses the current funding landscape for a particular education segment across various classes of funders and provides a snapshot of potential funding areas.
- **Recommendations:** presents a set of broad guidelines to funders on possible interventions and initiatives that would be the most impactful.

In line with this report's overall emphasis on a concerted approach to addressing challenges within the sector, a chapter on ecosystem funding has been included to examine desired outcomes in and barriers to funding ecosystem-level initiatives, and innovative, collaborative solutions that work towards systemic change.

THE FOLLOWING ELEMENTS IN OUR FRAMEWORK AIM TO HELP FUNDERS IDENTIFY FUNDING AND SUPPORT OPPORTUNITIES

Education segments	This report focuses on 5 key education segments – early childhood education (ECE), primary, secondary, vocational and inclusive education.
Outcomes	Across these education segments, gaps, trends, interventions and funding examples are analysed in accordance with critical outcomes that affect a student's learning quality - enrolment, retention, attainment, holistic development, health and well-being and employability.
Lenses	Analysis in this report has been recalibrated using specific lenses, thereby highlighting variations in trends and patterns. These include: origin (urban or rural areas), gender lens, marginalised groups, and government or private institutions. Each of these lenses will be denoted by different coloured circles and these circles indicate that the intervention, funding example or data point discussed, is relevant to a particular lens.
Stakeholders	Interventions presented in this report have been categorised based on the stakeholders they aim to address, namely: students, teachers, schools and the community.

LIST OF ABBREVIATIONS

A	AADI	Action for Ability Development and Inclusion
	ABC	Activity Based Curriculum
	ADB	Asian Development Bank
	AEP	Adolescence Education Programme
	AICTE	All India Council for Technical Education
	APS	Affordable Private Schools
	ASER	Annual Status of Education Report
B	BCG	Boston Consulting Group
C	CECED	Centre for Early Childhood Education and Development
	CF	Corporate Foundation
	CGD	Center for Global Development
	CSF	Central Square Foundation
	CSR	Corporate Social Responsibility
	CWSN	Children with Special Needs
D	DAISY	Digital Accessible Information System
	DFI	Development Finance Institution
	DFID	Department for International Development
	DISE	District Information System for Education
E	ECCE	Early Childhood Care and Education
	ECD	Early Childhood Development
	ECE	Early Childhood Education
F	FF	Family Foundation
	FSG	Foundation Strategy Group
	FY	Financial Year
G	GER	Gross Enrolment Ratio
	GF	Global Foundation
	Govt.	Government
H	HLC	Hippocampus Learning Centre
	HNWI	High Net Worth Individual
I	ICDS	Integrated Child Development Services
	ICT	Information and Communications Technology
	ID	Intellectual Disability
	IF	Impact Fund
	ILO	International Labour Organisation
	ISSNIP	ICDS Systems Strengthening & Nutrition Improvement Programme
	ITI	Industrial Training Institute
K	KCMET	KC Mahindra Educational Trust
M	M&E	Monitoring and Evaluation
	MHRD	Ministry of Human Resource Development
	MoSJE	Ministry of Social Justice and Empowerment
	MoSPI	Ministry of Statistics and Programme Implementation
	MoTA	Ministry of Tribal Affairs
	MSDE	Ministry of Skill Development and Entrepreneurship
	MSDF	Michael & Susan Dell Foundation

	NATS	National Apprenticeship Training Scheme
	NCERT	National Council of Educational Research and Training
	NCF	National Curriculum Framework
	NGO	Non-Governmental Organisation
	NHFDC	National Handicapped Finance & Development Corporation
	NIOS	National Institute of Open Schooling
	NMMS	National Means cum Merit Scholarship
	NORAD	Norwegian Agency for Development
N	NOS	National Occupational Standards
	NPE	National Policy of Education
	NSDA	National Skill Development Agency
	NSDC	National Skill Development Corporation
	NSDF	National Skill Development Fund
	NSIGSE	National Scheme of Incentive to Girls for Secondary Education
	NSSO	National Sample Survey Office
	NUEPA	National University of Educational Planning and Administration
O	OOSC	Out-of-School Children
	PACS	Poorest Areas Civil Society
	PHC	Primary Health Care
	PIPE	Programme to Improve Private Preschool Education
	PMKVY	Pradhan Mantri Kaushal Vikas Yojana
	PPP	Public-Private Partnership
P	PTR	Pupil-Teacher Ratio
	Pvt.	Private
	PwD	Persons with Disabilities
Q	QP	Qualification Packs
	RMSA	Rashtriya Madhyamik Shiksha Abhiyan
R	RTE	Right To Education
	SDG	Sustainable Development Goal
	SEED	Standard of Excellence in Education Development
	SEQI	School Education Quality Index
	SEMIS	Secondary Education Management Information System
S	SIDA	Swedish International Development Cooperation Agency
	SPARC	School for Potential Advancement and Restoration of Confidence
	SPO	Social Purpose Organisation
	SRS	School of Rehabilitation Sciences
	SSA	Sarva Shiksha Abhiyaan
	SSC	Sector Skill Council
	STEM	Science, Technology, Engineering, Mathematics
	TEA	The Education Alliance
R	TLM	Teaching-Learning Materials
	TVET	Technical and Vocational Education and Training
	UEE	Universalisation of Elementary Education
	UNESCO	United Nations Educational, Scientific and Cultural Organization
U	UNICEF	United Nations Children's Fund
	USD	United States Dollars

V	VTIP	Vocational Training Improvement Project
W	WHO	World Health Organisation

ABBREVIATIONS OF INDIAN STATES

A	AP	Andhra Pradesh
	ArP	Arunachala Pradesh
	AS	Assam
B	BH	Bihar
C	CHH	Chhattisgarh
G	GJ	Gujarat
H	HP	Himachal Pradesh
	HR	Haryana
J	JH	Jharkhand
	JK	Jammu & Kashmir
K	KER	Kerala
	KR	Karnataka
M	MEG	Meghalaya
	MH	Maharashtra
	MN	Manipur
	MP	Madhya Pradesh
	MZ	Mizoram
N	NG	Nagaland
O	ODH	Odisha
P	PN	Punjab
R	RJ	Rajasthan
T	TEL	Telangana
	TN	Tamil Nadu
	TR	Tripura
U	UP	Uttar Pradesh
	UTK	Uttarakhand
W	WB	West Bengal

EXECUTIVE SUMMARY

This report examines gaps, interventions and the funding landscape across different education segments and age groups in India. Running the spectrum from Early Childhood Education (ECE) through to vocational education and also covering inclusive education, it identifies gaps and showcases existing interventions as well as provides recommendations and suggested approaches to existing and prospective funders.

The Education for All movement, initiated at Jomtien in 1990 and reiterated in Dakar in 2000, has been the most important commitment to education in recent decades with its global call for universal access to education.[1] More recently this vision has been reaffirmed by the Sustainable Development Goals (SDGs) with SDG 4 and its corresponding targets calling for the provision of inclusive and equitable quality education and the promotion of lifelong learning opportunities for all.[2] These global efforts have repeatedly recognised the important role of education as a key driver of development and in achieving the remaining SDGs.[3] It has long been acknowledged that the rate of return from investment in schooling across countries is about 10%, with returns higher for investment in low-income countries, lower levels of schooling, and women.[4] Additionally, education has been found to increase human capital and labour productivity, thus leading to a higher equilibrium level of output.[5]

With more than 1.5 million schools[6] and more than 260 million student enrolments,[7] India is home to one of the largest and most complex education systems

1. UNESCO, 2015
2. UNESCO, 2015
3. UNESCO, 2015
4. World Bank, 2015
5. World Bank, 2015
6. Villgro, 2017

in the world. The education sector in India has grown significantly over the past few decades. India has achieved near universalisation of primary education as of 2015,[8] with 96.9% of children in rural India enrolled in school in 2016[9] and 98% of habitations now having access to a primary school within a one-kilometre radius.[10] Landmark policy developments such as the implementation of the Right to Education (RTE) Act for the primary level and the Rashtriya Madhyamik Shiksha Abhiyan (RMSA) for the secondary level have triggered large-scale efforts in increasing access and improving infrastructure. While there has been a wide array of initiatives aiming to address prevalent issues in the education space in India, gaps persist in various education segments, signifying the need for more targeted interventions.

This report defines education segments according to the following generally accepted criteria. Early Childhood Education (ECE) corresponds to 3-6 years of age. Primary education and secondary education correspond to Grades 1-8 and Grades 9-12, respectively, and may cover various ages, in light of the fact that students might experience abrupt stops in their education journeys. Vocational education is defined as a follow-on from Grade 9 that primarily caters to the age group of 15-18. Inclusive education is a special category for students between 3-18 years of age who have long-term physical, mental, intellectual or sensory impairments.

Across these education segments, gaps, interventions and funding examples are analysed in accordance with critical outcomes that affect a student's learning quality, namely: enrolment, retention, attainment, holistic development, health and well-being and

7. EY, 2017
8. UNESCO, 2015
9. ASER, 2016
10. SSA, 2010

employability. These outcomes are derived from secondary literature by reputable international organisations and interviews with stakeholders in the Indian education space. Their definitions are detailed in the Methodology section of this report.

Given the variations in the achievement of these outcomes and the spectrum of interventions across the education sector, where data permits, this report also attempts a finer review of gaps and progress through different lenses including gender, rural and urban areas, government and private institutions, marginalised communities and geographical variations.

GAPS AND TRENDS IN THE INDIAN EDUCATION SECTOR

India has the largest K-12 education system in the world, with approximately 260 million children enrolled in 1.5 million schools.[11] While near universalisation of access has been achieved at the primary level, enrolment and retention are generally low in other segments. Attainment remains a critical issue across all segments, largely owing to inadequate teacher training and the lack of focus on life skills education. Ecosystem-level interventions, which could potentially create system-wide impact, have not been a focus among private funders.

1. Access to education has not been equitable

While India has achieved near universalisation of primary education with an out-of-school rate of 3%, only around 64% (out of a total of 99.7 million adolescents) progress to secondary and senior secondary stages as of 2016.[12] Meanwhile, a whopping 24% of Indian children between 3-5 years of age do not have access to early childhood education and therefore miss out on critical developmental stimulation that would benefit them in their subsequent education journeys.[13] States such as Uttar Pradesh, Rajasthan and Arunachal Pradesh have anywhere between 40-80% out-of-school pre-primary children in rural areas.[14]

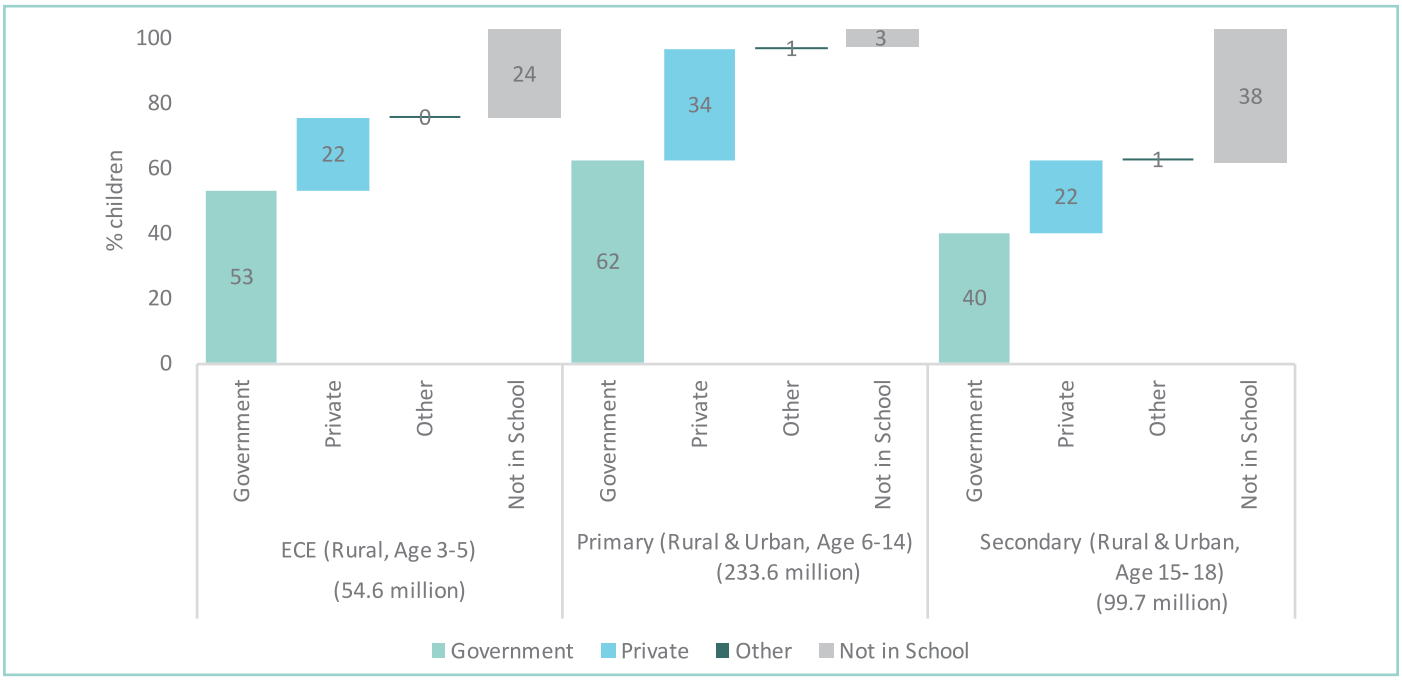


Figure 1: Enrolment in the education system from ECE to secondary education in India. **Source:** Census 2011, ASER 2016, NSSO 2014, Sattva analysis ***Note:*** *Enrolment data has been constructed using ASER 2016, U-DISE 2015-16 and NSSO 2014 survey in conjunction with Census 2011. There is no reliable enrolment data for enrolment in urban areas for ECE.*

11. BCG, 2016
12. Sattva analysis
13. Sattva analysis
14. ASER, 2016
15. DISE, 2016
16. Sattva analysis
17. Social & Rural Research Institute, 2010
18. DISE, 2016
19. CSAE, 2017
20. Baird, 2009
21. Baird, 2009
22. Baird, 2009
23. FSG, 2016
24. ASER, 2016
25. ASER, 2016
26. Sattva, 2017

Dropout rates among girls are particularly high beyond primary education. Over 16.9% of girls drop out at the secondary level, a remarkable rise from 4.1% at the primary level[15] (see Figure 1 in 'Secondary Education'). The transition rate of girls from secondary to higher secondary is only 69.4%. Dropout is also rampant among minority groups. As of 2015, high dropout rates were observed among Muslims (24.7%) and Scheduled Tribes (24.1%), compared to the national average of 17.1%.[16] Children with special needs (CWSN) face significant challenges in accessing education with 28.23%, or 0.6 million between 6-13 year, being out of school.[17]

2. Privatisation is on the rise across education segments

Between 2010-11 and 2015-16, the number of private schools surged by 77,063 nationwide, more than 6 times the increase in government schools (12,297).[18] In the same period, government school enrolment decreased by 13.1 million while private school enrolment increased by 17.5 million.[19] States such as Haryana, Jammu and Kashmir, Punjab, Rajasthan, Telangana and Uttar Pradesh have over 40-60% of children aged 6-14 enrolled in private institutions. This may be fuelled in part by the high perceived value of private education by parents,[20] access (especially in urban areas),[21] and even political and regulatory differences between states pertaining to establishing private schools.[22] Simultaneously, affordable private schools (APS), which are private unaided schools charging a fee under INR 1,500 (USD 24) per month,[23] are seen as changing the landscape of how primary education is delivered in India both in rural and urban areas, with the perception of delivering quality education at more affordable prices than private schools.

3. Attainment is a significant concern in both government and private schools

Low attainment levels are observed across all education segments. Among Grade 5 children in rural India, 52.2% cannot read a Grade 2 level text and 74.1% cannot solve a division problem.[24] In Grade 8, the corresponding values are 27% and 56.8% respectively.[25] Performance gaps persist beyond primary level - about 20% children in the 14-16 age group cannot read a Grade 2 level text, and about 50.8% cannot solve a division problem.[26]

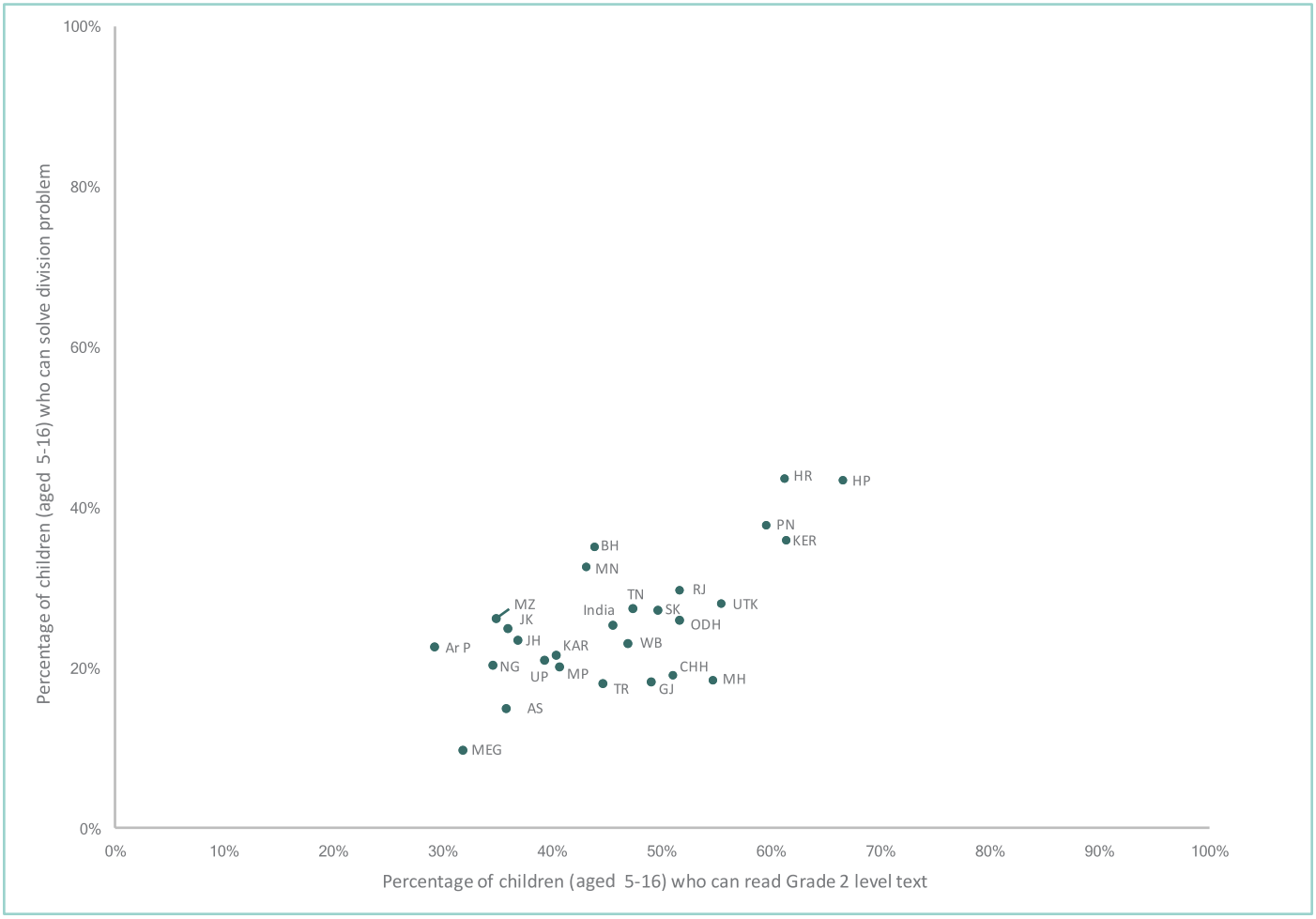


Figure 2: The best performing states such as Himachal Pradesh, Haryana, Punjab and Kerala are still below accepted levels of attainment by a large margin. **Source**: ASER 2016.

Despite their higher fees, evaluations across states show that private schools do not necessarily lead to improved learning outcomes.[27] The performance gap between government and private schools has largely been attributed to attainment levels plummeting in government schools while remaining more or less the same in private schools.[28]

The quality of vocational education has been impeded by the lack of alignment of such programmes with industry requirements. Further, there exists a lack of frameworks around soft skills training in areas such as communication, problem solving, conflict management for the 15-18 age group. Completion of vocational education programmes has therefore not translated to enhanced employability for students.

4. Acute shortage of qualified teachers affects delivery quality

A key factor contributing to low attainment, observed across all education segments, is the shortage of skilled teachers and trainers. The Ministry of Human Resource Development (MHRD) estimates 17.5% and 19% teaching vacancies in government primary and secondary schools.[29] Even among serving teachers, quality is an issue with a very low percentage - 17% in rural areas and 8.3% in urban areas- receiving in-service training.[30] For vocational education, the current gross capacity of government-run institutes for 'Train the Trainers' is only 1,600 per annum while the requirement for qualified trainers is more than 70,000, with an additional 10,000 per annum.[31]

27. JPAL, 2017
28. Centre for Civil Society, 2017
29. Government of India, 2016
30. DISE, 2016
31. Ministry of Skill Development and Entrepreneurship, 2017
32. Krishnakumar, 2017
33. Kulkarni, 2016
34. Central Square Foundation, 2015

Qualified teachers in inclusive education are also severely deficient. Less than 60% of teachers operating in government schools have had formal training on working with CWSN. In addition, training provided is often introductory with no accompanying aids or tools, or follow-up mechanisms.[32] In Karnataka, for example, in 2012–13, almost 5,000 teachers with training in special education were needed.[33]

5. Life skills have not been given due attention

Life skills, defined as psycho-social and cognitive abilities that equip students to make informed decisions and choices, manage their emotional well-being and communicate effectively, exert a positive influence on their long-term education and employment outcomes.[34] In-school structured sports, arts and experiential learning programmes are vital to develop essential life-skills among students[35] but have yet to receive adequate attention in India. Quality of course contents and shortage of qualified teachers are factors that have impeded effective integration of life skills into the curriculum.

6. Ecosystem-level interventions have been implemented in pockets

In the education space, common needs such as curricula, standards, learning outcomes data, methodologies and tools for teachers, students and school management are most economically served through collective interventions. The lack of such commons often results in multiple organisations duplicating efforts to address gaps and resulting in multiple sub-optimal solutions, no standardisation and a waste of investment. At the social purpose organisation (SPO) level, for instance, the nationwide household-based ASER survey undertaken by Pratham has now become the benchmark to measure progress on access, infrastructure and learning outcomes.[36] While such solutions demonstrate the potential of commons, there are still gaps to be addressed; ASER for example provides learning outcomes for rural areas but there is a lack of standardised data across urban areas.

In addition, there is growing emphasis by governments, donor agencies and international development organisations on capacity building of SPOs as being crucial to their sustainable development, especially in the context of reaching the Education for All (EFA) goals.[37] Nonetheless, while sector specific accelerators such as the Atma Accelerator or EduGild help education start-ups scale, most non-profits face persistent underfunding of their organisation building costs. Access to open-source expertise and services would also go a long way in helping SPOs to improve their capacity.

Last but not least, while a few multi-stakeholder partnerships have emerged such as the FSG's Programme to Improve Private Preschool Education (PIPE), the Educate Girls Development Impact Bond, The Education Alliance and the India Education Collective, there has not been a significant movement towards collective impact. If different stakeholders would work together, risks can be reduced and impact can be maximised.

LANDSCAPE OF EDUCATION FUNDING IN INDIA

The total financial requirement for India to reach SDG 4 by 2030 is USD 2,258 billion,[38] which for the years from 2017 to 2030 averages USD 173 billion per year, far exceeding the current government budget of USD 51.5 billion[39] a year for education. India's education market has been estimated at USD 133 billion with USD 56 billion in private spending.[40] Education has been one of the most invested causes in India by funders across the spectrum — USD 52 million in impact investment between 2012-2017,[41] USD 419 million through CSR just in 2016,[42] USD 127 million

35. Central Square Foundation, 2015
36. Socialcops, 2015
37. UNESCO, 2009
38. UNDP
39. MHRD, 2012-2015
40. Villgro, 2016
41. Villgro, 2016
42. CRISIL, 2017
43. Hurun, 2017

from HNWIs in 2016,[43] and a significant share from philanthropic foundations.[44] Despite this, education quality remains poor with limited impact on people's lives, especially at the bottom of the pyramid,[45] necessitating a need for funding with impact.

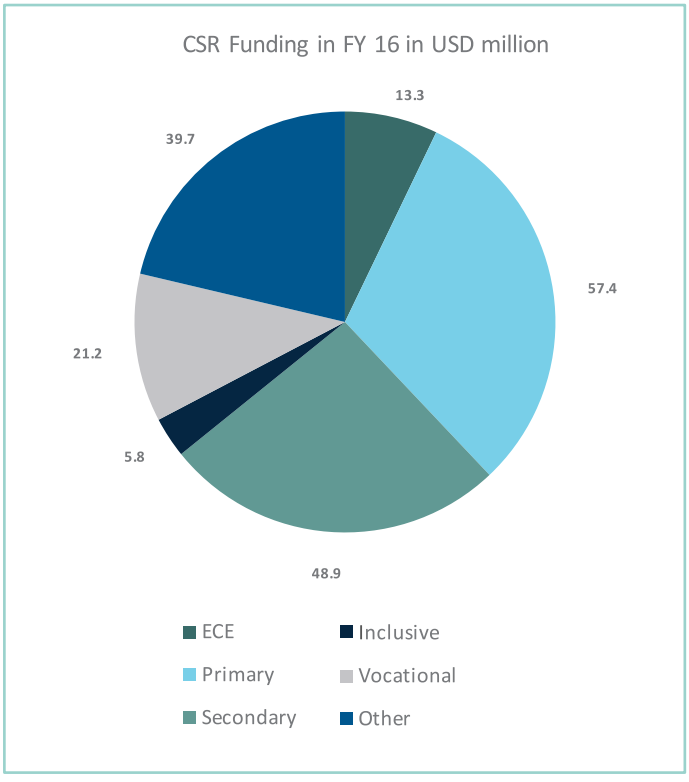
1. Government spending at 2.7% of GDP is insufficient to meet the demand for quality education

As the largest funder in the education space, the government's education budget was USD 51.5 billion[46] in 2015-16, about 2.7% of GDP.[47] As per the World Bank's 2015 estimates, India's public spending on education amounted to approximately 5.2% of the world's cumulative public spending while the country is home to 20% of the population in the target group.[48] This highlights the magnitude of the gap in government funding in education in India.

Government spending has also been criticised for being biased towards teacher salaries (80%), with meagre amounts going towards infrastructure improvement, training, tools and aids, or learning outcomes.[49]

2. Development finance institutions have been strong supporters of government programmes

The gap in government funding has been filled to some extent through the support of development finance institutions (DFIs) such as the World Bank, which focus primarily on delivering large-scale impact by strengthening and augmenting government schemes. The Sarva Shiksha Abhiyan (SSA) is a case in point with the World Bank investing USD 500 million in Phase I (2003-2007) and USD 1.35 billion in Phase II (2007-2012).[50]



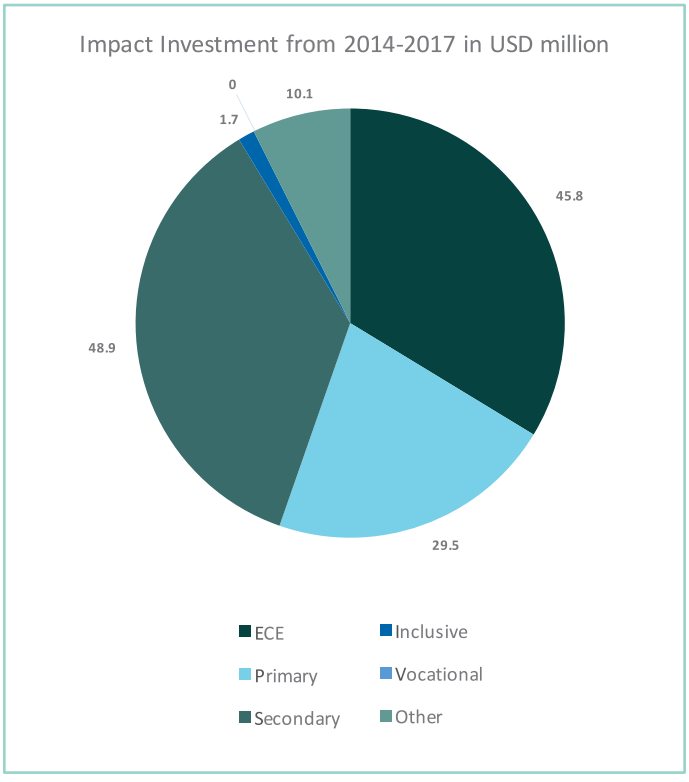


Figure 3: Distribution of CSR funding and Impact Investment across education segments **Source:** Sattva analysis based on data from NGObox and Venture Intelligence ***Note:*** *CSR funding analysis is based on NGOBox 2015-16 education report, which tracks CSR spending of 151 companies implementing 567 projects through their Annual Reports. The impact investment analysis is based on Venture Intelligence data between March 2014 to March 2017 within the education space.*

44. Dasra, 2015
45. Villgro, 2016
46. MHRD, 2015
47. CBPA, 2016
48. Villgro, 2016
49. Livemint, 2017
50. IBEF

3. CSR funding has been significant, especially in primary and secondary education

Education was a priority area for CSR in 2016, with 36% of total funding going to this space,[51] amounting to USD 419 million from 1,158 companies.[52] To provide a snapshot of CSR focus in the education space, data from 151 companies and 567 projects with a total expenditure of USD 186.3 million was analysed. The majority of CSR expenditure has been in primary education (USD 57.4 million), followed by USD 48.9 million for secondary education. ECE, vocational education and inclusive education have been relatively underfunded. The bulk of CSR spending in these categories have been in infrastructure provision and programmatic interventions.

Examples of corporates and corporate foundations active in the different segments are:

EDUCATION SEGMENT	CORPORATE	CORPORATE FOUNDATION
ECE	HDFC Bank, Snapdeal, Landmark Group, Balakrishna Industry Ltd., HPCL, Infosys, SRF Ltd, Ultra Tech Cement	Dewan Housing Finance Corp Ltd. (DHFL) Foundation, EdelGive Foundation, Wipro Cares, Saint Gobain India Foundation, Infosys Foundation
Primary Education	Asian Paints, DS Group, Hindustan Petroleum Corporation, Mahindra Group, Rolls-Royce	EdelGive Foundation
Secondary Education	Aditya Birla Group, H&M, Larsen & Toubro, Oracle, Philips, Tata Motors, Ambuja Cements Ltd., Credit Suisse, Deloitte, Mahindra & Mahindra, Asian Paints, Parle Bisleri, Trent-Westside, FICCI, Mahindra Group	Adobe Foundation, American Express Foundation, EY Foundation, Goldman Sachs Gives, ICICI Foundation, Bharti Foundation, K.C Mahindra Education Trust, Kotak Education Foundation, Mphasis F1 Foundation, Suzlon Foundation, Reliance Foundation
Vocational Education	Accenture, AMD, Barclays, HDFC Bank, Microsoft, Ambuja Cements Ltd., Credit Suisse, Deloitte, Mahindra and Mahindra, Asian Paints, Parle, Bisleri, Trent-Westside, FICCI, Asian Paints, Samsung India	EY Foundation, KPMG Foundation
Inclusive Education	Accenture, Ambuja Cement, Citibank, Microsoft, Credit Suisse, IBM India, Mphasis, Wipro	Tech Mahindra Foundation

4. Impact investment shows promise but is primarily focused on technology interventions

Of the USD 4.1 billion impact funds invested from 2010 to 2015 in India, only 2% was in education.[53] According to an analysis of 52 deals in education, with a total capital of USD 136 million, over the past 3 years, primary and secondary education have received

51. Shah, 2017
52. CRISIL, 2017
53. Sengupta, 2016

the most capital with tech-based platforms for online tutoring and remedial learning attracting significant investment. ECE has also been relatively well funded with 34% of the total investment. However, this has mostly been directed to private, urban, early childhood day care centres catering to middle-income groups. Inclusive education has had some scattered investments, however with a low quantum of 1.3% of total impact investment. A notable gap is the absence of any impact investment in the vocational space.

5. Education remains a popular cause among HNWIs and philanthropic foundations

Education continues to dominate as the most popular cause among HNWIs and family foundations in India. Over 54% of 377 HNWIs surveyed in 2015 reported funding education according to Bain,[54] while Hurun reported a donation of USD 127 million from HNWIs towards education in 2016.[55] Prominent HNWIs and family foundations investing exclusively in education in India include: Azim Premji Foundation (which has received USD 2 billion from Azim Premji),[56] Shiv Nadar Foundation (USD 98.44 million in 2016 towards higher education),[57] Piramal Foundation, Reliance Foundation (grants from Mukesh Ambani), Rakesh Jhunjhunwala and the Poonawalla Foundation.[58]

Examples of impact investors active in different education segments include:

ECE	Khosla Impact, Unitus Seed Fund, Omidyar Network, Pearson Affordable Learning Fund, Village Capital
Primary Education	Khosla Impact, Unitus Seed Fund, Kaizen Private Equity, LGT Impact Ventures, Pearson Affordable Learning Fund
Secondary Education	Acumen, Footprint Ventures, IFMR Trust, Novak Biddle Venture Partners, Gray Matters Capital, Varthana
Vocational Education	Acumen Fund
Inclusive Education	The Mumbai Angels, Inventus Capital

Examples of global and local foundations active in different education segments include:

ECE	Charities Aid Foundation, Global Fund for Children, Aga Khan Foundation, Sir Ratan Tata Trust
Primary Education	Bill & Melinda Gates Foundation, Draper Richards Kaplan Foundation, Global Fund for Children, Michael & Susan Dell Foundation, Piramal Foundation
Secondary Education	MacArthur Foundation, Azim Premji Foundation, Central Square Foundation, Draper Richards Kaplan Foundation, Sir Dorabji Tata Trust, Michael & Susan Dell Foundation

54. Bain et al, 2015
55. Hurun, 2017
56. Dasra, 2015
57. Hurun, 2017
58. Hurun, 2017

Vocational Education	American India Foundation, Dalyan Foundation, Oberoi Family Foundation, Sir Dorabji Tata Trust, Swades Foundation, Michael & Susan Dell Foundation
Inclusive Education	Narotam Sekhsaria Foundation, Paul Hamlyn Foundation, The Hans Foundation, Cipla Foundation, Sir Dorabji Tata Trust

6. Ecosystem funding needs to be augmented

Through ecosystem funding, funders seeking impact at scale view their interventions in the context of a broader system and take into account the contributions of multiple actors in the private, public and social sectors, often supporting structures that bring them together.

Across the board, ecosystem level interventions have been underfunded with analysis revealing only 5 companies implementing 6 CSR projects that support ecosystem interventions, amounting to a CSR spending of just USD 7.4 million.[59] There is no evidence of impact investment going into this space.[60] Nonetheless, as noted above, while there is yet a comprehensive mapping of ecosystem funding among philanthropic organisations, several have been initiated in recent years such as FSG's PIPE, Educate Girls Development Impact Bond, the Education Alliance and the India Education Collective.

Examples of funders looking at ecosystem investment are: Central Square Foundation, EdelGive Foundation, FSG, Michael & Susan Dell Foundation, Children's Investment Fund Foundation (CIFF), UBS Optimus Foundation, Marshall Foundation and Omidyar Network.

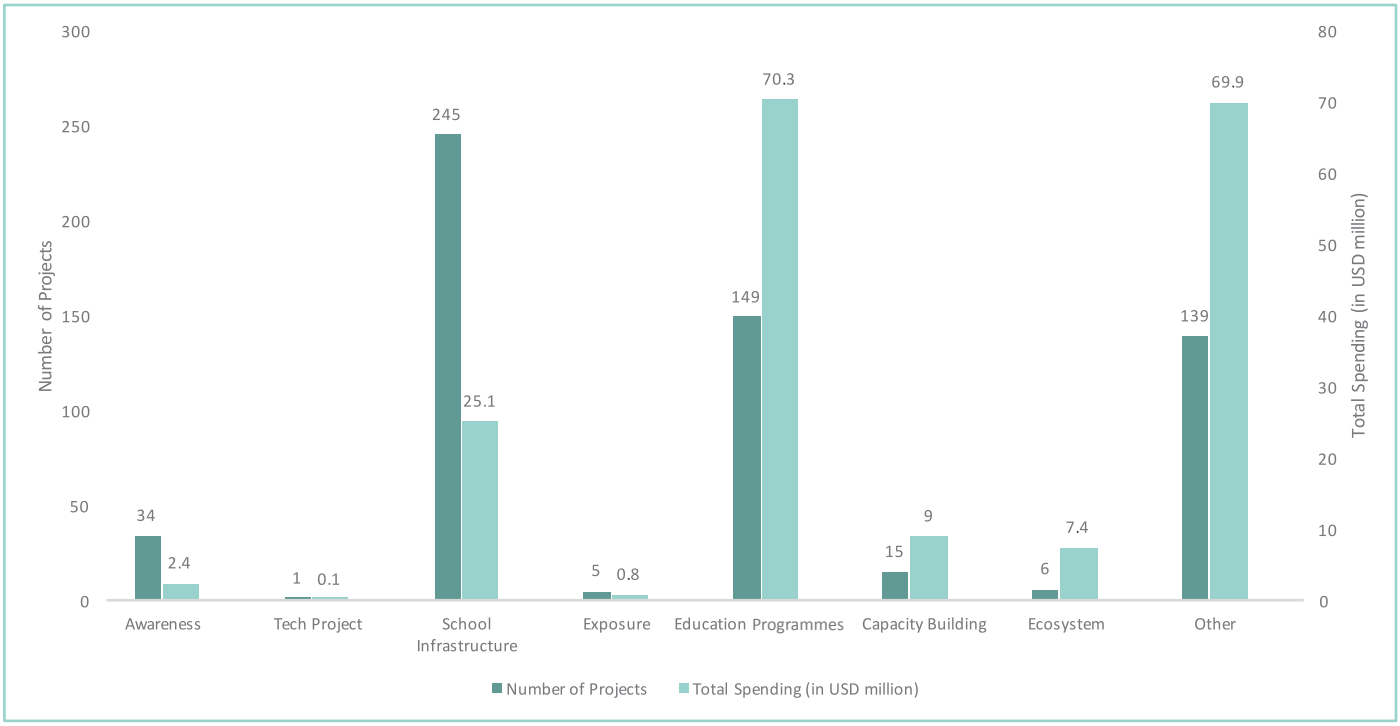


Figure 4: Focus of CSR projects **Source:** Sattva analysis based on NGOBox data ***Note:*** *The 'Other' category pertains to projects in tertiary education, donation to other CSRs, unclassified projects etc.*

59. Sattva analysis

60. Sattva analysis

BARRIERS TO FUNDING

Barriers to CSR funding in education are similar to those in other social causes. Legal requirements from the Companies (Corporate Social Responsibility Policy) Rules 2014 pose constraints to investment in capacity building as administrative overheads are capped at 5%.[61]

One of the major challenges hampering larger funding across the board, especially in ECE,[62] secondary,[63] inclusive,[64] and life skills education[65] is the lack of reliable data on outcomes and impact.

Further, the need to focus on quality of outcomes in education is not always reflected in the funding space. There is a tendency among donors to adhere to traditional measures of efficacy such as cost per child and neglect outcome quality.[66] As a result, in order to attract funding, some SPOs feel more incentivised to focus on serving many students instead of serving fewer students well and focusing on quality.[67]

OPPORTUNITIES FOR FUNDING EDUCATION WITH IMPACT ACROSS EDUCATION SEGMENTS

The last decade has seen a rise in several innovative and proven models aimed at different aspects of learning quality, especially at the primary level—from reading, Science, Technology, Engineering, Mathematics (STEM), remedial and life-skills programmes, to holistic multi-stakeholder intervention programmes seeking to improve learning quality in government schools. However, with the majority of initiatives in the Indian education sector being targeted at primary school students, there is room for innovation within the early childhood, secondary, vocational and inclusive education space. Across education segments interventions have been found to follow different approaches broadly aligning to in-school interventions, alternative models and system-level interventions. Given the need to address outcomes and accountability, sustained interventions with stakeholders in the school ecosystem is critical.

- In ECE, interventions have been focused on access and infrastructure along with strengthening systems.
- The primary education space has witnessed several interventions by SPOs adopting both non-profit and revenue-based models along with multiple scaled-up models that have achieved reach in the magnitude of 100,000 plus children, working across different states, and partnering with the government for scale.[68]
- Interventions in secondary education have focused on increasing access and reducing dropouts through infrastructure improvements, financial incentives, life skills education and alternative schools. This is also linked to enhancing the quality of learning outcomes to ensure employability.
- Interventions in vocational education have focused on outreach activities, awareness building and career counselling, along with technology-based solutions to facilitate scale and monitoring.
- Inclusive education interventions have focused on enrolment, holistic development and employability while retention and attainment remain key challenges.

The following represent a sampling of interventions undertaken to achieve outcomes by working with various stakeholders in the education ecosystem. (SPOs represented are examples)

61. Nishith Desai, 2014
62. Central Square Foundation, 2015
63. Interview with MacArthur Foundation in June 2017
64. Sæbønes, 2015
65. Daulet Singh & Menon, 2015
66. Interview with Educational Initiatives in June 2017
67. Interview with Educational Initiatives in June 2017
68. Sattva analysis

OUTCOME	STUDENT	TEACHER	SCHOOL	COMMUNITY
Enrolment	Formal and non-formal pre-schools/ECE classes for urban migrants *(Door Step School)* Bridge courses for OOSC *(Pratham Education Foundation)* Bridge programmes for integration of children with special needs (CWSN) *(Ummeed)* Special schools *(Aakanksha Lions School for Mentally Handicapped)* Career counselling and guidance *(Antarang Foundation)* Awareness building on career options *(Quest Alliance)*	Training for identification of children with development delays *(Setco Foundation)* Outreach, awareness and sensitisation *(Manovikas Kendra)*	Nutrition programmes in anganwadis and mid-day meals *(Akshaya Patra)* Infrastructure and effective functioning of anganwadis *(Gyan Prakash Foundation)* Strengthening ICDS (DHFL Foundation) ECE kits and pedagogy *(Sutradhar)* Non-formal schools *(Masoom, EkalVidyalayas)* Standalone schools for CWSN *(SPARC)* Solutions for school governance, data and monitoring *(Promorph Solutions)* Long-term vocational training programmes *(Nettur Technical Training Foundation)*	Community outreach, awareness and enrolment drives *(Educate Girls)* Community-based balwadis, SMC reforms *(Akshara Foundation)* Incentives for girl enrolment *(Nanhi Kali)* Identification and assessment of CWSN *(Jai Vakeel Foundation)* Outreach and awareness for CWSN *(Fourthwave Foundation)* Awareness building on vocational education *(Quest Alliance)* Community engagement in teaching and education *(Teach for India, India School Leadership Institute)*
Retention	In school life skills and sports programmes *(Magic Bus)* Transportation Support *(Coal India Limited)* Scholarships *(Kotak Education Foundation)* Therapy, counselling and rehabilitation for special needs children *(Ambuja Cement Foundation)*		Enhancing school infrastructure *(Bharti Foundation, Tata Consultancy Services)* SMC reforms *(Akshara Foundation)*	

OUTCOME	STUDENT	TEACHER	SCHOOL	COMMUNITY
Retention	Life-skills programmes and youth leadership (Salaam Bombay Foundation) Night Schools *(Masoom)*			
Attainment	Nutrition and education communication *(Galli Galli Sim Sim)* STEM Education *(Agastya International Foundation)* After-school complementary learning *(Nanhi Kali, SVYM)* Ed-Tech *(Zaya Learning Labs, Educational Initiatives)* Reading and libraries *(Room to Read)* Curriculum and pedagogy *(Bodh Siksha Samiti, Jai Vakeel Foundation)* Short-term vocational training courses *(SamvadaBaduku Community College)* Trainers for vocationalised education in schools *(LabourNet)* Facilitating apprenticeship programmes *(SVYM)* Play-based learning *(Hippocampus)*	Teacher Training *(Azim Premji Foundation, Akshara Foundation, STIR, AADI)* Curriculum and pedagogy *(Going To School)* Customised curriculum and lesson plans for CWSN *(Jai Vakeel Foundation)* Train-the-trainers for vocational education *(Quest Alliance)* Helplines for teachers *(Vikramshila)*	ECE pedagogy *(Sutradhar)* STEM Learning *(Agastya International Foundation, Vigyan Ashram)* Curriculum and Pedagogy *(Bodh Siksha Samiti, Going to School India)* Implementation of vocationalisation in secondary schools *(Lend-A-Hand India)* Supplementary trainers for education *(TFI, LabourNet, Magic Bus)* School leadership development *(Kaivalya Education Foundation)* Blended learning in ITIs *(Quest Alliance)* SMC reforms *(SEED schools)*	Training and capacity building of angwanwadi workers for ECE *(DHFL Foundation)* Reading and Libraries *(Pratham Education Foundation)*

OUTCOME	STUDENT	TEACHER	SCHOOL	COMMUNITY
Holistic Development, Health and Well-being, Employability	Mid-day meals *(Akshaya Patra)* Life skills *(Magic Bus, Going to School, OSCAR Foundation, Dream A Dream, Naz Foundation)* Bal Sabhas *(Kaivalya Education Foundation)* Career counselling *(Headstreams, Enable India)* Assistive technology *(Innovision)* Home-based and centre-based vocational training *(Victoria Memorial School for the Blind, Jai Vakeel Foundation)* In-school soft skills training and work-readiness *(Quest Alliance, Medha)*	Teacher training and networks *(Azim Premji Foundation, Dream a Dream, STIR)*	Mid-day meals *(Akshaya Patra)* Life skills toolkits *(Going to School India)* Bal Sabhas *(Kaivalya Education Foundation)*	Assistive Technology *(Invention Labs)*

ECOSYSTEM FUNDING OPPORTUNITIES

At an ecosystem level, the scarcity of interventions is an issue. There are several reasons for this, such as the difficulty of measuring impact or even outcome of ecosystems interventions. The key trends in ecosystem funding opportunities lie in three areas: creation of commons, capacity building for SPOs and partnerships for impact. Funders for these opportunities include: MPhasis Foundation, Gray Matters Capital, EdelGive Foundation, Omidyar Network and the Michael & Susan Dell Foundation.

RECOMMENDATIONS

Based on the analysis of needs, gaps, current funders and interventions advanced by SPOs, a number of recommendations can be made. Three areas exist across education segments and outcome targets and stand out as recommended intervention areas:

- Teacher training and school leadership development
- Development of standard and relevant curricula including life skills with a focus on learning outcomes
- Career counselling and developing skills for employability and livelihoods

The recommendations can be approached by education segments or outcomes as seen in the table below. For the ecosystem, the recommendations are different and listed after the table.

	ENROLMENT	RETENTION	ATTAINMENT	HOLISTIC DEVELOPMENT AND EMPLOYABILITY
Early Childhood Education	1. Parent and community outreach for counselling and enrolment. 2. Support in backward states such as Uttar Pradesh, Rajasthan, Arunachal Pradesh that have inadequate anganwadis and large number of out-of-school children. 3. Upgrading infrastructure in pre-primary schools in rural areas.	4. Programme design, curriculum and pedagogy development. 5. Funding teacher training initiatives and providing support to develop teaching-learning materials and teaching aids.		
Primary Education	1. Improving delivery in APS and designing new co-investment funds for progressive APS. 2. Bridge schools to help out-of-school children, especially in urban areas and laggard states.		3. Funding to support strengthening school management committees to drive accountability for quality learning. 4. Capital to replicate proven models in deprived geographies or communities. 5. Supporting efforts to design effective life skills programmes as well as training teachers to deliver such programmes.	
Secondary Education	1. Financial support: scholarships, financial and material incentives and infrastructure upgrade. 2. Remedial learning and alternative schooling options. 3. Bridging the gender gap in secondary education completion.		4. Training teachers and educators to effectively address academic attainment in secondary schools.	5. Focusing on life skills programmes in secondary education including recruiting sports coaches, curriculum development, training teachers and performing assessments.
Vocational Education	1. Changing perceptions about vocational education and helping students understand opportunities in vocational education and apprenticeship.		2. Simplifying the qualification framework, creating a dynamic mechanism for designing industry-relevant curricula and documenting successful models for implementing the Apprentices Act. 3. Investment in trainer certification across trades and 'train the trainers.' 4. Defining industry-relevant employability metrics and supporting SPOs to achieve such metrics.	
Inclusive Education	1. Data collection and systems for identification of CWSN. 2. Supporting girls with disabilities from education through to skills development. 3. Counselling and advocacy to alleviate prevalent attitudinal barriers to inclusive education for CWSN.		4. Specialised curriculum development and building teacher capacity. 5. Supporting programmes to employ special educators/counsellors under the SSA. 6. Support for therapy, mobility and enhanced learning for CWSN through assistive technologies. 6. Skilling and career pathways for disabled youth to effectively integrate them into the workforce.	

RECOMMENDATIONS FOR ECOSYSTEM FUNDING

Investment in standards and benchmarks

Setting a commonly understood and agreed set of standards and benchmarks could go a long way in orienting funding requirements towards desired outcomes, thereby enabling SPOs to access funding more effectively and efficiently. The adoption of such standards and benchmarks jointly stipulated by funders would also serve to catalyse quality improvement at the intervention as well as ecosystem level. In addition, advocacy efforts will contribute towards a more enabling environment for SPOs to implement their interventions. Finally, investment in open-source tools, knowledge and research will allow SPOs to better define their strategies and design their interventions.

Investment in building the capacity of SPOs

The success of interventions is usually positively correlated to the capacity of the SPOs implementing them. While building up the capacity of SPOs will enable them to achieve impact and scale, this has not been an area of focus among funders in the education space in India. Concerted efforts by funders to develop and nurture SPOs will go a long way in scaling, sustaining and deepening impact.

Partnerships with other stakeholders

Deeper engagement with other stakeholders across the ecosystem will enable funders to pool resources and maximise impact at scale. It will also augment funders' knowledge about the sector and the funding landscape while creating space for creative solutions, leveraging on individual strengths.

As mentioned above in the recommendations for ECE, the creation of platforms for companies and other stakeholders to enhance awareness of ECE may lead to greater flow of funding and support towards early childhood care. Similarly, in vocational training, partnerships between the government, corporate employers, academia and training institutes may ensure demand-led and relevant vocational education.

INTRODUCTION

Beginning with the Education for All movement at Jomtien, reiterated at Dakar in 2000[1] and more recently reaffirmed by the Sustainable Development Goals (SDGs) with SDG 4,[2] education has long been a global priority with several international commitments recognising the need to ensure universal access and inclusivity.

Increased educational attainment helps transform lives by reducing poverty, improving health outcomes, advancing technology and increasing social cohesion.[3] Research has established the rate of return to schooling across countries to be about 10%, with higher returns for lower levels of schooling in low-income countries and frequently for women.[4] The impact of education on economic growth has also been studied, highlight its positive influence on higher human capital in the labour force leading to higher labour productivity and a higher equilibrium level of output.[5]

Education for tomorrow has to both recognise the holistic nature of knowledge and cater to the needs of 21st century learners, inculcating abilities toward critical thinking and rational enquiry, and honing skills towards lifelong learning.[6] This requires re-imagining systems of instruction delivery and curricula, integrating technology effectively, training teachers, monitoring progress and outcomes, strengthening access and choices, and more importantly, engaging all stakeholders sustainably in the process.

In the context of India, education is critical to harness the country's growth momentum and propel it towards an inclusive and sustainable high-income economy in 3 primary ways:

1. UNESCO, 2015
2. UNESCO, 2015
3. UNESCO, 2016
4. World Bank, 2015

- **Quality education underpins India's demographic dividend,** with over half of India's population being below the age of 26, and 250 million people entering the workforce by 2030.[7] It is essential to recognise that the current national employability crisis has its roots in the prevalent gaps and inefficacies in the country's education system.
- **Access to education is a powerful means to overcome disadvantages,** break the inter-generational cycle of poverty, and reduce inequality in India, which are the core goals of the global SDG agenda.[8]
- **A better educated labour force is essential to inclusive economic development** centred on human welfare.[9] Over and above securing jobs, the purpose of education is to achieve overall health, well-being, holistic development and better citizenship among the future generation.

In accordance with global agenda, the Indian government has put in place various policies and programmes aimed at tackling existing gaps in the national education system:

5. World Bank, 2015
6. EY, 2017
7. Thomson Reuters, 2016
8. UNESCO 2016
9. UNESCO 2016

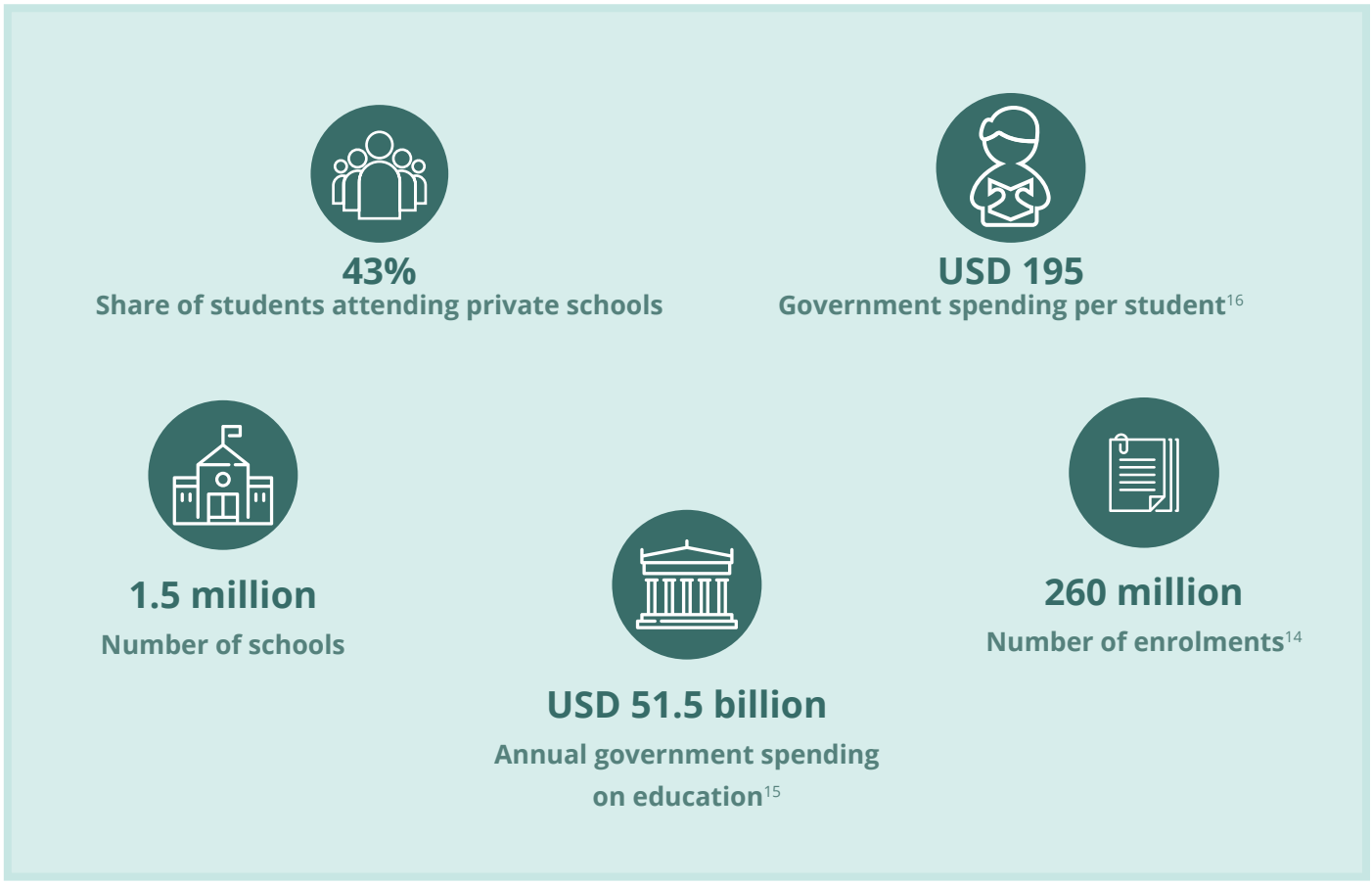
	SDG 4	EDUCATION FOR ALL & DAKAR FRAMEWORK	NATIONAL EDUCATION POLICY
Outcomes	Equity and inclusion in access, participation, retention and completion and learning outcomes Ensuring quality of education Develop foundational literacy and numeracy skills	**Goal 6:** Improving all aspects of the quality of education and ensuring excellence of all so that recognised and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills	Address issues in access, quality, quantity, utility and financial outlay; reduce rural-urban disparities; focus on literacy among women; strengthen the base of the pyramid
Early Childhood Education	**Target 4.2:** 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	**Goal 1:** Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children	Early childhood care and education programmes that are child-oriented, focused around play and the individuality of the child; local community to be fully involved in these programmes.
Primary Education	**Target 4.1:** Ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes	**Goal 2:** All children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality	Prioritise universal access and enrolment; universal retention of children upto 14 years of age; and a substantial improvement in the quality of education. Adoption of child centred and activity-based process of learning at the primary stage.
Secondary Education		**Goal 3:** Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes	Increase access to secondary education with emphasis on enrolment of girls and marginalised communities; increase delivery of computer literacy at secondary level institutions
Vocational Education	**Target 4.3:** Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	Teacher status, morale and professionalism Harnessing information and communication technology Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes	Vocational education may be made available after Grade 8; emphasis on women's participation in vocational education; focus on vocationalisation of secondary education
Inclusive Education	**Target 4.5:** Eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations		Aim to integrate persons with disabilities as equal partners,teachers' training programmes to be reoriented to deal with children with special needs; vocational training to persons with disabilities

Ecosystem	The success of SDG4-Education 2030 will depend on collective effort.	**Strategy 3-12:** Engagement of civil society in strategies for educational development, Accountability, Gender equality, Safe, healthy, inclusive and equitably resourced educational environments, Systematic monitoring of progress, Building on existing mechanisms	Union government to accept a larger responsibility to reinforce the national and integrative character of education, to maintain quality and standards (including those of the teaching profession at all levels), to study and monitor the educational requirements of the country as a whole in regard to manpower for development. Improvement in pre-service and in-service teacher training. As the first step, the system of teacher education will be overhauled.

Table 1: Global agenda and national policy framework across education segments.
Source: SDGs,[10] UNESCO,[11] National Education Policy 2016[12]

THE CURRENT EDUCATION FUNDING LANDSCAPE IN INDIA

India is home to one of the largest and most complex education systems in the world and has made significant progress in terms of providing access to education: enrolment has grown from 81.6% in 2001 to 96.9% in 2015, with 98% of habitations having access to a primary school within a kilometre radius.[13]



10. UNESCO et al, 2016
11. UNESCO, 2015
12. Ministry of Human Resource Development (MHRD), 1986
13. UDISE 2015-16
14. EY, 2017
15. MHRD, 2015, including union and state budgets
16. EY, 2017

India's education market has been estimated at USD 133 billion with USD 56 billion in private spending.[17] As a result of increased privatisation in the country's education system, multiple options of schooling are now available with the existence of government schools, government-aided schools, and affordable private schools. Other models include: donor-funded schools, which are few in number due to their prohibitive running costs, lack of scale and dependence on grant funding; non-formal education centres run mainly by non-profits; and a 25% reservation in elite private unaided schools for disadvantaged groups stipulated by the Right to Free and Compulsory Education (RTE) Act, which has been implemented only in a few schools across the country.

Government Funding

The government is the primary funder of education in India. While education spending has increased over the last decade, budgetary estimates have hovered close to 2.7% of GDP[18] which is considered 'insufficient' as well as 'inefficient.'[19] India's education spending is much lower than developed nations, lower than some other developing nations such as Brazil that spends over 4% of their GDP on education, while being higher than other South Asian nations. As per the World Bank's 2015 estimates, India's public spending on education amounts to approximately 5.2% of the world's cumulative public spending while the country is home to 20% of the population in the target group.[20]

Sarva Siksha Abhiyan, accounting for 34.5% of the union budget on education, purely finances infrastructure and incentives in primary schools. Teacher salaries claim a large proportion of the states' education budgets, — ranging from 51% to 80%, depending on the state.[21] This leaves little to be spent on teacher training, curriculum and pedagogy, monitoring or community engagement, which could tremendously improve the quality of learning for students.

Public-Private Partnerships (PPPs) in Education

Global evidence suggests that PPP models prove effective in introducing innovation in the public education system, raising quality of education, infusing accountability as well as providing parents with more schooling options. Various Indian states such as Gujarat, Rajasthan and Punjab have experimented with PPP models. Nonetheless, PPPs have been riddled with implementation and bureaucratic challenges, preventing them from realising their full potential or enabling scale up.[22] Lessons from India's current PPPs in education and international collaborations demonstrate that well-designed and executed PPP models could play an important role in improving the system.[23]

Social Investment in Education

UNESCO has estimated that the total annual cost of ensuring every student accessed quality primary and secondary education is projected to increase from USD 149 billion to USD 340 billion over the next 15 years.[24] Even after considering domestic revenue mobilisation, this leaves an annual USD 39 billion financing gap.[25] Tapping into philanthropic and private funding is therefore as much an effort to bridge the financing gap, as it is to deploy resources in more effective, efficient, accountable and co-ordinated ways, through strategic partnerships and innovative finance.[26]

Education has been one of the most invested and popular causes in India among HNWIs, philanthropic funders, family foundations and more recently, corporates. In FY 16, India witnessed a spending of USD 419 million through CSR from 1,158 companies[27] and USD 127 million from 13 HNWIs.[28] In addition, education registered the highest percentage of philanthropic contributions from foundations according to Dasra.[29] While the focus of development

17. Villgro, 2016
18. Livemint, 2017
19. Villgro, 2017
20. EY, 2017
21. Centre for Budget and Governance Accountability(CBGA) and Child Rights and You, 2016
22. Catalyst Management Services, 2016
23. Central Square Foundation and Federation of Indian Chambers of Commerce & Industry (FICCI), 2015
24. Save the Children and Education Equity Research Initiative, 2016
25. UNESCO, 2017

finance institutions (DFIs) has been around providing large-sized grants to augment government schemes, CSR has mainly focused on infrastructure provision and programmatic interventions, HNWIs and family foundations on setting up educational institutions, scalable non-profit programmes and ecosystem initiatives, and impact investment on technologies for education including tutorials and assessments, e-learning and massive open online courses (MOOCs).[30]

Despite the high quantum of funding on education, access to quality education remains a pressing challenge across the country:

- **India has the highest number of out-of-school children (OOSC):** Despite near universalisation, India has 6.064 million OOSC, of which 76% belong to marginalised communities. Uttar Pradesh, Bihar, Rajasthan, and West Bengal account for over 70% of the OOSC in the country.[31]
- **Learning outcomes are dismal:** 52.2% of Grade 5 children in rural India cannot read a Grade 2 level text and 74.1% cannot solve a division problem.[32]
- **Shortage of qualified teachers remains acute:** India is short of 907,585 government school teachers. Only 55% of teachers have received training of any sort.[33]
- **Dropout rates increase steeply in secondary education and beyond:** As of 2015, the dropout rate at the secondary level was 17.1% nationwide, with relatively higher rates observed among Muslims (24.7%) and Scheduled Tribes (24.1%).[34]

WHY THIS REPORT

While a large number of reports and investigations have excelled in examining various components of the Indian education system, there has been a need to identify opportunities to bring together stakeholders involved in education including the government, funders, intermediaries, social purpose organisations (SPOs) and beneficiaries, among others. This report aims to fill this gap by outlining potential areas where multiple stakeholders can work together towards providing access to quality education for all in India.

To this end, this report analyses gaps, interventions, initiatives, and the funding landscape along the learning journey of a student between 3-18 years of age spanning different education segments including: early childhood education, primary education, secondary education and vocational education. Inclusive education, or education for children with special needs, is detailed as an independent education segment as it spans various levels of education (see Figure 1).

Placing the student at the centre, the report

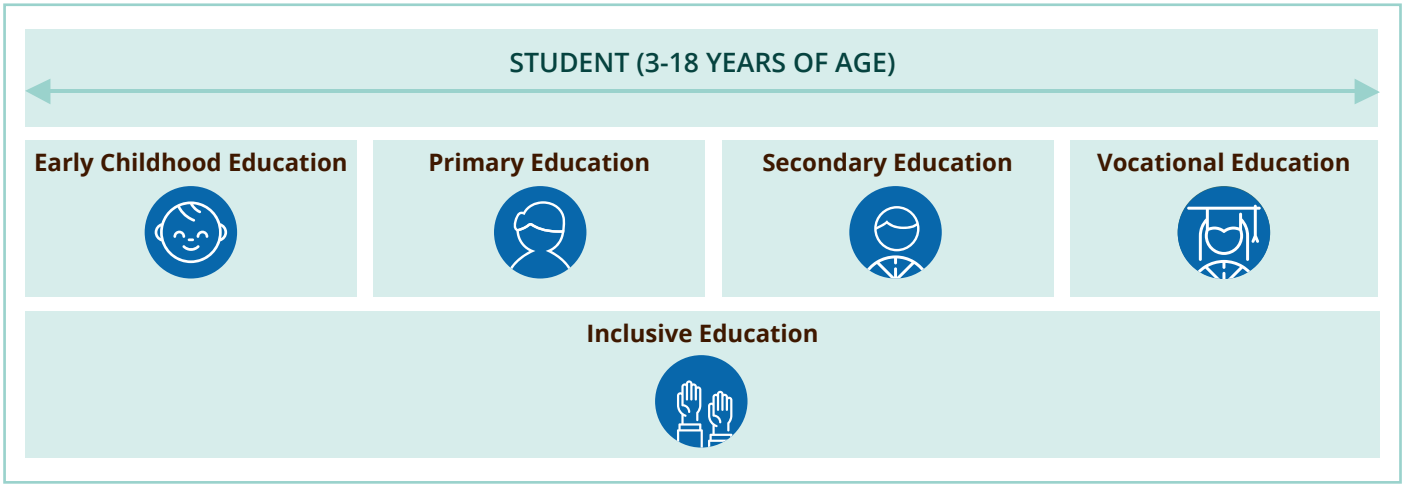


Figure1: Learning journey between 3-18 years of age in the Indian education system

26. UNESCO, 2017
27. CRISIL, 2017
28. Hurun, 2017
29. Dasra, 2015
30. Sattva analysis
31. UDISE 2015-16
32. ASER 2016
33. EY, 2017
34. UDISE 2015-16

categorises interventions according to outcomes that affect the student's learning quality, which are: enrolment, retention, attainment, holistic development, health and well-being and employability. Other stakeholders, namely teachers, schools and the broader community, are also taken into account (see Figure 2).

This report builds on dialogues and discussions at the 2017 AVPN Conference held in Bangkok, and reiterates the call for effective partnerships and alignment of outcomes between different stakeholders including, but not limited to, the government, funders and SPOs.[35] A chapter is thus dedicated to ecosystem investment which aims to highlight opportunities for creating systemic impact.

With the aforementioned elements, combined with rigorous primary and secondary research methods, this report provides actionable insights into the intervention and funding landscape in the Indian education sector that will allow funders and other stakeholders to maximise their impact in the space.

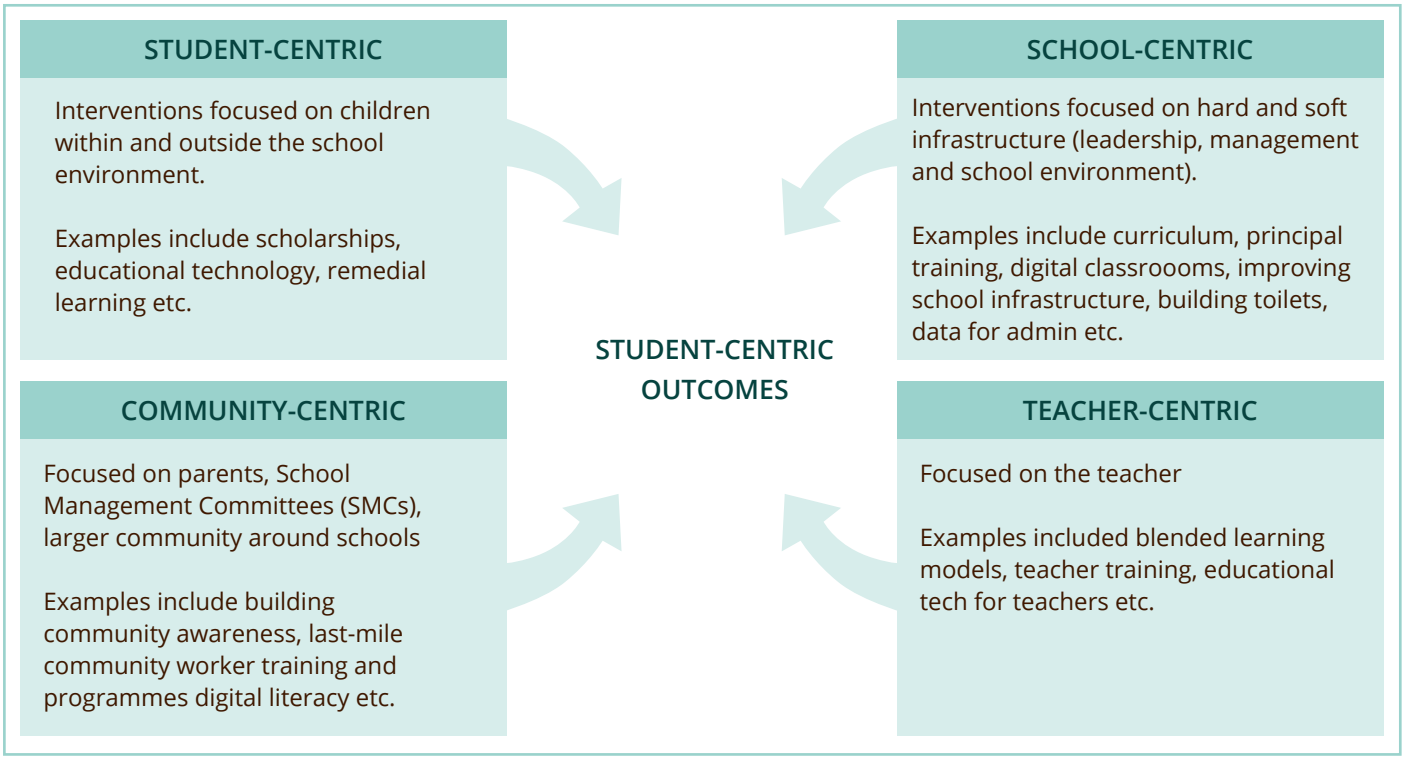


Figure 2: Interventions centred around multiple stakeholders with the students at the centre

35. AVPN, 2017

EARLY CHILDHOOD EDUCATION

> **"Investing in young children through Early Childhood Development programmes—ensuring they have the right stimulation, nurturing and nutrition—is one of the smartest investments a country can make to address inequality, break the cycle of poverty, and improve outcomes later in life."**
>
> **— The World Bank[1]**

The period of life between 0 and 8 years of age is defined as early childhood by the UNESCO. This is meant to be a period when the child develops his/her social, emotional, cognitive and physical needs, which lays the foundation for subsequent growth.[2] The World Bank estimates that for both developed and developing countries, each additional dollar invested in high quality pre-school programmes will yield a return of anywhere between USD 6 to USD 17.[3] Early childhood education (ECE) sets the ground for further learning — studies indicate that students that go through ECE have 15-20% higher retention rates through primary school years.[4] Furthermore, Professor James Heckman's oft-quoted work with a consortium of economists, psychologists, statisticians and neuroscientists, shows that early childhood development directly influences economic, health and social outcomes for individuals and society.[5]

POLICY FRAMEWORK

In India, early childhood care and education (ECCE) focuses on providing care, health, nutrition, education and play for children between the ages of 0 and 6, with an aim to get them ready for primary education. This is also known as pre-primary education.[6] Anganwadis, which are health care centres for mothers and children below the age of 6 that provide informal pre-school education, and Balwadis, which are community-run informal rural pre-schools for low-income sections,

1. World Bank, 2016
2. UNESCO, 2016
3. World Bank, 2016
4. Kaul & Sankar, 2009
5. Heckman Equation, 2012
6. MWCD, 2013

POLICIES IN ECE - A TIMELINE

1975

Integrated Child Development Services (ICDS)
Aims to deliver high-quality child development services under the Ministry of Women and Child Development. Regulates the Anganwadi workers, who are creche caregivers and educators in the community, manage the Anganwadi centres and provide 6 services including nutrition, health education, immunisation, health check-up, pre-school education and referral services.[7]

2006

Rajiv Gandhi National Creche Scheme (RGNCS)
Provides support to non-profits to run creches for children of working mothers. Has benefited over 0.77 million children at 21,012 crèches and is implemented by non-profits with special emphasis on children of working mothers. ECE is given prominence in the scheme.[8]

2012

Right of Children to Free and Compulsory Education Act or Right to Education (RTE) Act
Urges the states to provide adequate services for pre-school education for such children, although the RTE Act does not address children under 6 years of age.[10]

2013

National Policy on Early Childhood Care and Education (ECCE)
Aims to address quality concerns within the ICDS programme through providing ECCE services including public and private provision, and to promote holistic learning for children under the age of 6 and standardise quality services for ECE with close engagement with the community.[9]

2016

Article 45 in RTE Act
Recent landmark inclusion of ECE as a constitutional provision through the amended Article 45 of RTE Act, which now reads as follows: "The State shall endeavor to provide ECCE for all children until they complete the age of six years." If passed, pre-school education of 4-6 year olds will be brought into the fold of primary education and anchored by RTE.

are common features in the Indian ECE landscape. ECE falls under the Ministry of Women and Child Development (MWCD), which has historically focused on nutrition and well-being, with education becoming a recent focus since the passing of the National Policy on ECCE in 2013.

GAPS AND TRENDS IN EARLY CHILDHOOD EDUCATION

1. 24% of Indian children between 3-5 years of age do not have any access to ECE

The government organisations' ECE capacity has more than doubled in the last 10 years, yet, 13.3 million out of 54.6 million children between the age group of 3-5 years are out-of-school children.[11] The initial variation among states on out-of-school rates seems to converge at the onset of the RTE age group (6-14 years),[12] implying the positive impact of the RTE Act in bringing children to school. However, 24% of children in the 3-5 age group are still out of school according to 2016 ASER data,[13] missing out on critical stimulation during the early years, which is essential for their holistic development.

States such as Uttar Pradesh, Rajasthan, Arunachal Pradesh have 40-80% out-of-school pre-primary children in rural areas.[14] States that have high out-

7. MWCD, 2016
8. MWCD, 2017
9. MWCD, 2013
10. MHRD, Right to Education
11. Sattva analysis
12. Sattva analysis
13. Sattva analysis
14. ASER, 2016

of-school rates among 3-year old children tend to also have high out-of-school rates among 6-year old children, signifying that these children continue to remain out of the education system.

2. Urban migrant children and special needs children are critically underserved segments for ECE access

Estimates place the number of urban migrant children at about 15 million, 90% of whom are excluded from accessing the ICDS services. While 65% of the children suffer from ill health, 40% work as child labour and experience various kinds of abuse and exploitation.[15] As migration sites are located in remote areas, there is an absence of crèches, early childcare services and initiatives for pre-school and formal education, leading to migrant children being deprived of critical inputs for their development. The vulnerability of migrant children is aggravated since they are cut off from care and security, health and nutrition, learning and exposure, and an overall normalcy of childhood.[16]
A study across the three states of Assam, Rajasthan and Andhra Pradesh reveals that only 23 out of 298 surveyed ICDS centres had enrolled special needs children in 2013.[17]

3. Private pre-schools see increasing enrolment

As of 2016, around 35% of children aged 5 and 6 were attending private institutions. Between 2010 and 2016, the percentage of children attending kindergarten school increased by 12.4% for 5-year-olds and 8% for 6-year-olds.[18] During the same period, the percentage of children attending government schools decreased by 8.7% for 5-year-olds and 9.2% for 6-year-olds.[19] Private schools are believed to offer better infrastructure and facilities, hence creating a perception of better education quality among parents.[20]

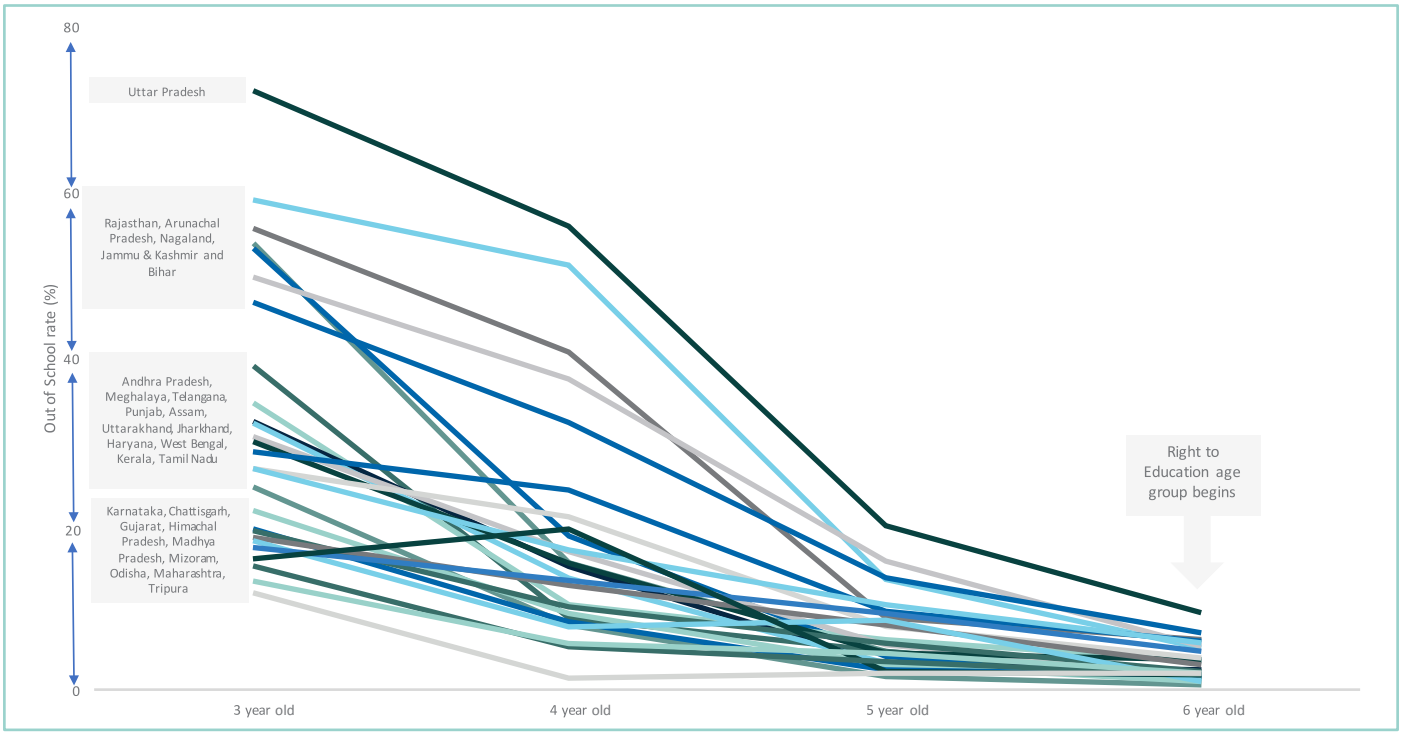


Figure 1: State-wise out-of-school children by age. **Source:** Sattva analysis based on ASER 2016.

4. Rural ECE infrastructure remains a challenge

Infrastructural availability, including compound walls, sanitation facilities, libraries, computers, electricity,

15. Aide et Action, 2015
16. Aide et Action, 2015
17. Kaul, Chaudhary and Sharma, 2015
18. Sattva analysis
19. Sattva analysis
20. Baird, 2009

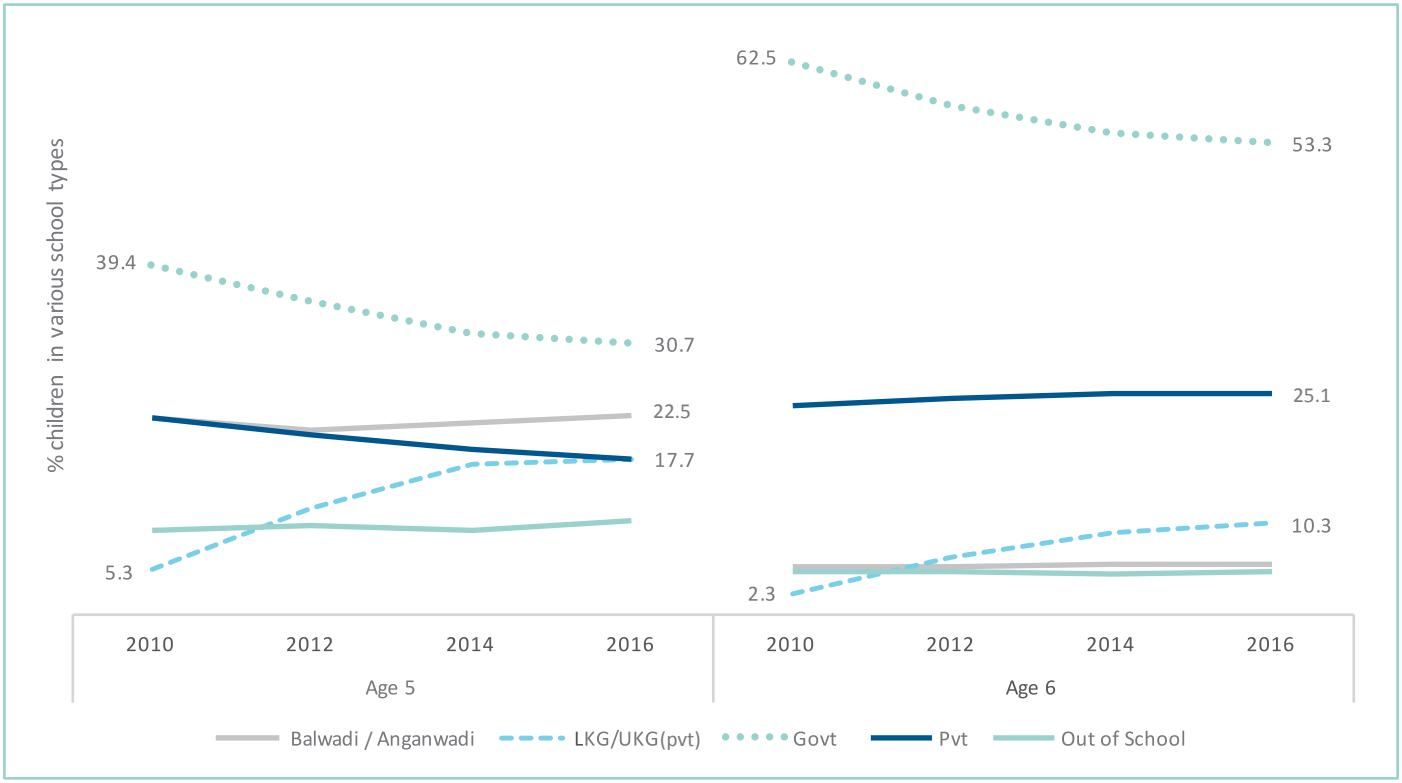


Figure 2: Percentage of 5 and 6-year-old children going to various school types. **Source:** Sattva analysis based on 2016 ASER data
Note: *LKG – Lower Kindergarten, UKG – Upper Kindergarten, Govt – Government Schools, Pvt – Private Schools.*

kitchen sheds, and playgrounds, for pre-primary school is about twice in urban schools than in rural schools (40.2 to 21.3%).[21] Out of 164.5 million children in the 0-6 age group, 73.7% live in rural areas,[22] further compounding the issue. The lack of pre-primary infrastructure is particularly acute in states such as Andhra Pradesh, Telangana and Uttar Pradesh where less than 10% schools in both rural and urban areas have pre-primary facilities.[23]

5. ECE has quality and governance issues on multiple fronts

Children in anganwadis study in poor environments —50% of anganwadis have no toilets and 35% have no drinking water. A high child-to-caregiver ratio (28 on average against the desired norm of 20)[24] is prevalent, coupled with multiple teacher responsibilities.

With nutrition being the traditional focus, anganwadi workers are not trained or equipped to deliver ECE. Most anganwadi workers are Grade 10-12 dropouts with inadequate training.[25] The lack of a structured ECE curriculum, inadequate teaching-learning materials (TLMs) / teaching aids further compound the problem of poor instruction delivery.

6. Low attainment level at ECE persists in subsequent stages of education

While there is an on-going debate among organisations working in the ECE space on expected outcomes from children's participation in ECE, the ability to identify letters (pre-literacy) and numbers (1-9) by the time children complete pre-primary school, is a basic minimum standard that sets the stage for further learning. ASER 2016 data highlights that about 40% of children in the 5-7 age category cannot identify letters and about 33% cannot identify numbers (1-9).[26] This initial gap in learning sustains and widens with progression, and adversely affects children in primary, secondary and tertiary levels of their schooling.[27]

21. DISE, 2016
22. Census, 2011
23. Sattva analysis
24. UNESCO, 2016
25. Interview with Hippocampus Learning Centres, June 2017
26. ASER, 2016
27. Vyas, 2014

OUTCOMES AND INTERVENTIONS IN EARLY CHILDHOOD EDUCATION

Outcomes in ECE include enrolment, retention, attainment, health and well-being as well as holistic development. Numerous non-profit and for-profit interventions have focused on achieving these outcomes.

Given that government anganwadis have doubled capacity over the last decade but still face quality issues in delivery of ECE, several non-profit initiatives have been undertaken to improve service delivery in government anganwadis and to strengthen the ICDS system. In addition, an affordable private school market has risen for ECE where low-cost, quality education centres cater to low-income early learners, with fees being paid in whole or part by parents.

The following table outlines intervention examples in ECE and SPOs working on these interventions, along with their legal structures and lenses.

Note: These SPOs have been selected to represent the diversity of operating models, scale, geography and partnerships with the government. The lens reflects the focus of intervention by the SPO.

OUTCOME	STAKEHOLDER	INTERVENTION	LENS	SPO
Enrolment	School	Strengthening infrastructure in anganwadis and pre-primary schools[28]		Gyan Prakash Foundation *Charitable Trust*[29]
	Student, School	Nutrition programme delivery in anganwadis[30]		Akshaya Patra Foundation *Charitable Trust*[31]
	Community	Community outreach, awareness and enrolment drives[32]		Educate Girls *Registered under Section 8*[33]
	Student, Community	Operating community-based balwadis[34]		Akshara Foundation *Charitable Trust*[35]
	Teacher	Training for identification of children with development delays[36]		Setco Foundation Operating Foundation of Setco Automotive Limited *Charitable Trust*[37]
Enrolment, Retention & Attainment	Student	Pre-schools/ECE classes/ Mobile-creches for children of migrants[38]		Door Step School *Charitable Society*[39]
Retention, Attainment, Health and Well-being	Teacher	In-service teacher training[40]		SRF Foundation Operating Foundation of SRF Limited *Charitable Society*[41]
	Student, Teacher	Play-based methods of learning[42]		Akshara Foundation *Charitable Trust*[43]
	Community, Student, School	Training, capacity building of anganwadi workers[44] Incentivised models of training and operating community balwadis Strengthening delivery of ICDS programme for nutrition and education[45]		Dewan Housing Finance Limited *Private Limited Company*[46]

LENS LEGEND Government Rural Urban Gender Marginalised Private

28. MWCD,2012
29. Guidestar, 2017
30. Kaul and Sankar, 2009
31. Dasra, 2017
32. Herbst, 2016
33. Educate Girls, 2014
34. Swaminathan, 1992
35. Akshara Foundation, 2017
36. Mukherjee et al, 2014
37. Indian Kanoon, 2014
38. Aide et Action, 2015
39. Dasra, 2017
40. MHRD, 2016
41. SRF Foundation, 2017
42. Kaul, Mathur, et al., 2015
43. Akshara Foundation, 2017
44. Kaul and Sankar, 2009
45. Kaul and Sankar, 2009
46. DHFL, 2016
47. Nielsen, 2009

OUTCOME	STAKEHOLDER	INTERVENTION	LENS	SPO
Retention, Attainment, Health and Well-being	Teacher	Helplines for teacher queries in ECE[47]		Vikramshila Education Resource Society *Charitable Trust*[48]
	Teacher, School	Early-childhood activity kits and pedagogy[49]		Sutradhar *Charitable Trust*[50]
	Student	Health and education communication[51]		Sesame Workshop India (Galli Galli Sim Sim) *Charitable Trust*[52]
	Community	Quality, affordable ECE schools[53]		Sudiksha Knowledge Solutions *Private Limited Company*[54]
Holistic Development	Student	Standalone early childhood education schools[55]		Prayas *Charitable Society*[56]
	Teacher	Training in holistic child care[57]		Mobile Creches *Charitable Society*[58]

FUNDING FOR EARLY CHILDHOOD EDUCATION

The central government, through the ICDS, is the biggest funder of ECE programmes. The focus of private investment has been in developing relevant pedagogy and curricula, teacher and anganwadi worker capacity and in supporting low-cost affordable private school models in ECE.

Government Funding

Due to a greater devolution to states, the ICDS programme had a budget of USD 1,237.62 million in 2015-16, which constitutes a steep cut from the USD 2,629.95 million allocated in 2014-15. ECE has no separate funding under ICDS, and is absorbed in the nutrition programme.

DFI Funding

International donor organisations have historically focused more on primary than pre-primary education. The World Bank has been one of the largest funders of ECE — the ICDS programme has been implemented across three phases through World Bank support – with a 11% allocation for ECE in 1997-2002.

- The World Bank has allocated USD 148 million to the ICDS Systems Strengthening & Nutrition Improvement Programme (ISSNIP) for 2012-2017;[59] and is also funding the Udisha, an ICDS training programme to improve implementation

48. NGOs India, 2017
49. Sahoo, et al., 2016
50. Sutradhar, 2017
51. Kaul and Sankar, 2009
52. Sesame Street, 2017
53. Swaminathan, 1992
54. Sudiksha, 2017
55. CSF, 2017
56. Prayas, 2017
57. MHRD, 2016
58. Mobile Creches, 2016
59. World Bank, 2017
60. National Institute of Public Cooperation and Child Development, 2008

capacities of functionaries.[60] Other DFIs supporting the ICDS programme include: UK Department for International Development (DFID; provides technical assistance in three states),[61] UNICEF, Swedish International Development Cooperation Agency (SIDA), the World Food Programme, and the Norwegian Agency for Development Cooperation (NORAD).[62]

- Given the lack of actionable data within ECE, DFI support also focuses on gaining insights into long term impact. UNICEF has been supporting the unique ECE Longitudinal study (2011-2016) which aims to generate Indian evidence on the sustained impact of quality preschool programme in early primary grades. The study is being conducted by the Centre for Early Childhood Education and Development (CECED), Ambedkar University and ASER/ Pratham.[63]

Corporate and Philanthropic Contributions

24 out of 151 companies analysed are working in the space of ECE, implementing a total of 39 projects. Cumulatively, these 24 CSR projects have utilised a budget of USD 13.3 million.

Prominent philanthropic funders in the space of ECE have been family foundations such as The Tata Trusts, Aga Khan Foundation and corporate foundations such as EdelGive Foundation, DHFL Foundation, Kotak Mahindra Foundation, and Infosys Foundation.

Impact Investment

Of a total investment of USD 136 million by 52 investors active in the education space in India, 33.7% was raised for ECE, funding urban day care centres delivering ECE for middle and upper-middle class families.

The following table lists examples of funding instances in ECE across the spectrum of funders.

Note: These are examples of funding, and the same SPO could have received funding from other funders as well which are not mentioned here. The table is not intended to recommend any one form of funding or one specific organisation.

LEGEND: CF – Corporate Foundation, IF – Impact Fund, GF – Global Foundation, FF – Family Foundation, CSR – Corporate Social Responsibility, NA – Not Available

FUNDER CLASS	ORGANISATION	SPO	INSTRUMENT	TICKET SIZE
CSR	Tata Consultancy Services	Mumbai Mobile Creches runs day-care centres across construction sites, including balwadis and after-school support ECE classes for municipal schools. *Charitable Society*	Grant Technical assistance grant (2015-16) Tata Consultancy Services developed the 'Comprehensive Inventory Management System' to plan, aggregate and monitor data across all ECE centres.[64]	NA

61. MWCD, 2017
62. World Bank
63. UNICEF, 2017
64. TCS, 2015
65. SRF Foundation, 2017
66. Aditya Birla, 2016

FUNDER CLASS	ORGANISATION	SPO	INSTRUMENT	TICKET SIZE
CSR	SRF Ltd.	SRF Foundation runs training programmes to improve teaching skills for pre-primary education.[65] *Operating Foundation of SRF Limited. Charitable Society*	Grant	NA
	Ultra Tech Cement	Direct support to anganwadis	Grant (2015-2016)	USD 0.07 million[66]
CF	Dewan Housing Finance Corp Ltd. (DHFL)	DHFL Foundation is strengthening 990 anganwadis through nutritional programmes and healthcare, capacity building and infrastructure upgrades.[67] Regional NGO partner Grammangal.[68] *Charitable Society*	Grant (2015-2016)	USD 0.94 million[69]
	Infosys Foundation, The Tata Trusts	Akshaya Patra provides nutritious mid-day meals to children in Government schools across 12 states. *Charitable Trust*	5-year grant (2015-2020)	USD 31.25 million.[70]
	EdelGive Foundation	Gyan Prakash Foundation works on effective management and functioning of anganwadis as well as community run pre-schools.[71] *Charitable Trust*	Grant (2009-2014)[72]	NA
	Wipro Cares, Saint Gobain India Foundation, Infosys Foundation	Door Step School conducts ECE classes in Balwadis in labour camps or construction sites identifying children between 3-6 years of age and preparing them for school.[73] *Charitable Society*	Grant	NA
GF	Children's Investment Fund Foundation (CIIF)	ASER and Ambedkar University undertook a 4-year long longitudinal impact study of ECE. *Registered under Section 8*	USD 300,000 multi-year grant[74] (between 2011-2016)	NA
	Global Fund for Children	Prayas operates one of the first integrated non-formal schools in India for special-needs, low-income, and neglected children including mentally and physically disabled children.[75] *Charitable Society*	Grant (2002-2009)	USD 0.92 million[76]

67. DHFL, 2017
68. Grammangal, 2017
69. NGOBox Report, 2016
70. IndiaTV, 2015; Akshaya Patra, 2013
71. EdelGive Foundation, 2017
72. EdelGive Foundation, 2016
73. Door Step School, 2017
74. CIIF, 2017
75. The Global Fund for Children, 2017
76. The Global Fund for Children, 2017
77. Centre for Learning Resources, 2016
78. Sutradhar, 2017
79. The Tata Trusts 2006
80. Sesame Workshop India, 2016
81. Vikramshila, 2017
82. Other funders include Unitus Seed Fund and Khosla Impact
83. Hippocampus Learning Centres, 2017
84. Gupta, 2014
85. Akshara Foundation, 2017
86. Omidyar Network, 2012
87. Sudiksha, 2017
88. Venture Intelligence, 2017
89. AserCentre, 2017
90. CIFF, 2017
91. Interview with DHFL Foundation, June 2017

FUNDER CLASS	ORGANISATION	SPO	INSTRUMENT	TICKET SIZE
FF	Aga Khan Foundation	Centre for Learning Resources focuses on improving the quality of early childhood care and development of rural and urban disadvantaged children.[77] *Charitable Society*	Grant	NA
	The Tata Trusts	Sutradhar creates vibrant resources and pedagogical tools for early learning.[78] *Charitable Trust*	Multiple grants from 2003-2006[79]	NA
DFI	USAID	Sesame Workshop India (Galli Galli Sim Sim) is an award-winning educational TV programme for early learners, reaching 22 million viewers across India.[80] *Charitable Trust*	Grant (2014-2017)	NA
	UNICEF	Vikramshila Education Resource Society provides technical support in the form of curriculum design and training for early childhood education to secondary education.[81] *Charitable Trust*	Grant (2015-16), grant provision is over 3 years	USD 0.09 million
	Asian Development Bank (ADB)[82]	Hippocampus Learning Centres provides affordable quality education opportunities in rural areas.[83] *Private Limited Company*	Equity (2014)	USD 2.3 million[84]
	Omidyar Network	Akshara Foundation provides quality pre-school education in government and community-run balwadis.[85] *Charitable Trust*	Grant (2012-2015)	USD 0.95 million[86]
	Pearson Affordable Learning Fund, Village Capital, Opes Impact Fund, Ennovent and Sadeesh Raghavan	Sudiksha Knowledge Solutions runs a chain of affordable quality pre-schools for economically weaker sections of society.[87] *Private Limited Company*	Equity (2014)	USD 0.24 million[88]

Technical Assistance: The Indian ECE longitudinal collaborative study put together by the Ambedkar University – Centre for Early Childhood Education and Development (CECED) and ASER, funded by Children's Investment Fund Foundation (CIFF), UNICEF, MHRD, The World Bank, and the government of Andhra Pradesh, is the first study of its kind in India to track 14,000 children in the age group of 4-8 across four years (2012-2016). The study sought to understand the impact of early learning, socialisation and school readiness experiences in pre-school settings on educational and behavioural outcomes along the primary stages.[89] The collaboration is contributing to the development of 'Quality Standards for Early Childhood Care and Education' for the MWCD and providing technical assistance in ECE to states including West Bengal, Maharashtra and Rajasthan.[90]

BARRIERS TO FUNDING

ECE does not appear to be a priority for most corporates.[91] This results in a lower quantum of funds being allocated to projects in this sector.[92] CSR funding in ECE is mostly focused on infrastructure and supplies with limited funding for capacity building or system level interventions which are crucial to outcomes.[93] While multilateral organisations have recognised this and have begun funding systemic interventions in ECE,[94] corporate funders have yet to adopt this approach.

A lack of knowledge and models in ECE are barriers to measurement of outcomes. It is reported that most private providers of ECE have a rudimentary awareness and understanding of the importance of child development.[95]

RECOMMENDATIONS

The following recommendations emerge from gaps, interventions, funding analysis and barriers to funding outlined above, as well as interviews with funders and SPOs working on early childhood education:[96]

Enrolment:

- **Parent and community outreach**: Given that 24% of Indian children do not have any access to early childhood learning, convincing the community of the importance of developing multiple skills during early stages of learning[97] and enrolling children in ECE programmes is critical. Organisations such as Akshara Foundation, Hippocampus and Centre for Learning Resources run counselling camps and community interventions which can be replicated in order to drive enrolment in anganwadis and community-run balwadis.
- **Support for backward states**: States such as Uttar Pradesh, Rajasthan, Arunachal Pradesh have inadequate anganwadis and face very high out-of-school pre-primary rates (between 40-80% in rural areas). There is a pressing need for funders to support access to ECE programmes in these states.
- **Urban migrant children and CWSN:** Special focused campaigns, programmes and provisions for balwadis around urban construction sites are essential to enrol children of urban migrants who often do not have an opportunity for early learning. CWSN are another segment that needs special attention as ECE would enable them to integrate better in subsequent stages of education.
- **Infrastructure for rural ECE:** Since infrastructural availability of ECE remains a pressing need, funders could support the upgrade of existing infrastructure in pre-primary schools in order to increase enrolment of children, particularly in rural areas.

Retention, Attainment and Holistic Development:

- **Programme design:** One of the cornerstones of the national ECCE policy enacted in 2013 is to define a holistic curriculum for students receiving pre-school education. The standard metrics of what this constitutes and the different skills children should acquire during the pre-primary phase still need to be researched upon and strengthened,[98] which is an opportunity for funding.
- **Teacher training:** With nutrition being the historical focus of early childhood care, anganwadi workers are not trained or equipped to deliver ECE. The lack of a structured ECE curriculum and inadequate teaching-learning tools further impede ECE delivery. Funding teacher training initiatives and providing support to develop TLMs and teaching aids would be a step in the right direction.

Health and Well-being:

- **Nutrition and healthcare:** Since nutrition plays a critical role in the first 1,000 days of life as a vital enabler to better learning for children, providing for nutritious, quality meals as well as ensuring adequate healthcare provision for pre-primary students must be encouraged by funders.

92. Samhita Social Ventures 2014
93. Interview with DHFL Foundation, June 2017
94. World Bank 2015
95. Central Square Foundation 2015
96. Interviews with Hippocampus Learning Centres, EdelGive Foundation, Global Fund for Children, DHFL, DS Group, June and July 2017
97. FSG, 2017
98. MHRD, 2016

PRIMARY EDUCATION

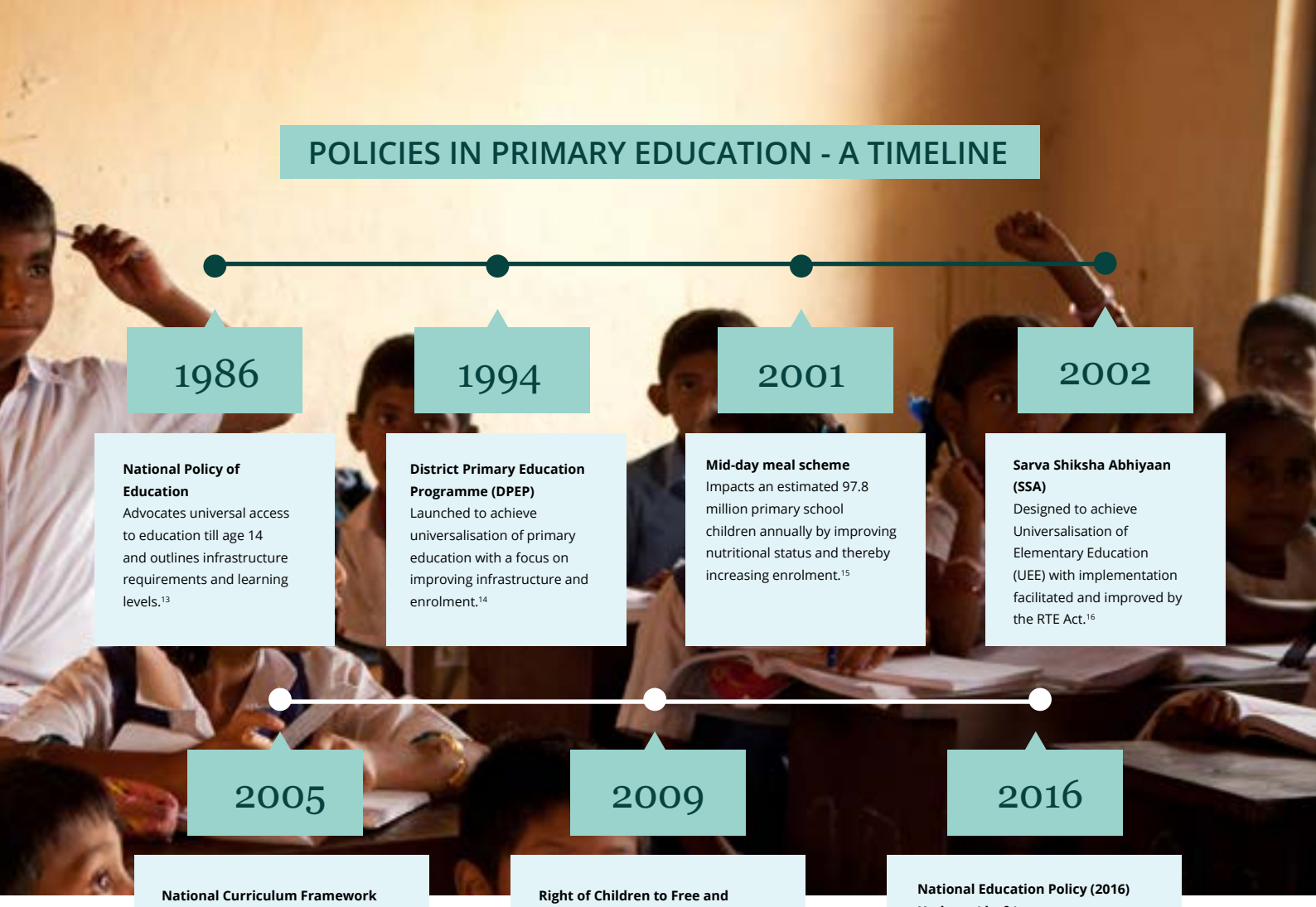
> **"Few global goals have been as consistently and deeply supported as the notion that every child in every country should have the chance to complete primary school. With global effort, it could become a reality."**
>
> **-The World Bank[1]**

According to the World Bank estimates, every additional year of primary education increases a person's productivity by 10 to 30%.[2] Primary education has also been linked with better family health, more strategic family planning, and thus slower population growth. In addition, since educated parents are more likely to send their children to school, primary education perpetuates its many benefits from one generation to the next.[3]

Primary education in India spans from Grade 1 to 5, followed by upper primary, from Grade 6 to 8, together constituting the term 'elementary education.' In this report, 'primary education' is used to denote education between Grades 1-8, corresponding with the categorisation of elementary education under the Right To Education (RTE) Act.[4]

India has achieved near universalisation of primary education as of 2015,[5] with a primary adjusted net enrolment ratio (ANER) of 98% overall (97% boys and 98% girls)[6] and 98% of habitations having access to a primary school within a one-kilometre radius.[7] India has a massive market for primary education with around 233 million children (73.3% of them living in rural areas) in the 6-14 age group.[8] The Indian government spends an estimated USD 25 billion on primary education, amounting to USD 200 per student per academic year.[9]

1. World Bank, 2003
2. World Bank, 1994
3. World Bank, 1997
4. MHRD, 2016
5. UNESCO, 2015
6. UNESCO, 2016 and UDISE 2015-16
7. SSA, 2010
8. Census, 2011



POLICIES IN PRIMARY EDUCATION - A TIMELINE

1986

National Policy of Education
Advocates universal access to education till age 14 and outlines infrastructure requirements and learning levels.[13]

1994

District Primary Education Programme (DPEP)
Launched to achieve universalisation of primary education with a focus on improving infrastructure and enrolment.[14]

2001

Mid-day meal scheme
Impacts an estimated 97.8 million primary school children annually by improving nutritional status and thereby increasing enrolment.[15]

2002

Sarva Shiksha Abhiyaan (SSA)
Designed to achieve Universalisation of Elementary Education (UEE) with implementation facilitated and improved by the RTE Act.[16]

2005

National Curriculum Framework (NCF)
Advocates a child-centred approach with a focus on improving curriculum, learning outcomes and developing life skills.[17]

2009

Right of Children to Free and Compulsory Education Act or Right to Education (RTE) Act
Makes education as a fundamental right of every child between the ages of 6 and 14 and specifies minimum norms in primary schools.[18]

2016

National Education Policy (2016) Updates (draft)
Emphasises on gender, education of tribal children, curriculum revitalisation, introduction of technology, teacher capacity, school governance, and raising education expenditure to 6% of GDP.[19]

POLICY FRAMEWORK

Primary education falls under the purview of the Ministry of Human Resource Development (MHRD). Over the past two decades, government initiatives such as the District Primary Education Programme (DPEP),[10] Sarva Shiksha Abhiyan (SSA) and the RTE Act[11] have propelled India towards near universalisation of access by 2015. Primary education policy goals in 2016 centre around quality, attainment, and enablers such as teacher training.[12]

GAPS AND TRENDS IN PRIMARY EDUCATION

1. Privatisation of primary education has risen significantly

At the national level, 0.33 million private schools (approximately 23.7% of total schools) account for 39% of enrolment in primary education.[20] A pronounced increase is seen in rural India where the percentage of children between 6-14 years of age attending private schools has risen from 18.7% to 30.5% over the past decade.[21] Between 2010-11 and 2015-16 post the RTE Act, the number of government schools increased by

9. BCG, 2016
10. Government of India, 2011
11. MHRD, 2017
12. Niti Ayog, 2016
13. NCERT, 1968
14. DPEP, 2017
15. MHRD, 2017
16. World Bank
17. NCERT, 2005
18. MHRD, 2017
19. NUEPA, 2016
20. Sattva analysis
21. Sattva analysis using UDISE

12,297 and private schools by 77,063 nationwide.[22] In the same period, government school enrolment decreased by 13.1 million and private school enrolment increased by 17.5 million.[23] States such as Haryana, Jammu and Kashmir, Punjab, Rajasthan, Telangana and Uttar Pradesh have over 40-60% of children aged 6-14 enrolled in private institutions. This may be fuelled in part by the high perceived value of private education by parents,[24] access (especially in urban areas),[25] and even political and regulatory differences between states which make it easier to set up a private school.[26]

Affordable private schools (APS) are changing the landscape of how primary education is delivered in India, both in rural and urban areas. APS are critical in the journey of improving education access and quality at affordable costs, especially for children from low-income families.[27]

TOP 5 STATES WITH A DECLINE IN GOVERNMENT SCHOOL ENROLMENT		TOP 5 STATES WITH A RISE IN PRIVATE SCHOOL ENROLMENT	
State	**Decrease in enrolment in govt. schools**	**State**	**Increase in enrolment in private schools**
Uttar Pradesh	-3,085,836	Uttar Pradesh	7,341,849
Madhya Pradesh	-2,655,437	Bihar	1,408,246
West Bengal	-2,291,025	Maharashtra	1,369,505
Maharashtra	-1,480,940	Rajasthan	1,336,624
Rajasthan	-868,111	Kerala	1,096,289

Table 1: Top five states with a decline of government school enrolment and a rise of private school enrolment **Source:** UDISE 2015-16

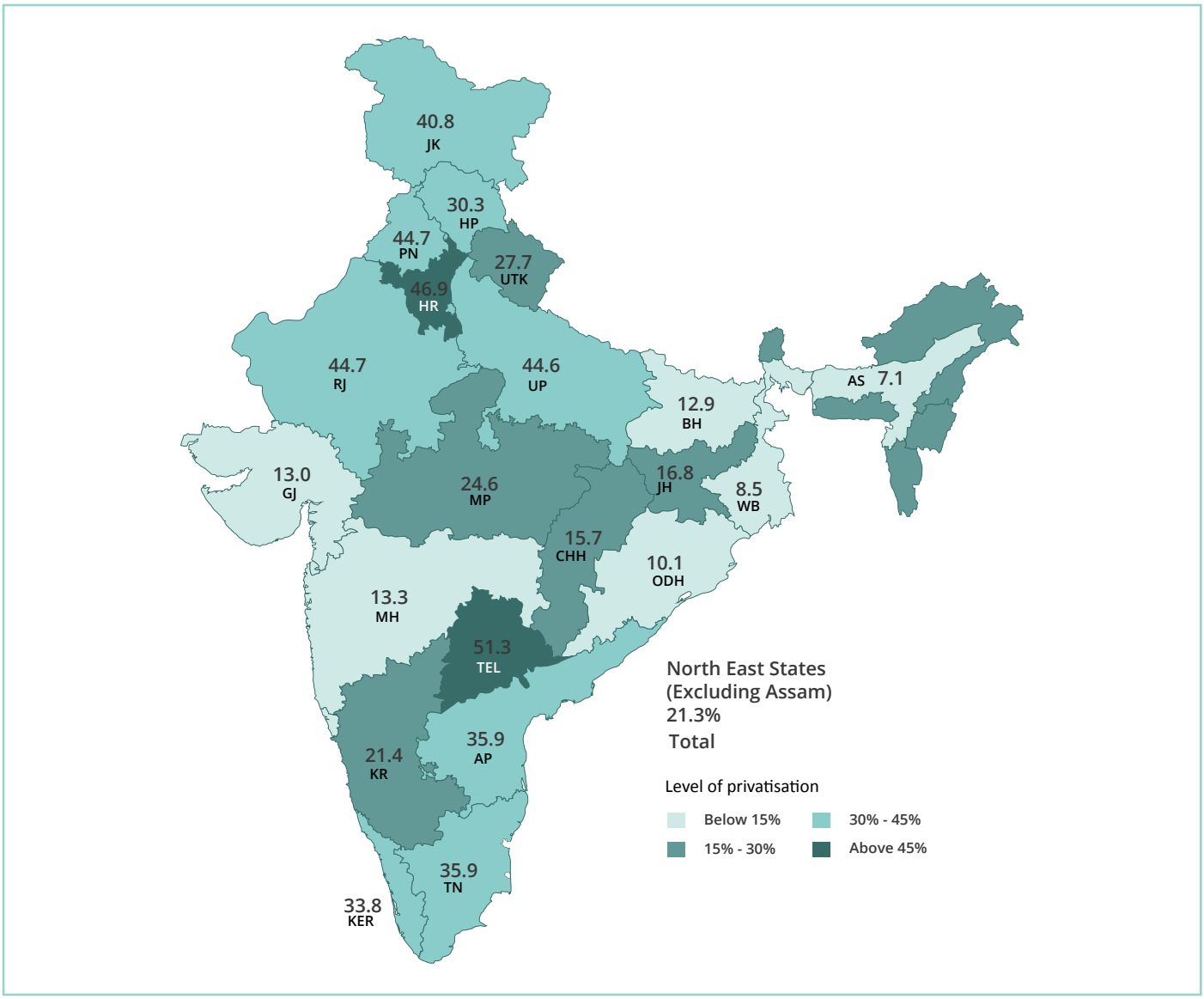


Figure 1: Percentage of children in private unaided schools by state in 2014-15. States such as Telangana and Rajasthan have very high rates of privatisation, especially in urban areas.[28] **Source:** National Sample Survey, 2014-15

22. Sattva analysis using UDISE
23. CSAE, 2017
24. Baird, 2009
25. Baird, 2009
26. Baird, 2009
27. Centre for Civil Society, 2017
28. Colour scales have been applied to locations to depict level of privatisation.

2. Learning levels are low in both government and private schools

Grade 5 is the highest grade in primary education that sets the foundation for secondary school. Among Grade 5 children in rural India, 52.2% cannot read a Grade 2 level text and 74.1% cannot solve a division problem.[29] In Grade 8, the corresponding values are 27% and 56.8% respectively,[30] indicating that gaps persist till the end of primary education. While 42% of Grade 5 children in government schools can read at Grade 2 level and 21% can solve a division problem, the corresponding attainment figures are 63% and 39% in private schools, reflecting the widening gap between government and private schools.[31] However, the higher levels of attainment have been attributed to better-performing children leaving government schools and enrolling in private schools as well as better socio-economic status of children joining private schools.[32] While private schools cost more since they are not covered by RTE subsidies, evaluations across states show that they do not necessarily lead to improved learning outcomes.[33] The gap has largely been attributed to attainment levels plummeting in government schools while remaining more or less the same in private schools.[34] Experts attribute this decline to schools prioritising infrastructure development over learning outcomes and the no-failure policy till Grade 8 as stipulated under the RTE Act.[35]

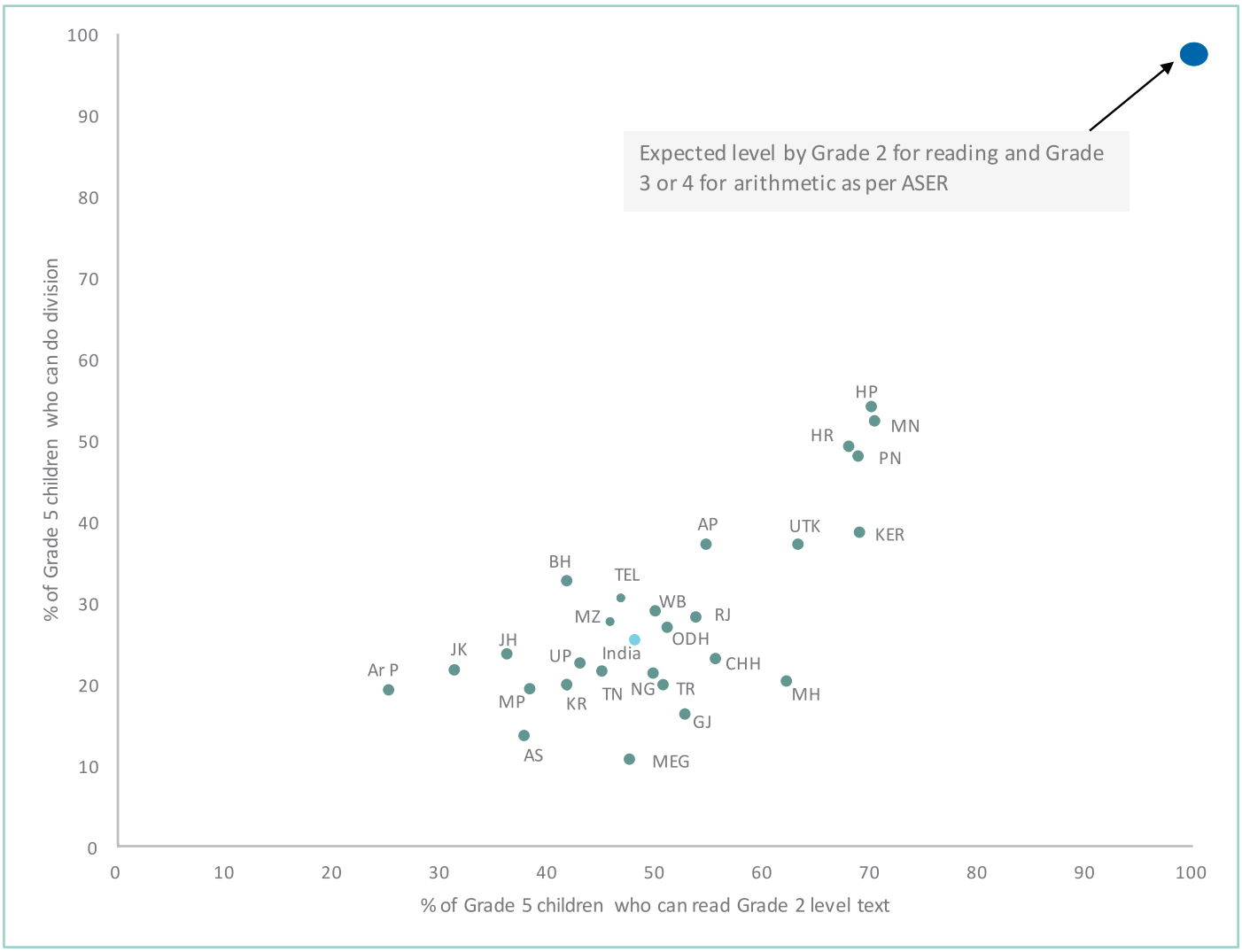


Figure 2: Literacy and numeracy levels of children in all states in India. Even in the best performing states such as Himachal Pradesh, Manipur, Haryana and Punjab, attainment falls short of expected levels by a large margin. **Source:** ASER (2016)

29. Sattva analysis
30. Sattva analysis
31. ASER 2016
32. BCG, 2016
33. JPAL, 2017
34. Centre for Civil Society, 2017
35. Centre for Civil Society, 2017

3. Out-of-school children (OOSC) and dropout rates are still a cause for concern, especially among marginalised communities

At the national level, the percentage of OOSC was 3.1% in 2016, a significant improvement from 2006 when it was 6.6%.[36] However, gaps persist at the state level. The top 3 states in terms of the percentage of OOSC aged 6-14 in rural India are Uttar Pradesh (5.3%), Madhya Pradesh (4.4%) and Rajasthan (4.3%).[37] This translates to around 3.7 million OOSC in these 3 states alone. The percentage of OOSC is particularly high among marginalised groups such as poor urban migrants. A 2015 study conducted among poor urban migrant families in 7 cities across India found that 39% of the total child population in the 6-14 age group had never enrolled in any school.[38]

As of 2015-16, dropout rates at the primary level were highest in the North Eastern states, with Assam leading at 13.9%, followed by Arunachal Pradesh (9.5%) and Meghalaya (8.6%).[39] Dropout rates are higher among marginalised groups, with Scheduled Tribes and Muslims showing a 7.5% dropout, as compared to the national average of 4.1% for primary school children.[40]

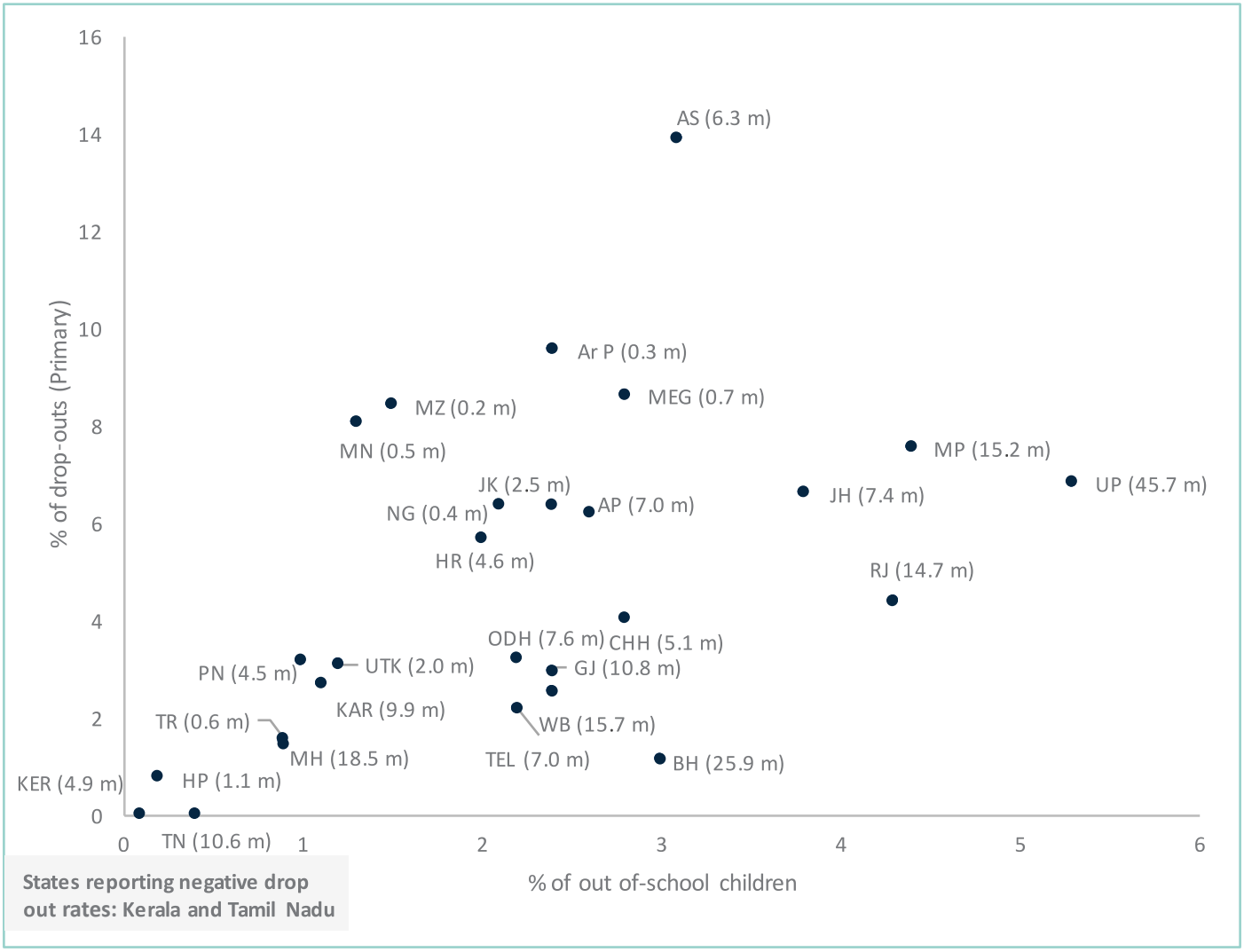


Figure 3: Statewise dropout rates vs. OOSC. Kerala, Himachal Pradesh and Tamil Nadu have achieved universalisation of primary education with less than 1% dropout rates while states in North-eastern India register high dropouts at the primary level **Source:** ASER (2016) and DISE (2015-16) ***Note:*** *Labels denote states and their total population of primary school age children in millions.*

36. Sattva analysis
37. Sattva analysis
38. Aide et Action, 2016
39. Sattva analysis
40. Sattva analysis

4. Teacher shortage is acute in government schools

While the pupil-teacher ratio (PTR) in primary schools is within RTE stipulated level at 24:1,[41] this is not always a reliable indicator of the extent of teacher shortage due to the high prevalence of schools with few students: a staggering 44,000 schools, or 29% of rural primary schools in India, have less than 60 students.[42] Irregular recruitment schedules, delays in official approval for creation of positions and the lack of qualified candidates have resulted in an acute shortage of teachers. Only 12% of candidates passed the Central Board of Secondary Education's Central Teacher Eligibility Test for primary schools in 2016.[43] The MHRD estimates the rate of teaching vacancies in government primary schools as 17.5%, translating to 907,585 vacant teaching positions.[44] North-Eastern and Eastern states such as Jharkhand (38%) and Bihar (34%) are the worst affected.[45] Even among serving teachers, quality is an issue, as a very low percentage — 17% in rural areas and 8.3% in urban areas[46] — receive regular in-service training.

5. Life skills education remains inadequate

Life skills — the range of psycho-social and cognitive abilities that equip students to make informed decisions, manage their emotional well-being and communicate effectively — exert a positive influence on long-term education and employment outcomes.[47] In-school structured sports, arts and experiential learning programmes are vital to develop essential life skills at the primary school level.[48] While there has been scattered progress in India through the NCF, curriculum and funding for life skills education, the focus on curriculum integration,[49] quality of content, teacher development for life skills and evaluation of impact are largely absent in both government and private schools.[50] Primary schools often lack skilled teachers to impart life skills[51] and provide physical education.[52]

OUTCOMES AND INTERVENTIONS IN PRIMARY EDUCATION

Despite near universalisation of access to primary education, key barriers to achieving outcomes related to retention, attainment and holistic development still persist. A focus on learning quality including curriculum development, school assessments, building capacities and skills of teachers (and candidates for teaching positions) both pre-service and while in service, community engagement and self-development through comprehensive education including life skills, are essential areas of interventions.[53]

The last decade has seen a rise in several innovative and proven models focusing on different aspects of learning quality and holistic development issues in primary education — from reading, Science, Technology, Engineering, Mathematics (STEM), remedial and life skills programmes, to holistic multi-stakeholder intervention programmes seeking to improve learning quality.

Primary education interventions are being tackled by SPOs adopting both non-profit and revenue-based models. There are multiple scaled-up models such as Kaivalya Education Foundation, Pratham Education Foundation, Teach for India, Nanhi Kali, Agastya Foundation, among others, that have achieved reach in the magnitude of 100,000 plus children, working across different states, and partnering with the government for scale.[54]

The following table documents intervention examples in primary education and SPOs working on these interventions, along with their legal structures and lenses.

Note: These SPOs have been selected because they represent a diversity of operating models, scale, geography and partnerships with the government. The lens reflects the focus of intervention by the SPO.

41. MHRD,2017
42. Sattva analysis
43. Indian Express, 2016
44. MHRD, 2016
45. MHRD, 2016
46. Sattva analysis
47. Central Square Foundation, 2015
48. Central Square Foundation, 2015
49. TEI India, 2017
50. Central Square Foundation, 2015
51. Central Square Foundation, 2015
52. Sattva analysis
53. Financial Express, 2016
54. Sattva analysis

OUTCOME	STAKEHOLDER	INTERVENTION	LENS	SPO
Enrolment	Community	Community outreach, awareness and enrolment drives[55]		Educate Girls *Registered under Section 8*[56]
	Community, Student	Bridge courses for OOSC[57]		Pratham Education Foundation *Registered under Section 8*[58]
	Student	Incentives for girl enrolment[59]		KC Mahindra Educational Trust (KCMET) through its Nanhi Kali programme *Charitable trust*[60]
	School	Solutions for school governance, data and monitoring[61]		Bharti Foundation Charitable Trust[62] Promorph solutions *Private Limited Company*
	Student	In school life skills and sports programmes[63]		Magic Bus *Registered under Section 25*[64]
Retention, Attainment	School, Community	Reforms for school management committees (SMCs)[65]		Akshara Foundation *Charitable Trust*[66]
	School	Strengthening infrastructure in schools[67] School assessments		Gray Matters Capital *Private Limited Company*[68]
Attainment	Student	After-school complementary learning[69]		KC Mahindra Educational Trust (KCMET) through its Nanhi Kali programme *Charitable Trust*[70]
	Student, School, Teacher	STEM learning programmes[71]		Agastya International Foundation *Charitable Trust*[72]
	Student	Technology based blended learning and student assessments[73]		Zaya Learning Labs *Private Limited Company*[74]
	Student, Community	Reading and Libraries[75]		Room To Read *Charitable Trust*[76]

LENS LEGEND **Government** **Rural** **Urban** **Gender** **Marginalised** **Private**

55. Patra 2007
56. Educate Girls, 2014
57. NCERT, 2013
58. Pratham Education Foundation, 2017
59. MHRD, 2013
60. Nanhi Kali, 2017
61. MHRD, 2012
62. Bharti Foundation, 2017
63. MHRD, 2013
64. Dasra, 2017
65. RTEForum, 2015
66. Akshara Foundation, 2017
67. Bhunia, Shit and Duary 2012
68. Gray Matter
69. UNICEF, 2009
70. Nanhi Kali
71. Information Technology Industry Council, 2012
72. Guide Star India, 2017
73. Laurillard, 2014
74. Zauba Corp, 2017
75. NCERT, 2005
76. Room To Read

OUTCOME	STAKEHOLDER	INTERVENTION	LENS	SPO
Attainment	Teacher	Pre-service and In-service teacher training[77]		Azim Premji Foundation *Registered under Section 25*[78]
	School, Teacher	Curriculum and pedagogy[79]		Bodh Shiksha Samiti *Non-profit Organisation*[80]
	School	Improving infrastructure and learning quality in APSs		Varthana *Private Limited Company*
	School	Leadership development programmes for government school leaders		Kaivalya Education Foundation *Registered under Section 25*
	Community	Community engagement in teaching and education[81]		Teach for India *Non-profit Organisation* India School Leadership Institute (ISLI) *Non-profit Organisation*[82]
Enrolment, Retention & Attainment	School, Teacher	Non-formal 'one-teacher' schools for marginalised communities[83]		Ekal Vidyalayas *Non-profit organisation*[84]
Health & Well-being	School, Student	Mid-day meal programmes[85]		Akshaya Patra *Charitable Trust*[86]
Holistic Development	Student, Community	In school life skills[87]		Magic Bus *Registered under Section 25*[88]
	School, Student	Bal Sabhas providing a health environment for children to interact with peers[89]		Kaivalya Education Foundation *Registered under Section 25*[90]
	Student	Life skills toolkits[91]		Going to School *Charitable Trust*[92]
	Student, Community	Empowering children to drive change in communities[93]		Design for Change *Charitable Trust*[94]
	Teacher	In-service teacher training for life-skills education[95]		Dream a Dream *Charitable Trust*[96]

LENS LEGEND Government Rural Urban Gender Marginalised Private

77. Bhattacharjea, Wadhwa and Banerji, 2011
78. APF
79. University of Sussex, 2014
80. Copal Partners, 2009
81. Kwauk, Robinson and Spilka 2016
82. Education Innovations
83. Downes, 2012
84. Ekal
85. Sharma, et al., 2006
86. Dasra, 2017
87. MHRD, 2013
88. Dasra, 2017
89. The Pioneer, 2015
90. Indian NGO List, 2017
91. Central Square Foundation, 2015
92. Dasra, 2017
93. Irish National Teachers' Organisation, 2009
94. Dream a Dream, 2017
95. Bhattacharjea, Wadhwa and Banerji, 2011
96. Dream a Dream, 2017

FUNDING FOR PRIMARY EDUCATION

Government Funding

The government spends an estimated USD 25 billion on primary education annually.[97] Three-fourth of this, translating to around USD 19 billion, is spent by the states.[98]

DFI Funding

DFIs have financed a significant part of the development costs of primary education expenditure in India.[99] Since 2003, the World Bank has supported the SSA, investing USD 500 million in Phase I (2003-2007) and USD 1.35 billion in Phase II (2007-2012).[100] DFID has also funded SSA to the tune of USD 390 million (USD 372 million as financial aid and USD 18.2 million as technical assistance) in the 2008-2013 period.[101]

DFIs have also supported primary education projects at the district level through local SPOs. A recent example is the Gyan Shala project to pilot affordable private primary schools in Bihar (2011-13) supported by DFID with USD 1.1 million.[102]

DFI support has had a significant direct impact upon management practice, financial reporting, accounting procedures and monitoring arrangements.[103] They have also been influential in initiating major changes in the sector by funding innovative projects at the pilot stage.[104]

Corporate and Philanthropic Contributions

An analysis of 151 companies and 567 projects reveals that 30.8% of funding is channelled towards primary education, amounting to a CSR spending of USD 57.4 million.[105] Prominent global and family foundations such as Piramal Foundation, Michael & Susan Dell Foundation (MSDF), Nilekani Philanthropies, Shiv Nadar Foundation, Bill & Melinda Gates Foundation and corporate foundations such as Edelgive Foundation, IDFC Foundation, Adani Foundation, Ambuja Cement Foundation, Essar Foundation, India Bulls Foundation, Kotak Education Foundation, Bharti Foundation, The Sir Ness Wadia Foundation, and SRF Foundation have repeatedly invested in primary education.[106]

Impact Investment

The majority of impact investment in primary

UBS Optimus Foundation-Children's Investment Fund Foundation (CIFF)-Educate Girls Development Impact Bond

This is the world's first Development Impact Bond, offering an innovative approach to achieving social and financial returns. The aim is to help improve education and learning outcomes for 18,000 children in government primary schools in the state of Rajasthan. UBS Optimus Foundation finances Educate Girls for this programme and CIFF will reimburse UBS Optimus for its investment in Educate Girls, plus additional incentive payments, if agreed outcomes are met and validated by IDinsight as the independent evaluator. The value of the multi-year bond is USD 994,282.

Source: CIFF

97. BCG, 2016, unpublished
98. BCG, 2016, unpublished
99. Colclough and De 2010
100. IBEF
101. ICAI, 2012
102. Colclough and De 2010
103. Colclough and De 2010
104. Colclough and De 2010
105. Sattva analysis
106. Sattva analysis

education has been in the space of education technologies or in-school operating models that are revenue-driven. Out of a total of USD 136 million in equity deals between 2014 and 2017, 22% has been spent on primary education.[107]

The table below presents a list of funding instances across the spectrum of funders.

Note: These are examples of funding, and the same SPO could have received funding from other funders as well which are not mentioned here. The table is not intended to recommend any one form of funding or one specific organisation.

LEGEND: CF – Corporate Foundation, IF – Impact Fund, GF – Global Foundation, FF – Family Foundation, CSR – Corporate Social Responsibility, NA – Not Available

FUNDER CLASS	ORGANISATION	SPO	INSTRUMENT	TICKET SIZE
CSR	Asian Paints[108]	Magic Bus uses activity-based curriculum to improve outcomes and retention at the primary level.[109] *Registered under Section 25*	Grant (2015-16)	NA
	DS Group[110]	Adharshila Shiksha Samiti seeks to improve enrolment and attainment among marginalised groups through alternative schools. *Charitable Society[111]*	Grant (2015-16)	NA
	Hindustan Petroleum Corporation Limited[112]	Akshaya Patra aims to improve learning outcomes and retention by providing mid-day meals to children in government schools.[113] *Charitable Trust*	Grant (2014-15)	USD 0.058 million[114]
	Mahindra & Mahindra Group[115]	KC Mahindra Educational Trust (KCMET) through its Nanhi Kali programme provides academic, material and programmatic support for education of underprivileged girl children.[116] *Charitable Trust*	Grant (2015-16)	USD 5.26 million[117]
	Rolls-Royce[118]	Agastya International Foundation runs hands-on science education programmes.[119] *Charitable Trust*	Grant (2016-17)	USD 0.059 million[120]
GF	Bill & Melinda Gates Foundation[121]	Pratham Education Foundation focuses on high-quality, low-cost, and replicable interventions to address systemic gaps in the education system.[122] *Registered under Section 8*	Grant (2016)	USD 0.44 million[123]

107. Sattva analysis
108. Magic Bus, 2017
109. Magic Bus, 2017
110. DS Group, 2017
111. Adharshila, 2017
112. Akshaya Patra, 2017
113. Akshaya Patra, 2017
114. Hindustan Petroleum, 2017
115. Nanhi Kali, 2017
116. Nanhi Kali, 2017
117. Nanhi Kali, 2017
118. Rolls Royce, 2017
119. Agastya International Foundation, 2017
120. Interview with Rolls Royce, June 2017
121. DevEx, 2017
122. Bill and Melinda Gates Foundation, 2017
123. Pratham, 2017

FUNDER CLASS	ORGANISATION	SPO	INSTRUMENT	TICKET SIZE
GF	Draper Richards Kaplan Foundation[124]	STIR empowers teachers to improve student learning outcomes.[125] *Registered under Section 8*[126]	Grant (2015)	NA
	Global Fund for Children[127]	Going to School uses story-telling and learning kits for increasing learning levels.[128] *Charitable Trust*[129]	Grant (2004-05)	USD 0.03 million[130]
	Michael & Susan Dell Foundation[131]	Bodh Shiksha Samiti provides training focusing on child-centric pedagogy and community involvement.[132] *Non-profit Organisation*	Grant	NA
FF	Piramal Foundation[133]	Kaivalya Education Foundation works with government schools on transforming student learning outcomes.[134] *Registered under Section 25*	Grant (2015-16)	USD 4.6 million[135]
IF	Kaizen Private Equity[136]	Varthana provides loans and support to affordable private schools.[137] *Private Limited Company*	Equity (2016)	USD 14.44 million[138]
	LGT Impact Ventures[139]	Educate Girls empowers communities to promote girls' education.[140] *Registered under Section 8*	Grant (2017)	USD 0.37 million[141]
	Pearson Affordable Learning[142]	Zaya Learning Labs offers affordable blended learning models and curricula for low-income learners.[143] *Private Limited company*	Equity (2014)	NA
DFI	The United Nations Children's Fund (UNICEF)[144]	Kaivalya Education Foundation provides leadership training to school principals.[145] *Registered under Section 25*	Grant	NA

- **Technical Assistance:** EdelGive Foundation provides mentoring support and capacity building for grantees such as Adarshila Adharshila Schools, Agastya International Foundation and STIR Education[146] to translate strategy into action.[147]
- **Pro-bono Support:** Microsoft Foundation partners with state governments to provide teacher training in government schools through Project Shiksha.[148]

124. DRK Foundation, 2017
125. STIR Education, 2017
126. Guide Star India, 2017
127. Dasra, 2017
128. Going to School, 2017
129. Dasra, 2017
130. Global Fund for Children, 2005
131. MSDF, 2017
132. Bodh Shiksha Samithi, 2017
133. Interview with Piramal Foundation, June 2017
134. Kaivalya Education Foundation, 2017
135. Piramal, 2016
136. Economic Times, 2016
137. Varthana
138. Economic Times, 2016
139. LGT
140. Educate Girls
141. Jasmine Social Investment
142. Your Story, 2015
143. Zaya
144. Kaivalya Education Foundation
145. Kaivalya Education Foundation, 2017
146. Interview with EdelGive Foundation, June 2017
147. Interview with EdelGive Foundation, June 2017
148. Microsoft, 2017

There are new models being explored in the primary education funding space such as co-investing models bringing multiple funding partners together. Promising examples include EdelGive's Coalition for Transforming Education, a partnership with the government of Maharashtra to improve education quality in 4 backward districts,[149] and The Education Alliance - a collaborative effort of Central Square Foundation, MSDF, Absolute Return for Kids (Ark) and Omidyar Network to improve outcomes by facilitating effective partnerships between government and NGOs.[150]

BARRIERS TO FUNDING

The shift to focusing on learning outcomes in primary education is not always reflected in a corresponding shift in funding. There is still a current pattern observed among donors of funding and tracking traditional measures of efficacy such as cost per child or number of beneficiaries.[151] This puts several SPOs focusing on quality at a comparative disadvantage.

While APS are on the rise in the primary education space, they have mostly been scattered, standalone schools set up by various operators. As such they struggle to keep costs low while achieving learning outcomes.[152] This coupled with regulatory blocks has hampered funding for APS from CSR and foundations.[153]

RECOMMENDATIONS

The following recommendations emerge from gaps, interventions, funding analysis and barriers to funding outlined in the section, as well as interviews with funders and SPOs focusing on primary education:[154]

Enrolment and Retention

- **Affordable private schools:** While APS are on the rise, they often have not been successful in improving education quality. Further, APS have attracted relatively insignificant funding from CSR and foundations due to their fragmented nature, regulatory roadblocks[155] and low awareness on engaging with these schools. Efforts such as the Standard of Excellence in Education Development (SEED) Schools' new co-investment fund for progressive APS or Varthana's loans to these schools to improve learning outcomes, are innovative models to channel funding and quality improvement into the APS space.[156]
- **Remedial learning centres:** Despite near universalisation, OOSC, especially in urban areas and laggard states amount to 8 million, a significant number that requires funding and interventions in remedial education to enrol them in schools. Remedial learning centres are essential to ensure that students who are out of the system have an avenue for re-entry and thus present a significant funding opportunity.

Attainment and Holistic Development

- **SMC strengthening:** The most effective and sustainable initiatives across the primary education space involve multiple stakeholders including schools, the community and local governments. Funding for revitalisation and strengthening of SMCs therefore needs to be encouraged. Such committees can be a powerful mechanism to improve accountability and educational attainment.
- **Scaling proven models:** Primary education in India is seeing several innovative and scalable proven models such as Pratham's Read India programme, Agastya's STEM programme or Kaivalya's School leadership programme. Funding to scale up and replicate proven models in underserved geographies and communities would be a step in the right direction to improve access and education quality at the primary level in India.
- **Life skills programmes:** Life skills, while highly correlated with better learning and life outcomes, are not sufficiently prioritised at the primary level. Efforts to design effective life skills programmes as well as training teachers to deliver such programmes can produce lasting impact in subsequent stages of education. Support for life skills programmes through funding and technical assistance should thus be strengthened.

149. EdelGive, 2017
150. EdelGive, 2017
151. Interview with Educational Initiatives, June 2017
152. Interview with SEED schools, June 2017
153. Centre for Civil Society, 2017
154. Interviews with: Edelgive Foundation, Global Fund for Children, DHFL, Pratham, Hippocampus, Piramal Foundation, Rolls-Royce CSR, The Education Alliance and Educate Girls, May and June 2017
155. Centre for Civil Society, 2017
156. Interview with SEED Schools, June 2017

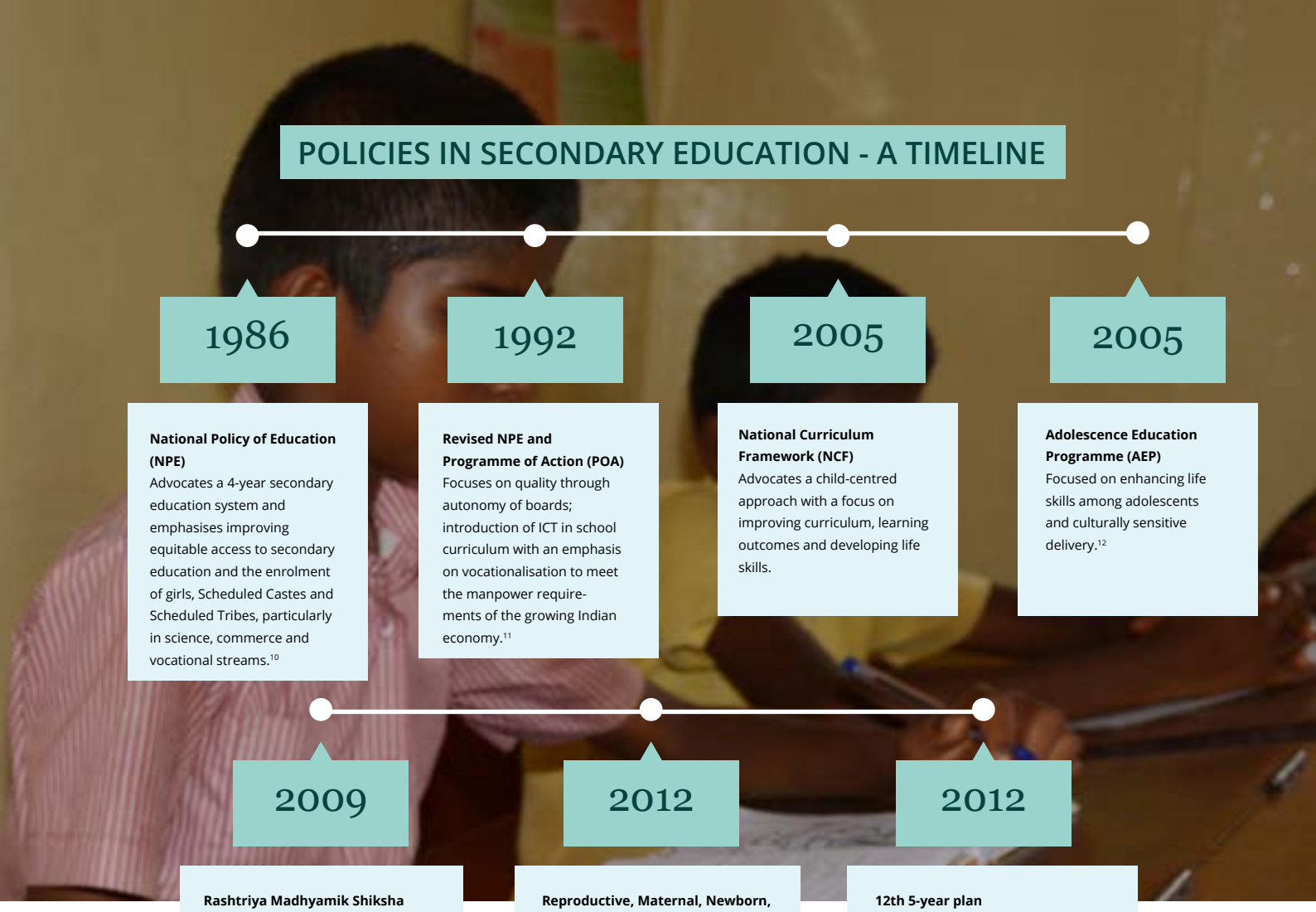
SECONDARY EDUCATION

> **"It is being increasingly recognised that secondary education is the most critical segment of the education chain. Apart from the bottom-up pressure (i.e. arising from the growth of primary schooling) and the top-down pressure (as the source of potential intakes for higher education) for its expansion, there is a need to pay greater attention to secondary education as it caters to the needs of the most important segment of the population – adolescents and youth, the source of the future human and social capital of a nation."**
>
> **- Consortium for Research on Educational Access, Transitions and Equity[1]**

Secondary education has a positive impact on youth by facilitating personal development, higher cognitive functioning and readying them for the labour market.[2] Studies have repeatedly established that social and emotional competencies have strong correlations with personal satisfaction and growth, responsible citizenship, and reduced violence and drug use.[3] At a societal level, secondary education advances human and social capital, redistributes income and wealth and alleviates income poverty.[4]

As per Census 2011, there are a total of 99.7 million adolescents in the secondary and senior secondary school age group (roughly corresponding to 15 to 18 years old) in India.[5] Of these, only 60 million (or around 64%) are enrolled in secondary and higher secondary schools as of 2016.[6] Madhya Pradesh (25%), Uttar Pradesh (22%) and Rajasthan (20%) are the states with the most OOSC.[7] In this report, the term "secondary education" has been used to refer to Grades 9-12 of the Indian education system.

1. K. Biswal, 2011
2. K. Biswal, 2011
3. K. Biswal, 2011
4. K. Biswal, 2011
5. Sattva analysis
6. MHRD, 2016
7. Sattva analysis



POLICIES IN SECONDARY EDUCATION - A TIMELINE

1986

National Policy of Education (NPE)
Advocates a 4-year secondary education system and emphasises improving equitable access to secondary education and the enrolment of girls, Scheduled Castes and Scheduled Tribes, particularly in science, commerce and vocational streams.[10]

1992

Revised NPE and Programme of Action (POA)
Focuses on quality through autonomy of boards; introduction of ICT in school curriculum with an emphasis on vocationalisation to meet the manpower requirements of the growing Indian economy.[11]

2005

National Curriculum Framework (NCF)
Advocates a child-centred approach with a focus on improving curriculum, learning outcomes and developing life skills.

2005

Adolescence Education Programme (AEP)
Focused on enhancing life skills among adolescents and culturally sensitive delivery.[12]

2009

Rashtriya Madhyamik Shiksha Abhiyan (RMSA)
Aims to achieve universal secondary education through a decentralised model by improving accessibility, affordability and quality; building capacity for measuring learning outcomes and promoting curriculum development.[13]

2012

Reproductive, Maternal, Newborn, Child, and Adolescent Health Strategy (RMNCH+A)
Aims to promote positive health-seeking behaviours, improve health outcomes and reduce the proportion and risk of pregnancies among adolescents.[15]

2012

12th 5-year plan
Aims to increase enrolment at higher levels of education and raise the Gross Enrolment Ratio (GER) at the secondary level to over 90%, at the Senior Secondary level to over 65% and increase quality.[16]

POLICY FRAMEWORK

Secondary education in India falls under the purview of the Ministry of Human Resource Development (MHRD). The central government has played a minimal role in the expansion of secondary education over the last 6 decades.[8] Since education was a state responsibility prior to 1976, there have been wide state-level variations in aspects such as structure of secondary education (various states have various frameworks for secondary education completion), management, infrastructure facilities, teacher deployment, and quality of learning achievements.[9]

The Rashtriya Madhyamik Shiksha Abhiyan (RMSA) is a landmark policy that addresses the need for a standardised nationwide reform in secondary education, especially in improving access and quality. Launched in 2009, RMSA aims to achieve universal secondary education by improving accessibility, affordability and quality; building capacity for measuring learning outcomes and promoting curriculum development.

8. K. Biswal, 2011
9. K. Biswal, 2011
10. K. Biswal, 2011
11. K. Biswal, 2011
12. UNFPA, 2011
13. MHRD, 2017
14. USAID, 2014
15. Ministry of Health & Family Welfare, 2013
16. Planning Commission , 2013

GAPS AND TRENDS IN SECONDARY EDUCATION

1. Access remains problematic and shows a gender gap

Despite RMSA recommendations mandating a secondary school within a reasonable distance (5-7 km) of every habitation,[17] as of 2014 there were only 244,653 secondary schools in the country — a shortage of 400,714 schools in 2013-14.[18] State level data highlights several states with a problematic ratio of upper primary schools to secondary schools, namely Uttar Pradesh (7:1), Bihar (7:1) and Jharkhand (6:1).[19] Children, especially girls, terminate their schooling after Grade 8 as secondary schools may not be available in their villages and distance becomes a barrier.[20] In terms of OOSC numbers there is a pronounced gender gap as well — the difference between the number of OOSC, male and female, increases as they progress to higher grades.[21]

2. Privatisation is on the rise yet access remains an issue

Secondary education has been increasingly privatised, even more than primary education — as of 2014, around 60% of secondary schools were private schools (aided and unaided).[22] Yet, only 36% of urban secondary school students and 24.5% of rural students are enrolled in private schools.[23] This indicates that access remains an issue and may be related to affordability of private schools, coupled with the overall lower enrolment rates at the secondary level.

3. Enrolment declines sharply at upper grades while dropout rates rise

Despite issues around access, enrolment shows an upward trend overall at the entry stage — Gross Enrolment Ratio (GER) increased from 51.7% to 76.6% for secondary education and from 27.8% to 52.2% for higher secondary education between 2000-2013.[24] However, over the same period, the difference in GER between secondary and higher secondary schools has remained constant (23.9 in 2000 to 24.4 percentage points in 2013).[25] Enrolment declines steadily at upper grades — enrolment declined from 10.7 million to 6 million for boys, and from 9.6 million to 5.4 million for girls between Grade 9 and Grade 12 in 2014-15.

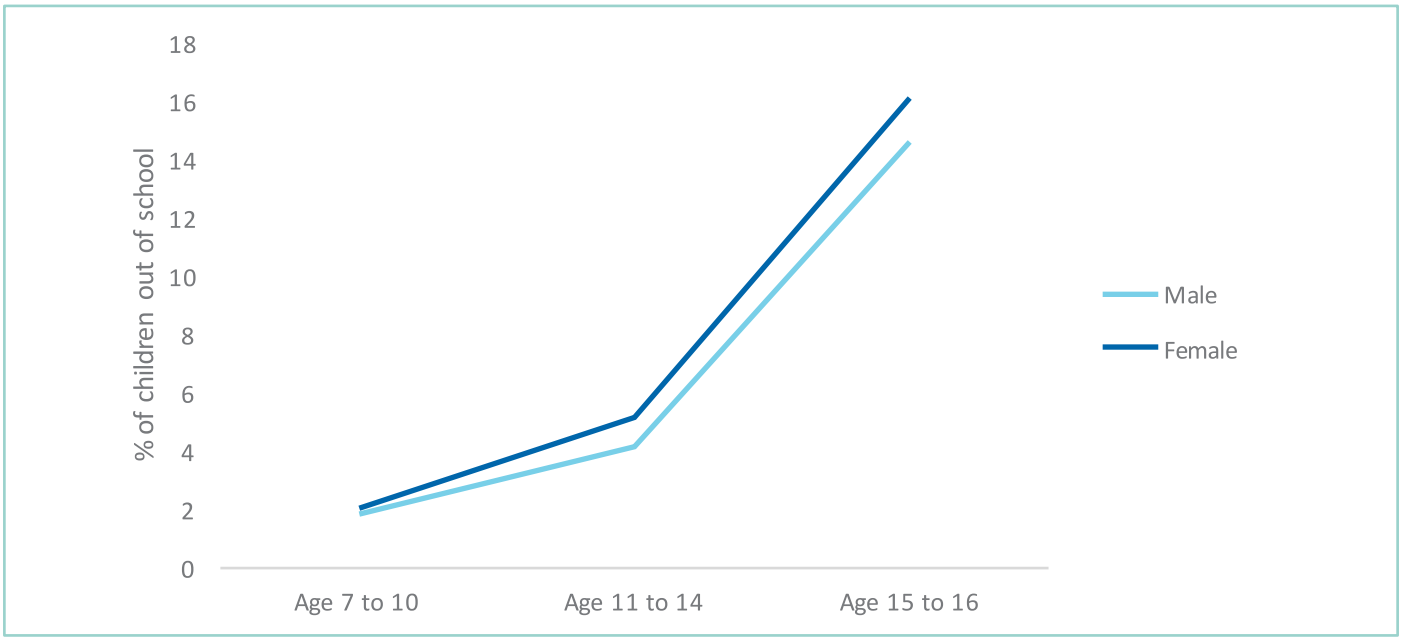


Figure 1: There is a sharp increase in out-of-school children beyond the RTE age group (above 14 years of age). **Source:** ASER 2016

17. MHRD, 2017
18. MHRD, 2014
19. MHRD, 2014
20. Chugh, 2011
21. Sattva analysis
22. MHRD, 2014
23. Kingdon, 2017
24. NUEPA, 2014
25. NUEPA, 2014

High dropout rates are another worrying aspect at the secondary level. As of 2015, the dropout rate at the national level among secondary school students was 17.1% with relatively higher rates observed among Muslims (24.7%) and Scheduled Tribes (24.1%).[26]

One of the main contributing factors is poverty, which is strongly associated with a lack of participation in secondary education.[27] Apart from poverty,[28] factors influencing the decision to drop out include: gender,[29] poor pedagogy,[30] non-contextual curriculum,[31] language barriers[32] and low attainment.[33] Additionally, after the age of 14, the likelihood of entering the workforce increases significantly as there is no legal barrier.[34] Among underprivileged students, the highest increase in dropouts happens at Grades 7-9, when parents and students take a call on how valuable education is to them relative to the monetary benefits of employment.[35]

4. Girls' dropout rate increases at secondary level

In India, over 16.9% of girls drop out at the secondary level, a significant rise from 4.1% at the primary level.[37]

The transition rate of girls from secondary to higher secondary is only 69.4%, with the lowest transition rates among Scheduled Tribes (53%) and in rural areas (58%).[38]

23% drop out of school due to poor sanitation facilities that impede them during menstrual cycles. The widespread incidence of early marriage has also been correlated with dropouts.[39] Data from the Census 2011 shows about 20% of adolescent girls were married by the age of 19.[40] Other deterrents to girls attending school include: a lack of infrastructure (no toilets or boundary walls), longer travel distance to school, all male teachers and teacher absenteeism.[41]

5. The shortage of qualified and motivated teachers affects the quality of delivery

Current estimates place vacancies in secondary school teaching positions at 19%.[42] Higher qualification levels and subject expertise required at the secondary level pose a constraint on the availability of skilled candidates. Conversely, since secondary education lies outside the purview of RTE stipulations, states

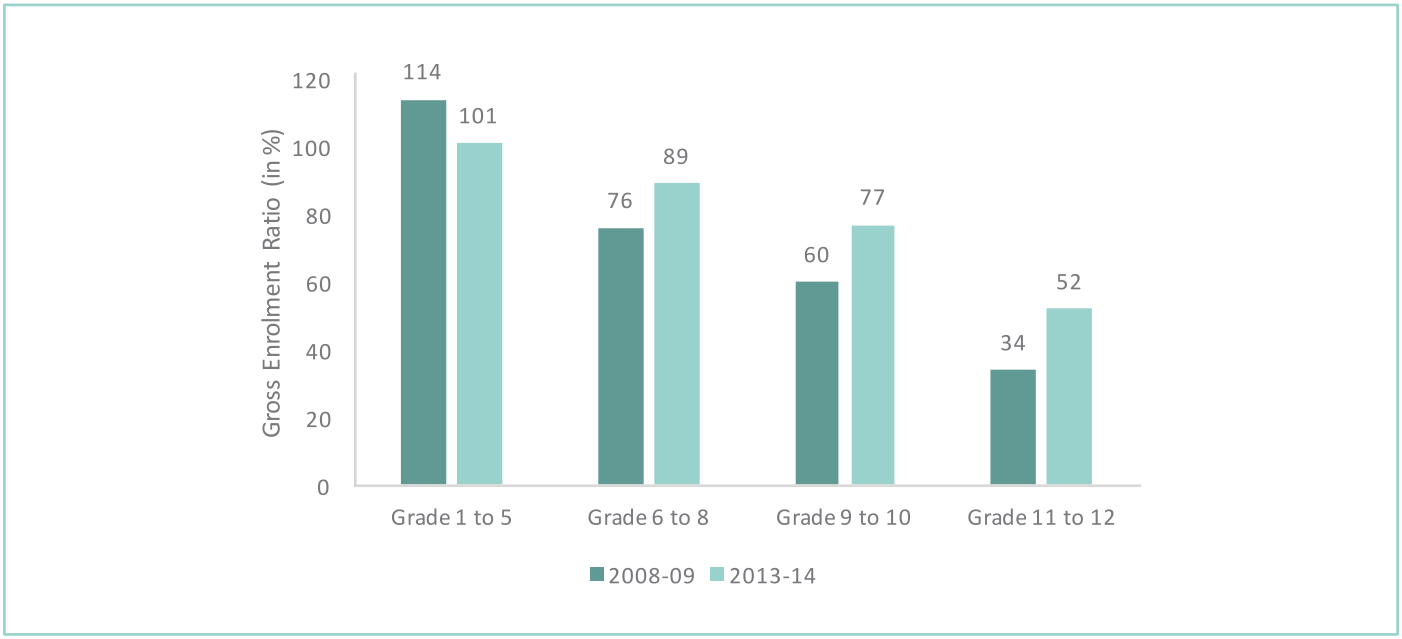


Figure 2: While overall GER has risen compared to previous years, it continues to decrease from Grade 8 to 12. **Source:** Institute for Policy Research Studies, 2016[36]

26. Sattva analysis
27. K. Biswal, 2011
28. Chugh, 2011
29. Sattva, 2016
30. Chugh, 2011
31. Sattva, 2016
32. Sattva, 2016
33. Chugh, 2011
34. Chugh, 2011
35. Sattva, 2016
36. PRS Legislative Research, 2016
37. DISE, 2016
38. Sattva, 2016
39. Young Lives, 2017
40. Young Lives, 2017
41. Sattva, 2016
42. MHRD, 2016

are not required to conduct Teacher Eligibility Test for recruitment in secondary schools, leading to the selection of unqualified candidates.[43] While government programmes such as AEP are delivered in over 3,500 secondary schools, factors such as insufficient funds, inadequately trained teachers, lack of material for students and lack of bandwidth among teaching staff to take up life skills classes, pose challenges to effective implementation.[44]

6. Low attainment necessitates private coaching which is unaffordable for poorer students

About 20% children in the 14-16 age group cannot read a Grade 2 level text, and about 50.8% cannot solve a division problem.[45] The implications of this are especially severe at the secondary level with sufficient evidence indicating that poor academic achievement leads to dropping out.[46]

Poor learning outcomes also prompt students to look elsewhere for supplemental learning. According to the National Sample Survey Office (NSSO), as of 2014, approximately 26% of children enrolled in schools seek tuitions or private coaching.[47] The same source estimates the average spending on private coaching at the national level to be up to 15% of household expenditure on education[48] – a proportion that is often too high for poorer households. This in turn precipitates dropouts among underprivileged students due to affordability.[49]

7. There is a lack of data on the secondary education sector

The lack of accurate, usable data and effective monitoring and feedback systems is a critical development constraint in secondary education in India.[50] Unlike the Annual Status of Education Report (ASER) for primary education, there is no nationwide survey on learning outcomes or development at the secondary level. Although, in recent years, efforts have been made as part of RMSA and the National University of Educational Planning and Administration (NUEPA) initiatives to institutionalise the Secondary Education Management Information System (SEMIS) at the sub-national levels, it is yet to feed effectively into the planning and management processes of secondary schools.[51]

OUTCOMES AND INTERVENTIONS IN SECONDARY EDUCATION

With initiatives in the Indian education sector being targeted at primary school children, there is room for considerable innovation within the secondary education space. On the supply side, the lower number of schools for secondary education remains a problem. While affordable private schools have filled in this gap to a certain extent, they too suffer from poor infrastructure and inadequate learning outcomes. There is a need for interventions in both government and private schools to remedy this. The high numbers of OOSC and dropout rates are also concerning and reinforce the need for informal schools such as the National Institute of Open Schooling (NIOS) model to deliver secondary education to adolescents before they move on to be part of the workforce. Additionally, since the secondary level is often the final stage of formal education, it provides a valuable opportunity to impart essential life skills through both in-school and after-school models.

The following table outlines intervention examples in secondary education and SPOs working on these interventions, along with their legal structures and lenses.

Note: These SPOs have been selected to represent a diversity of operating models, scale, geography and partnerships with the government. This is not a comprehensive list of SPOs working on these interventions. The lens reflects the focus of intervention by the SPO.

43. National Council for Teacher Education, 2011
44. UNFPA, 2011
45. Sattva analysis
46. Chugh, 2011
47. NSSO, 2015
48. NSSO, 2015
49. Chugh, 2011
50. K. Biswal, 2011
51. K. Biswal, 2011
52. Zaidi, et al., 2012
53. Pratham, 2017
54. Zaidi, et al., 2012
55. SVYM, 2017
56. Zaidi, et al., 2012
57. Educate Girls, 2014
58. Zaidi, et al., 2012
59. Kotak Mahindra Bank, 2017
60. Pandya and Maniar, 2014
61. Masoom Trust, 2017
62. Zaidi, et al., 2012
63. Zaubacorp, 2017
64. MHRD, 2014
65. NDTV Profit, 2017
66. Singh and Menon, 2015
67. Salaam Bombay Foundation, 2017
68. Zaidi, et al., 2012
69. Bharti Foundation, 2017
70. Singh and Menon, 2015
71. APF, 2017
72. Muktangan, 2017
73. Eusebius, Kumar, & Townsend, 2017
74. Guidestar, 2017

OUTCOME	STAKEHOLDER	INTERVENTION	LENS	SPO
Enrolment	Student	Bridge courses for out-of-school children[52]		Pratham Education Foundation *Registered under Section 8*[53]
	Community	Community outreach, awareness and enrolment drives[54]		Swami Vivekananda Youth Movement Charitable Society[55]
	Community	Community awareness and drives for girls[56]		Educate Girls *Registered under Section 8*[57]
Enrolment, Retention	Student	Scholarships[58]		Kotak Education *Foundation CSR wing of Kotak Mahindra Bank*[59]
	School	Non-formal education centres[60]		Masoom *Charitable Trust*[61]
Retention	School, Community	SMC reforms[62]		SEED Edu. Corp. (India) Pvt Ltd *Private Limited Company*[63]
	Student	Transportation support[64]		Coal India Limited *Public Limited Company*[65]
	Student	Life-skills programmes and youth leadership[66]		Salaam Bombay Foundation *Registered under Section 8*[67]
	School	Strengthening infrastructure in schools[68]		Bharti Foundation *Charitable Trust*[69]
Attainment	Teacher	In-service teacher training[70]		Azim Premji Foundation *Registered under Section 25*[71] Muktangan *Charitable Trust*[72]
	Teacher	Teacher Networks[73]		STIR (India) *Registered under Section 8*[74]
	Student	After-school complementary learning[75]		Swami Vivekananda Youth Movement *Charitable Society*[76]
	School, Student	STEM Learning[77]		Vigyan Ashram *Non-profit organisation*
	Student, School	Curriculum and pedagogy[78]		Going to School *Charitable Trust*[79]
	Student	Technology based blended learning and assessments[80]		Educational Initiatives *Private Limited Company*[81]
	Student	Leadership development programmes for government school leaders		Kaivalya Education Foundation *Registered under Section 25*
Holistic development	School	Life-skills programmes[82]		OSCAR Foundation *Charitable Trust*

LENS LEGEND **Government** **Rural** **Urban** **Gender** **Marginalised** **Private**

75. Sujatha, 2002
76. SVYM, 2017
77. Krishnan and Hariharan, 2016
78. Zaidi, et al., 2012
79. Dasra, 2017
80. Shinde and Deshmukh, 2012
81. Educational Initiatives, 2017
82. Singh and Menon, 2015

FUNDING IN SECONDARY EDUCATION

While increased investment in secondary education has been identified as a key driver of long-term economic growth,[84] in comparison with primary education, fewer funders explicitly focus on the secondary education segment.

Government Funding

Secondary education continues to be the most neglected segment of school education in developing countries, including India.[85] While primary education receives more than half of the education budget (44.6% according to the Budget Estimate, 2013/14), the share of public expenditure on secondary education in the total public expenditure on education continues to be as low as 24.9% (Budget Estimate, 2013/14).[86]

DFI Funding

The secondary education focus of most DFI funding from organisations such as World Bank, UNICEF and DFID[87] has been on augmenting central and state government schemes such as RMSA through long-term grants, investing in ecosystem level initiatives including teacher training, curriculum development as well as investments with a low-income states or marginalised communities focus, along with technical assistance.

Corporate and Philanthropic Contributions

Out of 151 top companies investing in education over the 2015-16 period, 119 companies are working in the space of secondary education implementing a total of 331 projects. Cumulatively, these 119 companies have invested USD 48.9 million for secondary education with Reliance Industries Ltd. (39.1%) and ONGC (19.9%) contributing the most to the secondary education funding pool. Other prominent CSR funders in the secondary education space are Airtel, Yes Bank Corporate, Adani Ports and Special Economic Zone, and NLC India Limited.[88]

The Michael & Susan Dell Foundation has invested in interventions around (i) school leadership and teacher training, (ii) high-quality, standardised data, (iii) in-school and after-school programmes, through over 40 grants worth approximately USD 22 million in the education/ skilling space. Central Square Foundation has made over 20 grants in edtech, APS performance, capacity building and governance.[89] Others such as MacArthur Foundation and the MasterCard Foundation have also focused on supporting secondary schooling in India with around USD 2 million provided through the Partnership to Strengthen Innovation and Practice in Secondary Education, although their funding at times also cuts across education segments.[90]

Impact Investment

Impact investment has focused primarily on classroom tools such as interactive learning materials, student assessment tools (e.g., Educational Initiatives Mindspark for Mathematics), tutoring and online learning (e.g., EduComp, Byju's) while edtech is seeing some traction.[91]

The following table presents a list of funding instances across the spectrum of funders:

Note: These are examples of funding, and the same SPO could have received funding from other funders as well which are not mentioned here. The table is not intended to recommend any one form of funding or one specific organisation.

83. Guidestar, 2017
84. UNESCO, 2016
85. UNESCO, 2016
86. Centre for Budget and Governance Accountability India, 2016
87. ADB, 2014
88. Sattva analysis
89. BCG, 2016, unpublished
90. The MasterCard Foundation, 2017
91. Kaizen Private Equity, 2013

LEGEND: **CF – Corporate Foundation, IF – Impact Fund, GF – Global Foundation, FF – Family Foundation, CSR – Corporate Social Responsibility, NA – Not Available**

FUNDER CLASS	ORGANISATION	SPO	INSTRUMENT	TICKET SIZE
CSR	Aditya Birla Group	Multiple NGOs provide scholarships, uniforms, library books and water purifiers in government. secondary schools.[92]	Grant (2015-16)	NA
	Larsen & Toubro	Swami Vivekananda Youth Movement's vocational training programmes equip rural, tribal youth with critical employability skills.[93] *Charitable Society*	Grant (2015-16)	0.87 million towards all education initiatives in STEM[94]
	Ambuja Cements Ltd., Credit Suisse, Deloitte, Mahindra & Mahindra, Asian Paints, Parle Bisleri, Trent-Westside, FICCI[95]	Salaam Bombay Foundation runs vocational, leadership and life skills programmes in municipal secondary schools.[96] *Registered under Section 8*	Grant	NA
	Mahindra Group, Titan, HPCL[97]	K.C Mahindra Education Trust supports girls in accessing and completing their education.[98] *Charitable Trust*	Grant (2015-16)	NA
CF	Adobe Foundation with American Express Foundation, Bank of America, EY, Goldman Sachs Gives, ICICI Foundation	American India Foundation works to impart critical life skills and access to high quality education.[99] *Charitable Trust*	Grant (2015-16)	USD 385,026 from Adobe Foundation[100]
	Airtel Bharti Group	Bharti Foundation runs the Satya Bharti schools at primary, secondary and senior secondary level to impart quality holistic learning.[101] *Charitable Trust*	Grant (2015-16)[102]	NA
	Kotak Mahindra Bank	Kotak Education Foundation supports children and youth belonging to underprivileged families through various educational interventions[103] *CSR wing of Kotak Mahindra Bank.*	Grant (2015-16)	USD 1.5 million[104]
	Mphasis F1 Foundation	Headstreams works with vulnerable children to prepare them to face after-school challenges.[105] *Charitable Society*	Grant	NA
	Reliance Foundation	Reliance Foundation Schools provide access to quality education through multi-pronged interventions.[106]	Grant	NA

92. Aditya Birla Group, 2017
93. SVYM, 2017
94. L&T, 2016
95. Dasra
96. Salaam Bombay, 2017
97. KCMET, 2016
98. KCMET, 2017
99. AIF, 2017
100. Adobe Foundation, 2015
101. Bharti Foundation, 2017
102. Bharti Foundation, 2016
103. Kotak Mahindra Bank, 2017
104. Kotak Mahindra Bank, 2017
105. Headstreams, 2017
106. Reliance Foundation, 2017

FUNDER CLASS	ORGANISATION	SPO	INSTRUMENT	TICKET SIZE
GF	MacArthur Foundation, Mastercard Foundation	Muktangan operates on government schools in Mumbai to provide holistic learning with the support of trained community teachers.[107] *Charitable Trust*	Grant (2014)	USD 0.57 million[108]
	Michael & Susan Dell Foundation	Various EdTech companies through the India Educational Investment Fund.[109]	Equity	USD 0.03 million
FF	Azim Premji	Azim Premji Foundation works on improving quality of education in India by working on systemic reform.[110] *Registered under Section 25*	Grant (multiple years)	USD 1.92 billion given in 2013[111]
	Draper Richards Kaplan Foundation[112]	STIR strives to improve student learning outcomes by building a 'teacher change maker' movement.[113] *Registered under Section 8*	Grant (2014-2017)	NA
IF	Sir Dorabji Tata Trust	Lend-a-Hand partners with NGOs, community groups and local government to improve access to education for the poor.[114] *Charitable Trust*	Grant	NA
	Central Square Foundation	Going to School creates design-driven stories to teach the underprivileged.[115] *Charitable Trust*	Grant	NA
	Acumen Fund	SEED Edu. Corp. (India) operates affordable private schools.[116] *Private Limited Company*[117]	Equity	USD 0.65 million[118]
	Footprint Ventures[119]	Educational Initiatives develops personalised learning solutions to improve student learning outcomes.[120] *Private Limited Company*	Equity (2008-09)	NA
	Gray Matters Capital	Indian School Finance Company provides loans to affordable private schools educational entrepreneurs and institutions.[121] *Private Limited Company*	Equity (2016)	USD 6 million[122]
	Varthana	Multiple affordable private schools.	Debt	Below USD 7800 (unsecured loan) and above USD 7800 (secured loan)

Technical Assistance: Between 2013-15, DFID, through the technical assistance agency IPE Global, assisted the Ministry of Tribal Affairs (MoTA) to implement a paradigm shift in how education for tribal children was conceived, delivered and managed.[123] DFID worked with the Ministry to utilise the experience gained in the course of implementing integrated education programmes (SSA and RMSA) and proposed replacing the MoTA's existing multiple schemes with an umbrella scheme to enable improved use of funds, better holistic planning, efficiencies in management, monitoring and supervision and better financial discipline.[124] DFID is the only DFI providing technical assistance to support government programmes at primary and secondary levels.[125]

107. Muktangan, 2017
108. MacArthur Foundation
109. MSDF, 2017
110. APF, 2017
111. Times ofIndia, 2013
112. DRK
113. STIR Education, 2017
114. Lend a Hand, 2017
115. Going to School, 2017
116. SEED Edu. Corp.(India) , 2017
117. Zaubacorp, 2017
118. Venture Intelligence
119. Venture Intelligence, 2008. Other funders include: IFMR Trust and Novak Biddle Venture Partners.
120. Educational Initiatives, 2017
121. ISFC, 2017
122. The Economic Times, 2016
123. ICF Consulting Services, 2016
124. ICF Consulting Services, 2016
125. ICF Consulting Services, 2016

BARRIERS TO FUNDING

Funders observe that interventions in the secondary education space have largely been piecemeal.[126] Lack of data and awareness around learning outcomes in secondary education is cited as a challenge to identify effective solutions to fund.[127]

The lack of skilled and motivated teachers is a significant gap at the secondary level. Impact investors often shy away from social innovations in government schools and APS as teachers are often not incentivised enough to put extra effort into effective delivery to ensure impact.[128]

As in other segments, the APS segment struggles in the secondary education space as well. Most companies that develop content and curricula focus on high- and mid-income segment schools since willingness to pay among the low-income population segment is very low.[129]

While life skills education is a key intervention at the secondary level, there is a lack of consensus on common metrics used for evaluation. Outcomes from such interventions, if at all measured, are rarely measured consistently or in a comparable manner,[130] which adversely affects funding.

RECOMMENDATIONS

The following emerge from gaps, interventions and funding analysis outlined in the section, as well as interviews with funders and SPOs working on secondary education:[131]

Enrolment and retention

- **Financial support for students:** As dropout rates are influenced by poverty, scholarships, financial and material incentives can spur retention at the secondary school level. For children of poor socio-economic backgrounds, these incentives will be

126. Interview with Mphasis F1 Foundation, July 2017
127. Interview with MacArthur Foundation, June 2017
128. Malani, 2016
129. Malani, 2016
130. Daulet Singh & Menon, 2015
131. Interviews with MacArthur Foundation, Salaam Bombay Foundation, Jai Vakeel Foundation, Labournet, Education Alliance, CSF, GFC and Edelgive Foundation, June and July 2017

useful in improving the retention rate. Upgrading infrastructure and the learning environment is another significant area for funding.

- **Remedial education**: Giving children a second chance at learning either through remedial classes or alternative schooling options such as NIOS or night schools would help reduce dropout rates at the secondary level. Vocationalisation of secondary education may also help in this regard as it would motivate students to stay in school to enhance their employability.
- **Support for APS:** Given the rise of the APS market at the secondary level and its importance to underprivileged students, funding of interventions should focus on finding ways to support APS in terms of teacher training and financing to improve their viability.
- **Addressing the gender gap:** While the gender gap is relatively small at the primary level, girls land up completing secondary education at far lower rates than boys. A focus on bringing girls to school through incentives in the form of monetary support, transport and logistics, after-school programmes and technology could go a long way in this regard. Equally critical is the need to engage and raise awareness among communities and parents, who are the main decision makers in terms of sending girls to schools.

Attainment

- **Teacher training:** With teacher training being seen as the most significant gap in improving attainment at secondary school, there needs to be a concerted focus on training teachers and educators to effectively deliver secondary education. Efforts by organisations such as STIR, Azim Premji Foundation, the Teacher Foundation in bringing together a platform of educators, training academies and related efforts need significant support through funding.

Holistic development

- **Life skills programmes:** The evidence linking secondary education as a key driver of economic growth and overall well-being as well as the fact that for many students, secondary education would be their terminal education, underscore the urgency of providing 21st century skills in secondary education. Interventions such as recruiting sports coaches, developing curricula, training teachers and performing assessments to determine the efficacy of life skills programmes are opportunities for funders.

VOCATIONAL EDUCATION

> **"India is a country today with 65% of its youth in the working age group. If ever there is a way to reap this demographic advantage, it has to be through skill development of the youth so that they add not only to their personal growth, but to the country's economic growth as well."**
>
> **- Ministry of Skill Development and Entrepreneurship, India[1]**

As defined by the All India Council for Technical Education (AICTE), Technical and Vocational Education and Training (TVET), or vocational education, is education that "prepares learners for jobs that are based in manual or practical activities, traditionally non-academic and totally related to a specific trade, occupation or vocation, in which the learner participates."[2] The primary outcome expected from vocational education is the acquisition of employable skills which will enable the student to become employed or self-employed. In line with the overall research scope covering education segments that span a student's learning journey from 3 to 18 years of age, this section focuses on vocational education for students between 15-18 years of age.

Amongst the overall population of 15 years and above, 6.8% have received some form of vocational training (Figure 1). In comparison with more advanced economies, this constitutes a sizeable gap in access to vocational education in India.

As per Census 2011, there are about 99.7 million people in the 15-18 age category. 60% of this population go on to complete secondary education. Of the remaining 40% of this age group — or 39.9 million — only 400,000 or 1 in 100 enrol in Industrial

1. MSDE, 2017
2. AICTE India, 2014

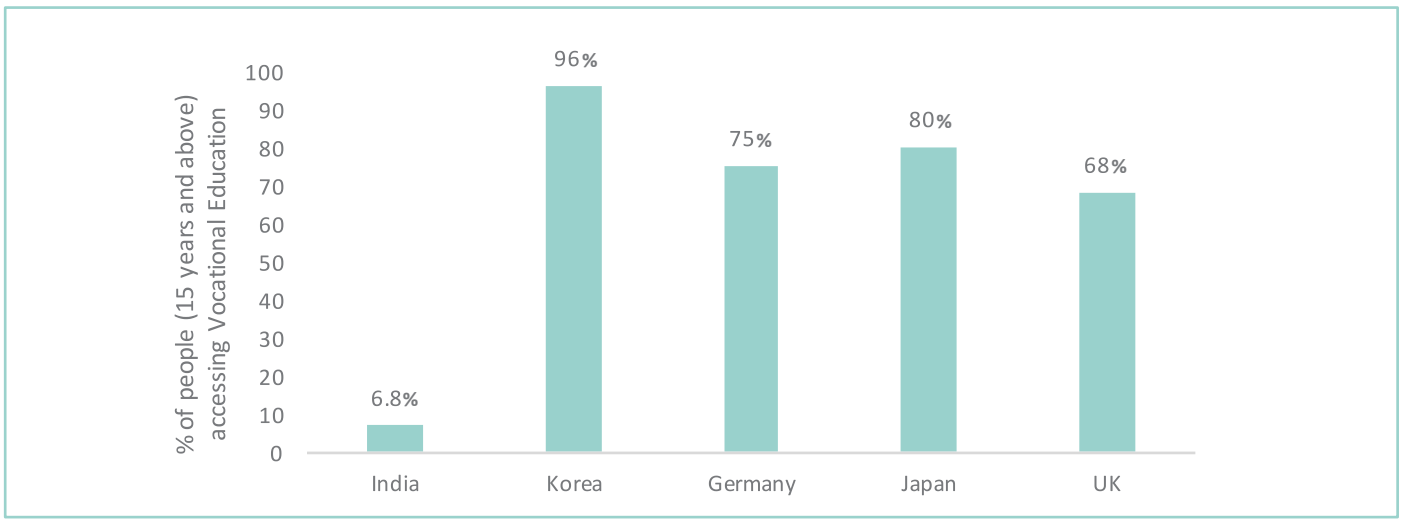


Figure 1: Access to vocational education in India remains low in comparison to other countries. **Source:** Skill Development in India, Federation of Indian Chambers of Commerce and Industry (FICCI)[3]

Training Institutes (ITIs) or vocational education,[4] and another 426,964 have enrolled under the National Apprenticeship Training Scheme.[5] As of June 2017, 6,118 secondary schools across the country offer a vocational subject for the 15-18 population.[6] Assuming on average a school has about 200 students in Grades 9-12, approximately 1.2 million children currently have the option of taking up a vocational subject while in school. Nonetheless, this brings the overall enrolment in vocational education within the 15-18 age group to just about 2%.

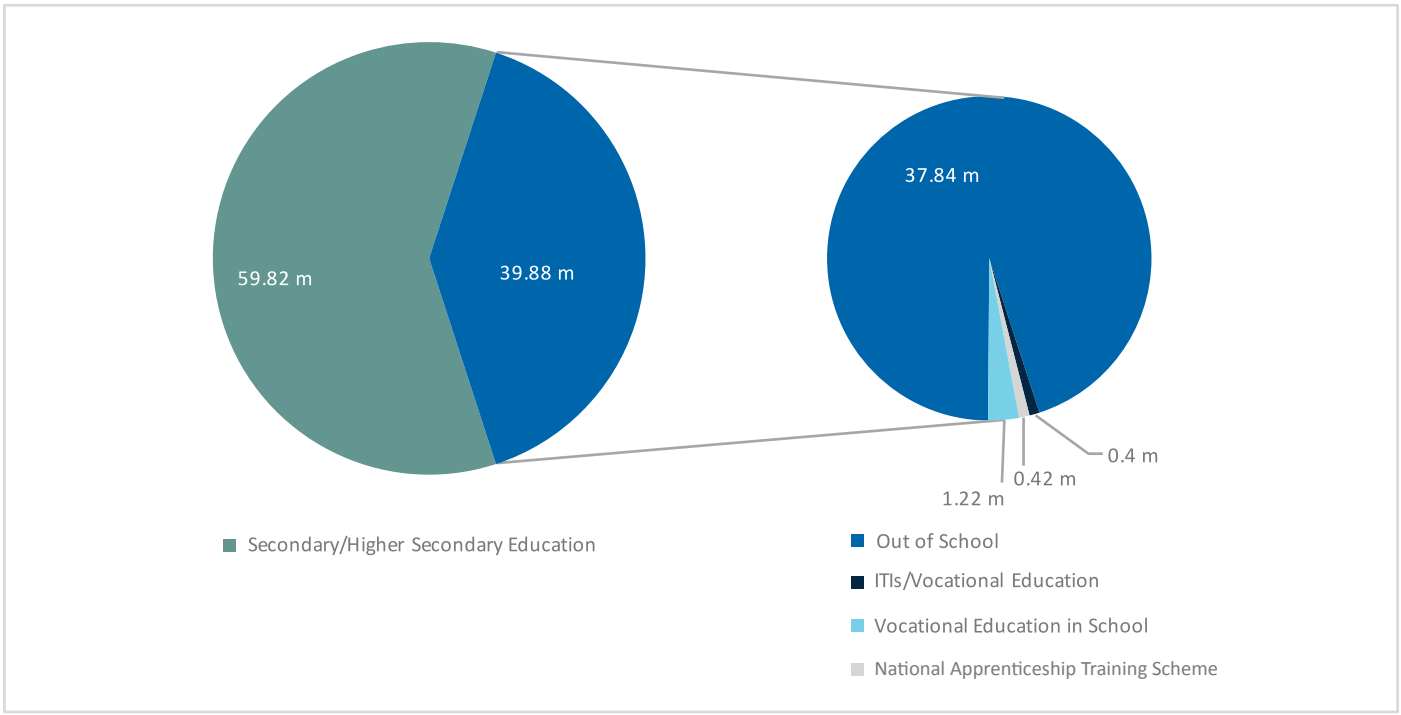
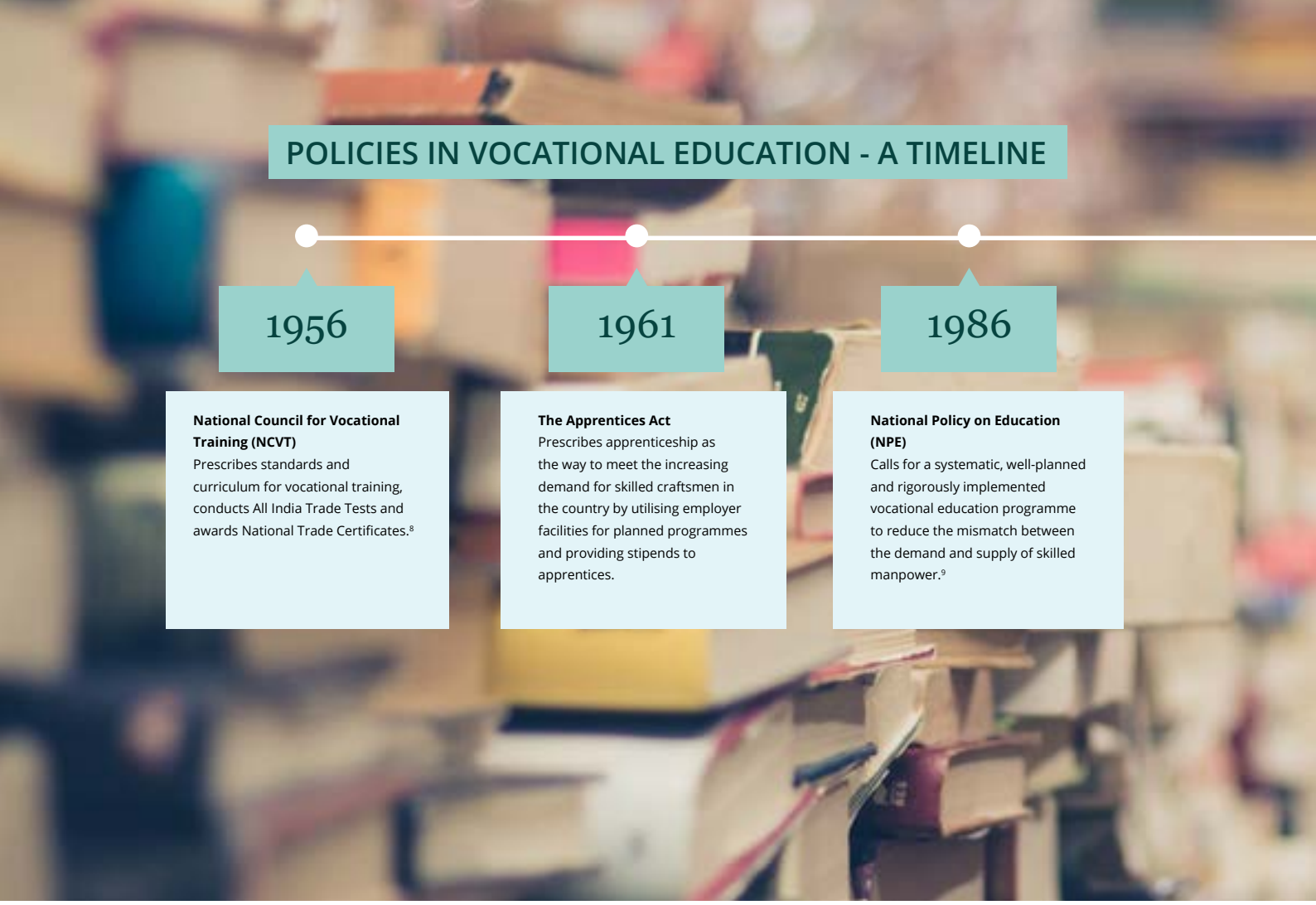


Figure 2: Enrolment status of the 15-18 age category: Less than 2% children in 15-18 year age category are enrolled in vocational education. **Source:** Census 2011, DISE 2015-16, Ministry of Labour and Employment, Ministry of Human Resource Development (MHRD), and Sattva analysis

3. FICCI, 2015
4. FICCI, 2015
5. MHRD, 2017
6. RMSA, 2017



POLICIES IN VOCATIONAL EDUCATION - A TIMELINE

1956

National Council for Vocational Training (NCVT)
Prescribes standards and curriculum for vocational training, conducts All India Trade Tests and awards National Trade Certificates.[8]

1961

The Apprentices Act
Prescribes apprenticeship as the way to meet the increasing demand for skilled craftsmen in the country by utilising employer facilities for planned programmes and providing stipends to apprentices.

1986

National Policy on Education (NPE)
Calls for a systematic, well-planned and rigorously implemented vocational education programme to reduce the mismatch between the demand and supply of skilled manpower.[9]

POLICY FRAMEWORK

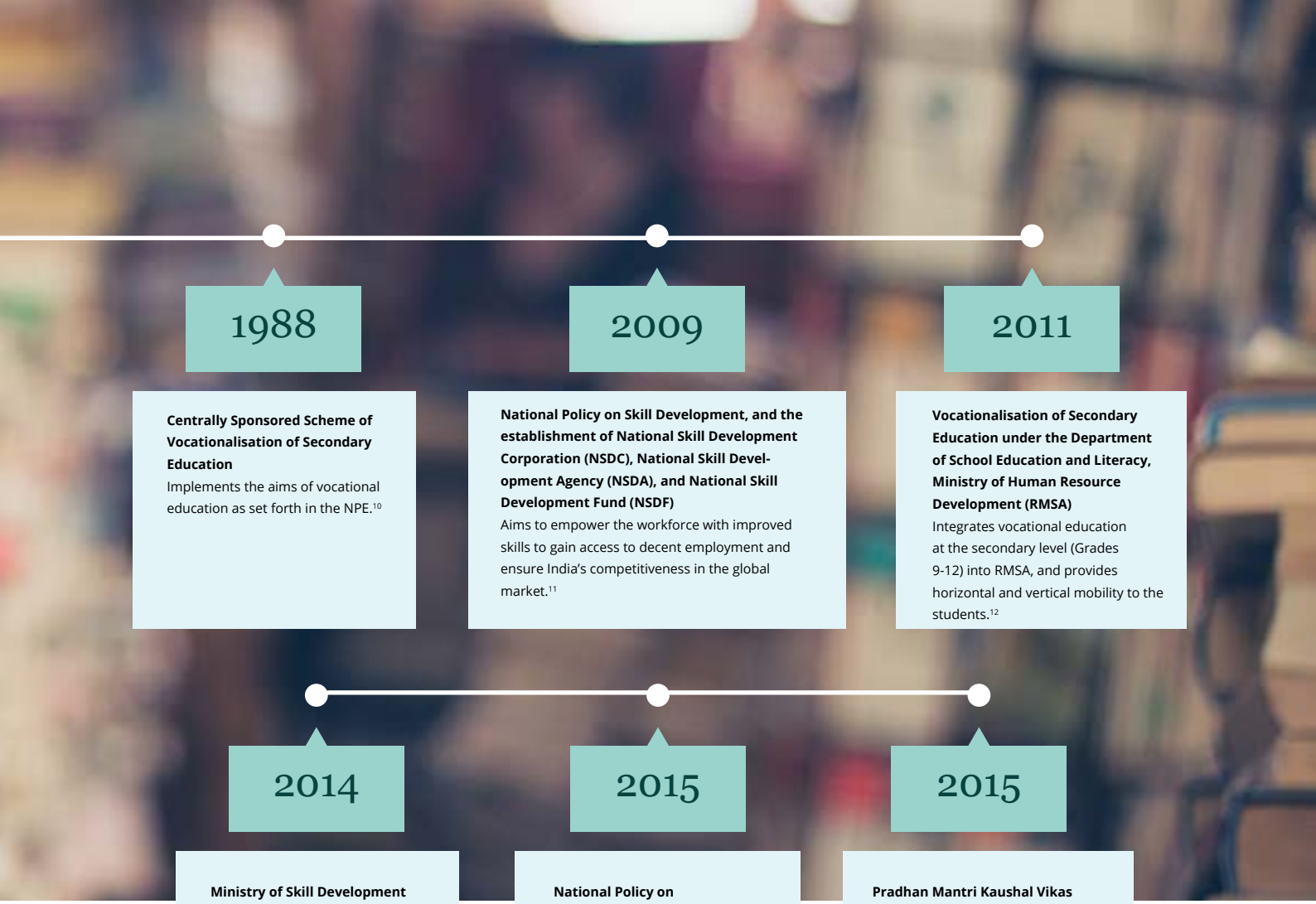
Responsibility for vocational education in secondary schools and implementation of the Apprentices Act lies with the MHRD, while TVET, which begins as early as age 16, is under the purview of the Ministry of Skill Development and Entrepreneurship (MSDE).[7] It is important to note that the majority of the policy discourse and implementation in skill development centre around the adult population (above 18 years of age), primarily because the measurable outcome of vocational/skill training is employment, and employability as a measurable concept has not found a place within the vocational education discourse.

GAPS AND TRENDS IN VOCATIONAL EDUCATION

1. Vocational education is not an "aspirational" choice

The primary reason for low participation in vocational education, as noted in the National Policy on Education 2016, is that "vocational education is not "aspirational" for the students, the parents and the community at large for a variety of reasons, social and economic.[15]" Skilling is perceived as an option only for those who have not been able to progress within the general academic system.[16] Awareness rates are low - with 100 courses across 18 sectors on offer in secondary schools,[17] these courses are still seen more as pursuit of a "hobby" rather than enablement for employment.[18] Since these students are part of the "general" stream of education, vocational courses are

7. MHRD, 2017
8. National Council for Vocational Training, 2017
9. Government of India, 1992
10. MHRD, 2016
11. Government of India, 2009
12. SSA Karnataka, 2017
13. MSDE, 2015
14. MSDE, 2015
15. MHRD, 2016
16. MSDE, 2015
17. MHRD, 2017



not seen as a link to aspirational jobs, but rather a path to informal jobs with poor pay, if at all. However, the demand for industrial training institute (ITI) courses is gradually increasing, as they are directly linked to jobs, and students who enrol are those who are specifically interested in technical courses.[19] Further, the All India Higher Education survey by MHRD in 2011-12 reveals that out of a total of 1.28 million students enrolled in 2 or 3-year diploma courses in polytechnics institutes, 82.35% are male while only 17.65% are female.

2. Low supply of institutes and qualified trainers poses a significant constraint

The two primary avenues for students between 15-18 years of age to obtain vocational education are through technical institutes or through secondary schools.

With 2,284 government-run ITIs providing a seating capacity of 498,370 and 9,860 private ITIs providing a capacity of 1,194,466,[20] a total of 1.69 million ITI seats cater to less than 2% of the 15-18 age group. Similarly, out of a total of 252,176 public and private

18. Interview with LabourNet, June 2017
19. Times of India, 2017
20. FICCI, 2015

secondary and senior secondary schools across the country,[21] only 8,227 government schools have been approved for vocationalisation, of which 6,118 have implemented vocational training programmes.[22] The vocationalisation scheme has still not been extended to private schools. This is again just 2.5% of all secondary schools which provide an option of vocational education.

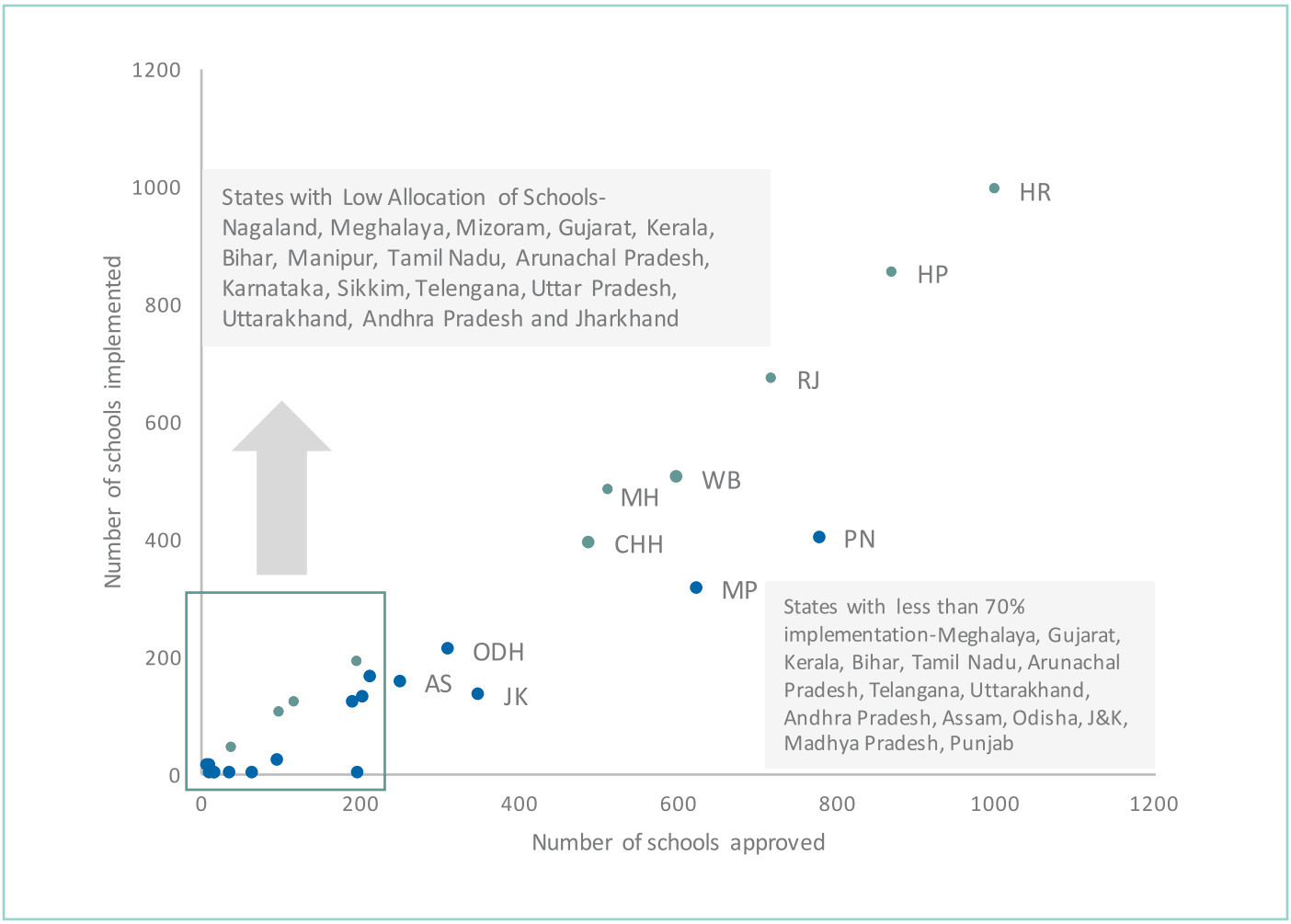


Figure 3: Vocationalisation status of secondary schools as of June 2017. Allocation and implementation of vocational education remain weak in India. **Source:** RMSA, MHRD. ***Note:*** *Implementation rate = number of schools implemented/ number of schools allocated. Union territories are excluded from the analysis above.*

Figure 3 shows state-wise status of the allocation and implementation of vocationalisation amongst secondary schools. Haryana, Himachal Pradesh and Rajasthan are the top three states in terms of both allocation and implementation of vocational training in secondary schools. States with the largest populations of youth such as Uttar Pradesh and Bihar have low allocation of schools for vocationalisation. Relatively richer states such as Tamil Nadu, Kerala and Gujarat have low implementation rates for the scheme. For the vocational stream to gain equivalence to the general stream, access must be significantly enhanced.[23] Simultaneously, awareness among students and parents regarding the benefits of the vocational stream should be enhanced.[24]

Supply constraints also exist on the trainer side. The current gross capacity of government-run institutes for 'Train the Trainers' is only 1,600 every year while the requirement for qualified trainers is more than 70,000,

21. DISE, 2016
22. RMSA, 2017
23. Interview with LabourNet, June 2017
24. MHRD, 2016

with an additional 10,000 every year.[25] Delivering all available courses therefore becomes a challenge, especially for short-term courses, due to the lack of qualified trainers. Adding to this problem is the fact that trainers lack clear career pathways, making trainer recruitment a challenge.[26]

3. Skilling is not aligned with market demand

The quality of vocational education has been further impeded by the fact that such programmes do not match industry requirements. While vocational educational curricula must be based on the National Skills Qualifications Framework set forth by MSDE, currently various norms apply across different programmes.[27] Further, support for vocational education institutions to keep abreast of the evolving demands of the industry remains inadequate.

The Sector Skill Councils (SSCs) are responsible for setting the National Occupational Standards (NOSs) as well as seeking acceptance from the industry. Vocational education curricula are typically designed based on the Qualification Packs (QPs), which detail sets of best practices based on the NOSs pertaining to specific job roles. To date, 1,011 job roles have been defined by the SSCs and in FY 14-15 alone, 335 QPs and 3,436 unique NOSs were developed.[28] However, the SSCs have been hampered by various quality and administrative issues and clear accountability is yet to be established.[29]

4. Employability skills have not been an area of focus

The prevalent definition of vocational education encompasses specific sectoral skills such as beauty, welding or carpentry, whereas employability or 'work-readiness' includes both hard technical skills as well as soft skills such as English, communication skills, problem solving, managing conflicts, amongst others, especially in more service-oriented and customer-facing job roles. Because of the lack of framework around employability, soft skills training, especially amongst the 15-18 age group, has been a significant gap – even hard data around this is currently lacking, and most of the evidence is anecdotal.[30] For instance, luxury brand retail employers, who were approached as part of an ongoing retail training programme conducted by Sattva for a client, were unanimous in their views that life skills and soft skills were the basis on which they recruit and this is currently a gap in the market.[31]

5. Apprenticeship is an untapped opportunity

India has so far seen poor implementation of the Apprentices Act 1961, which was last amended in 2014 to enable higher participation from employers. The National Apprenticeship Training Scheme (NATS) was announced to fill the mismatch between the demand and supply of technical skills, and to develop an employable cadre of candidates.[32] NATS is a one-year programme where apprentices are provided training by the organisations at their places of work and during this period receive a stipend, half of which is paid by the government.[33] However, with 12,144 employers and just over 400,000 apprentices participating in the scheme to date,[34] the Act has been evidently underutilised in light of the 1 million reaching employment age every month in India.[35] This is because of the lack of awareness among both employers and potential apprentices about the opportunities and benefits of the scheme, as well as barriers to implementation, including limited trade coverage, the number of approvals required, and rigid laws governing apprenticeship.[36]

25. MSDE, 2017
26. Tara and Kumar, 2016
27. Tara and Kumar, 2016
28. MSDE, 2017
29. Financial Chronicle, 2017
30. Interview with Dream a Dream, June 2017
31. Selecther, 2017
32. MHRD, 2017
33. MHRD, 2017
34. MHRD, 2017
35. Bhattacharya, 2016
36. Ernst and Young 2013

OUTCOMES AND INTERVENTIONS IN VOCATIONAL EDUCATION

As seen above, barriers to outcomes in vocational education exist on both the demand side (lack of information and aspiration) as well as on the supply side (lack of infrastructure, lack of trainers and outdated curricula not matching employment market demand). Interventions within vocational education for the 15-18 age group primarily fall under vocationalisation of secondary education, delivery of short-term technical and soft-skills training programmes within and outside the school, and implementation of the apprenticeship scheme.

Outreach activities, awareness building and career counselling for vocational education are still emerging areas of interventions. Technology as a lever to scale both learning interventions (for students and trainers) as well as for monitoring the demand and supply of candidates, jobs and skills is also in a nascent stage. Efforts in this direction have been isolated and in pockets. A successful illustration of using e-learning within vocational education is SkillTrain,[37] a social enterprise which uses Youtube videos and a mobile app to teach students different vocational skills in remote areas. Quest Alliance has a blended self-learning model for both trainers and students using technology platforms along with classroom facilitation, which has been successfully scaled across multiple locations.[38]

The following table outlines intervention examples in vocational education and SPOs working on these interventions, along with their legal structures and lenses.

Note: These SPOs have been selected to represent a diversity of operating models, scale, geography and partnerships with the government. This is not a comprehensive list of SPOs working on these interventions. The lens reflects the focus of intervention by the SPO.

OUTCOME	STAKEHOLDER	INTERVENTION	LENS	SPO
Enrolment	Community	Community outreach, awareness and guidance towards enrolment[39]		Quest Alliance *Charitable Trust*[40]
	Student	Career counselling and guidance[41]		Antarang Foundation *Charitable Trust*[42]
	School	Strengthening infrastructure for technical training[43]		Directly sponsored for implementation in ITIs by Samsung India Electronics Pvt. Ltd. *Private Limited Company*[44]
	School	Long-term vocational training programmes[45]		Nettur Technical Training Foundation *Charitable Trust*[46]

37. Skill Train, 2017
38. Quest Alliance, 2017
39. Short 2008
40. Dasra, 2017
41. Aggarwal, Kapur and Tognatta, 2012
42. Dasra, 2017
43. Goel, 2011
44. Samsung India Electronics Pvt. Ltd., 2017
45. UNESCO 2001
46. NTTF, 2017

OUTCOME	STAKEHOLDER	INTERVENTION	LENS	SPO
Attainment	Student, School	Provision of trainers for implementing vocationalisation[47]		LabourNet *Private Limited Company*[48]
	School	Implementation of vocationalisation in secondary schools[49]		Lend-A-Hand *Charitable Trust*[50]
	Student	Short-term vocational training courses for out-of-school children[51]		Samvada (Baduku Community College) *Charitable Trust*[52]
	Student	Facilitating apprenticeship programmes[53]		Swami Vivekananda Youth Movement *Charitable Society*[54]
	School	Technology based blending learning in ITIs[55]		Quest Alliance *Charitable Trust*[56]
	Teacher	Train the trainers[57]		Quest Alliance *Charitable Trust*[58]
Employability & Holistic Development	Student, School	In-school soft skills training programmes and work readiness[59]		Quest Alliance *Charitable Trust*[60] Medha Registered under Section 25[61]
	Student	Livelihood linkage programmes[62]		Magic Bus *Registered under Section 25*[63]
		After-school life skills programmes and youth leadership[64]		Dream a Dream *Charitable trust*[65]

FUNDING FOR VOCATIONAL EDUCATION

Government Funding

The government has budgeted USD 2,630 million to boost skill development.[66] However, it is important to note that this investment goes into skill development for the above 18 age group – there are relatively fewer avenues for funding the 15-18 year old segment.

47. RMSA, 2014
48. LabourNet, 2017
49. Maclean and Pavlova, 2013
50. LabourNet, 2017
51. NCPCR, 2013
52. Samvada, 2017
53. Molz, 2015
54. SVYM, 2017
55. Sahin 2010
56. Dasra, 2017
57. Mehrotra, et al., 2014
58. Dasra, 2017
59. UK India Business Council 2011
60. Dasra, 2017
61. Dasra, 2017
62. MSDE, 2015
63. Dasra, 2017
64. Singh and Menon, 2015
65. Dream a Dream, 2017
66. Economic Times, 2017

DFI Funding

The World Bank and Asian Development Bank (ADB) are leading efforts to improve vocational education and access to skill training early into education. Complementing the government of India's Skill India initiative, multiple rounds of funding have taken place at the central and state government level to revamp vocational education in India.

In collaboration with the World Bank, the government of India has initiated the Vocational Training Improvement Project (VTIP). The primary objective of the programme is to improve the employment outcomes of graduates from the vocational training system by making the design and delivery of training more demand-driven. The USD 280 million project aims to support 400 ITIs across the country to become centres of excellence in selected skill areas.[67]

ADB has approved the funding of the USD 80 million Himachal Pradesh Skill Development Project to assist the government of Himachal Pradesh in reforming its TVET institutions and boost the employability of Himachal Pradesh's youth. The project aims to reach around 65,000 youth over the period of 2017-2022 and expand the capacity of training by 13,000 students annually.[68]

Corporate Contributions and Impact Investing

Funding in vocational education so far has been a good mix of grants, debt and equity. Non-profits offering soft-skills training (Dream a Dream, Quest Alliance) or short-term vocational training linked to employment/livelihoods (Swades Foundation, Unnati) operate with grants, either through CSR or from foundations. NSDC has supported multiple training partners with debt funding and impact funds such as Acumen Fund and Villgro have been actively engaged in the skill development sector.

The following table presents a list of funding instances across the spectrum of funders.

Note: These are examples of funding, and the same SPO could have received funding from other funders as well which are not mentioned here. The table is not intended to recommend any one form of funding or one specific organisation.

LEGEND: **CF – Corporate Foundation, IF – Impact Fund, GF – Global Foundation, FF – Family Foundation, CSR – Corporate Social Responsibility, NA – Not Available**

FUNDER CLASS	ORGANISATION	SPO	INSTRUMENT	TICKET SIZE
CSR	Accenture, AMD, Barclays, HDFC Bank, Microsoft, Godrej	Quest Alliance designs scalable technology solutions that enable educators to address critical gaps for quality education and skills training.[69] *Charitable Trust*	Grant (2015-16)	USD 1.77 million[70]
	Ambuja Cements Ltd., Credit Suisse, Deloitte, Mahindra and Mahindra, Asian Paints, Parle, Bisleri, Trent-Westside, FICCI	Salaam Bombay Foundation works with at risk children through various life skills programmes.[71] *Registered under Section 8*	Grant	NA

67. World Bank, 2017
68. Asian Development Bank, 2017
69. Quest Alliance, 2017
70. Quest Alliance, 2016
71. Salaam Bombay, 2017

FUNDER CLASS	ORGANISATION	SPO	INSTRUMENT	TICKET SIZE
CSR	Asian Paints	Magic Bus uses Activity Based Curriculum (ABC) to improve outcomes and retention.[72] *Registered under Section 25*	Grant	NA
	Samsung India Electronics Pvt. Ltd	Samsung Technical Schools at ITIs conducts courses for specialised training along with on-the-job work experience at Samsung Service Centres.[73]	Grant	NA
	HSBC India	HSBC India established the Skills for Life programme in 2015 that focuses on: i) employment linked skill development of disadvantaged young people ii) upskilling of teachers and educators iii) enterprise development and livelihoods enhancement for women.[74] The first vertical was launched in 2015 in partnership with Swades Foundation. *Registered under Section 8*	Grant (2015-2020)	USD 7.81 million[75]
CF	EY Foundation, KPMG Foundation	Antarang Foundation runs career focused programmes with an aim to bridge the employability gap which exists among the underprivileged youth.[76] *Charitable Trust*	Grant	NA
GF	America India Foundation, Dalyan Foundation	Medha seeks to improve employment outcomes by providing skills training and career counselling to youth at their existing educational institutions.[77] *Registered under Section 25*	Grant (2017-18)	USD 0.03 million[78]
	American Jewish World Service, Bread for the world, Misereor	Samvada (Baduku Community College) is an educational institution catering to the academic needs of the rural and urban poor.[79] *Charitable Trust*	Grant	USD 0.27 million[80]
FF	Oberoi Family Foundation	Dream-a-Dream empowers children using a creative life skills approach.[81] *Charitable trust*	Grant (2013-14)[82]	NA

72. Magic Bus, 2017
73. Samsung, 2017
74. Swades Foundation, 2017
75. Swades Foundation, 2017
76. Antarang Foundation, 2017
77. Dasra, 2017
78. Medha, 2017
79. Samvada Baduku, 2017
80. Samvada Baduku, 2017
81. Dream a Dream, 2017
82. Dream a dream, 2017

FUNDER CLASS	ORGANISATION	SPO	INSTRUMENT	TICKET SIZE
FF	Sir Dorabji Tata Trust	Lend-A-Hand India partners with NGOs, community groups and local government to improve access for education for the poor.[83] *Charitable Trust*	Grant	NA
DFI	European Union	India-EU Skills Development Project aims to improve employability and promote entrepreneurship to boost economic and social development.[84]	Grant (2012-16)	USD 7.29 million[85]
	The World Bank	The Skill Development Operation Mission programme aims to increase market relevance of skill development programmes.[86]	Grant (2017-23)	USD 250 million[87]
IF	Acumen Fund[88]	LabourNet enables sustainable livelihood opportunities for disadvantaged rural and urban men, women and youth.[89] *Private Limited Company*	Equity (2013)	NA[90]

Pro-bono Support: Schneider Electric India Foundation's "Strategic Skill Development" Initiative conducts curriculum revamping of exiting ITI courses as well as residential training of trainers along with training of candidates on various technical and non-technical subjects[91].

BARRIERS TO FUNDING

While skilling is receiving a reasonable amount of focus from the government as well as CSR over the years, vocational education specifically for the 15-18 age group has not been an area of focus. This stems from a number of reasons, starting with the lack of avenues to fund. The two main interventions for this age group involve vocationalisation of secondary education and apprenticeship – both programmes are run by the government. Almost all the non-governmental interventions are crowded around life skills and counselling for in-school and out-of-school children below the age of 18 with very few SPOs focusing on technical courses for these children.

Another barrier in vocational education funding for the 15-18 segment is the lack of tangible outcomes for this segment. Most funding in skill development is focused on the 18 and above age group as interventions in this segment are expected to result in "employment" as an immediate outcome that is easier for funders to track.[92]

Further, the lack of a coherent strategy and framework in vocational education prevents funders from focusing on this segment.[93] NSQF implementation is not yet complete[94] and there are significant gaps in quality of training institutes across the value chain.[95]

83. Lend a hand, 2017
84. India EU Skills, 2017
85. Europe India Foundation for Excellence, 2015
86. World Bank, 2017
87. World Bank, 2017
88. Other funders include Michael and Susan Dell Foundation
89. Labournet, 2017
90. Acumen, 2017
91. Corporate Sustainability Initiatives India – INAWE, 2015
92. The Hindu, 2016
93. Business Today, 2013
94. The Hindu, 2016
95. Accenture, 2013

RECOMMENDATIONS

Enrolment

- **Perception barriers:** Changing perceptions about vocational education and helping students understand opportunities in vocational education and apprenticeship could yield significant returns in the long term by improving enrolment in vocational education and bridging the demand-supply mismatch in technical roles. Funders could therefore support outreach and counselling efforts in vocational education aimed at students, parents and the larger community.

Attainment and Employability

- **Research and evidence building:** Mobility between the general and vocational streams and increased equivalence between the two can only be achieved by increasing the reach of vocational education beyond government schools, simplifying the qualification framework, creating a dynamic mechanism for designing industry-relevant curricula and by documenting successful models for implementing the Apprentices Act. These activities need concerted research and evidence building, and funding in this area is an urgent need.[96]
- **Trainer certification:** Investment in trainer certification, either by partnering with existing government/private 'train the trainers' initiatives or creating standalone programmes, is critical, without which the skilling targets of the country cannot be met.
- **Employability metrics:** In light of the lack of a clear and unified impact framework around vocational education, defining industry-relevant

96. Interview with LabourNet, June 2017

employability metrics and supporting SPOs to achieve such metrics are potential avenues where funders, especially corporates, can maximise impact.[97]

- **Cross-sector collaboration:** Partnerships between the government, corporates (particularly employers), academia and training institutes are paramount to ensure that vocational education is demand-led and relevant. Forging such collaboration at the ecosystem level would enable funders to create meaningful impact.

97. Interview with Quest Alliance, June 2017

INCLUSIVE EDUCATION

> **"No education target should be considered met unless met by all. We therefore commit to making the necessary changes in education policies and focusing our efforts on the most disadvantaged, especially those with disabilities, to ensure that no one is left behind."**
>
> **- Incheon Declaration, World Education Forum 2015[1]**

In 2014, an estimated 2.14 million children in the age group of 6-13 years were characterised as children with special needs (CWSN) in India[2], of which 62%[3] -72%[4] received some form of education. The United Nations Convention on the Rights of Persons with Disabilities describes persons with disabilities as "those who have long-term, physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others."[5] In this report, the term 'inclusive education' is used to describe a system that offers CWSN access to education through integration into regular schools, special schools, and other alternative education models.

POLICY FRAMEWORK

In India, as in many other lower-middle-income countries, there has been a gradual shift in the approach to education for CWSN from a purely 'segregated'[6] model to an 'integrated' approach and to one of 'inclusion.'[7] Education for CWSN falls under both the Ministry of Social Justice and Empowerment (MoSJE) and the Ministry of Human Resource Development (MHRD). The following timeline describes key milestones in India's inclusive education policy:

1. UNESCO, 2015
2. Social & Rural Research Institute, 2014
3. UNICEF, 2014
4. Social & Rural Research institute, 2014
5. United Nations
6. Kohama, 2012
7. Rao, 2003

POLICIES IN INCLUSIVE EDUCATION - A TIMELINE

1974

Scheme for Integrated Education for Disabled Children[8]
Integrates children with disabilities into regular school systems by providing allowances and facilities.

1986

National Policy of Education[9]
Seeks to integrate CWSN into regular schools with those with severe disabilities being educated in special schools.

1994

District Primary Education Program (DPEP)[10]
Launched to achieve universalisation of primary education with a focus on identifying specific interventions required at the district level.

1996

Persons with Disabilities Act[11]
Makes it mandatory to provide free education to all children with disabilities till the age of 18.

2002

Sarva Shiksha Abhiyaan (SSA)[12]
Adopts "zero-rejection policy" to ensure every child with special needs is provided education in an appropriate environment.

2009

Right of Children to Free and Compulsory Education Act or Right to Education (RTE) Act
Makes education a fundamental right of every child between the ages of 6 and 14 and specifies minimum norms in primary schools.

2015

Accessible India Campaign[13]
Focuses on: i) Built Environment Accessibility, ii) Transportation System Accessibility, and iii) Information and Communication Eco-System Accessibility.

2016

The Rights of Persons with Disabilities Act[14]
Mandates that all educational institutions recognised or funded by the government must provide inclusive education to CWSN.

GAPS AND TRENDS IN INCLUSIVE EDUCATION

1. There is a need for accurate estimates on the number of CWSN

Analysing the progress of inclusive education is a challenge not just for India but across the world due to the scarcity of reliable and comparable data on disabilities.[15] The Indian Census is the only nationwide enumeration for disabled people; yet, the census question on disabilities often gets missed or misinterpreted due to varying definitions of what disabilities mean as well as the discomfort associated with asking and answering the question.[16] While WHO estimates that 15% of the world's population deal with disabilities,[17] Census 2011 estimates that 2.21% of India's population is disabled, much lower than the expected average.

Despite the lower estimate, a few trends are discernible — a larger share of the disabled population reside in rural India (69% or 18.6 million)[18] and nearly 50% of disabled children live in one of 5 largest states in terms of population - Uttar Pradesh (15.5%), Maharashtra (11.05%), Bihar (8.69%), Andhra Pradesh (8.45%), and West Bengal (7.52%).[19]

8. NHFDC, 2017
9. NCERT, 2017
10. DPEP, accessed June 2017
11. Government of India, 2016
12. World Bank, 2009
13. Accessible India , 2017
14. Government of India, 2016
15. UNESCO, 2017
16. Mampatta, 2015
17. WHO, 2017
18. MOSPI, 2016
19. MOSPI, 2016

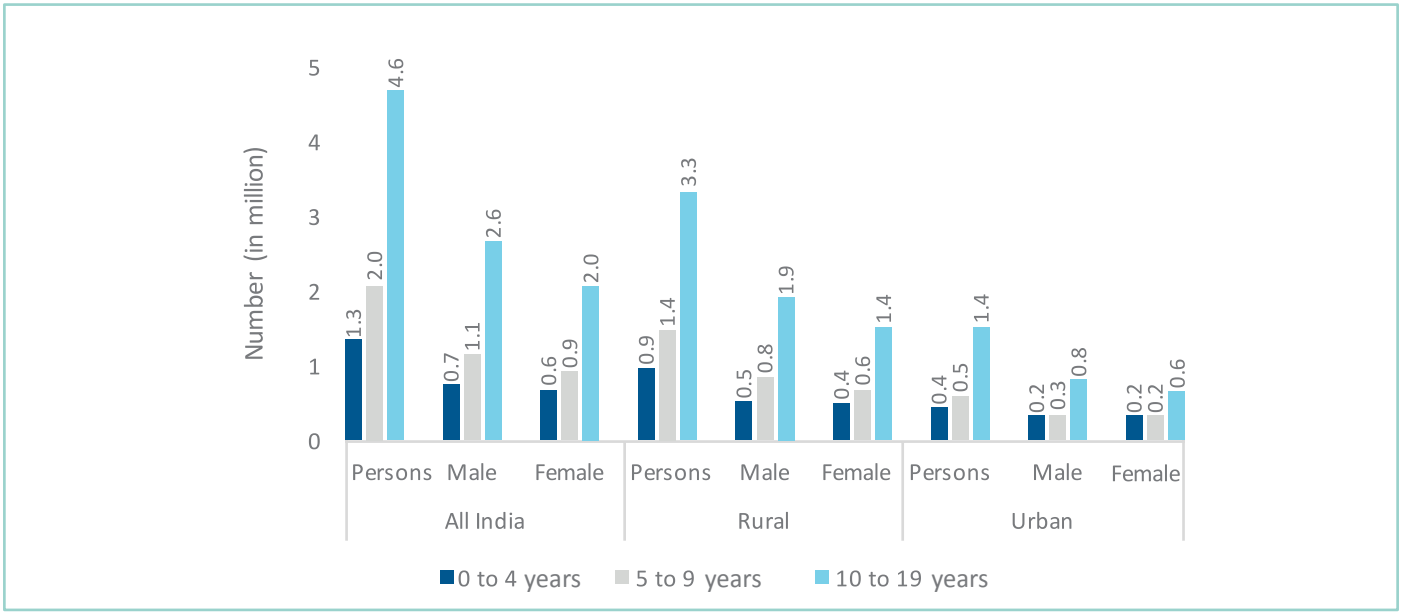


Figure 1: 69% of disabled children reside in rural India. **Source:** Census 2011

2. Enrolment and retention of CWSN are low

While India has achieved near universalisation of education in the 6-13 age group with 2.97% of children out of school,[20] 28.23% of CWSN, or 0.6 million children, are out of school.[21] This is 10 times as much as the India out-of-school population. The percentage worsens by types of disabilities: 44.13% children suffering from more than one type of disability and 35.97% of children with intellectual disability (ID) are out of school.[22] Secondary and higher secondary enrolment are far lower than the primary level (Figure 2), signifying an increase in dropouts with grades largely due to the inability to cope with the mainstream education system.

Children with ID and their families face particularly challenging circumstances. Most special schools have minimum criteria for admission, which include managing activities of daily life and independent decision-making by the students, both of which need assistance when it comes to ID.[23]

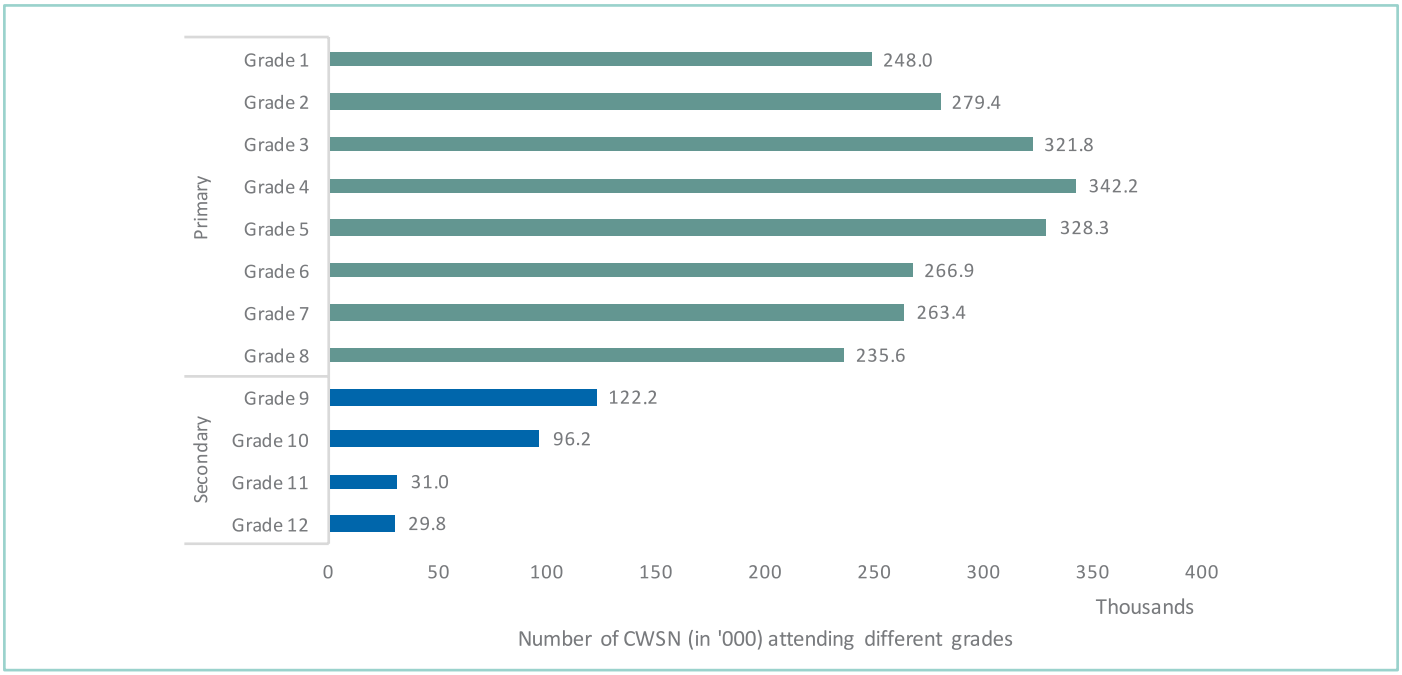


Figure 2: Dropout rates among CWSN increase with grades. **Source:** India Spend

20. Social & Rural Research Institute, 2014
21. Social & Rural Research Institute, 2010
22. Social & Rural Research Institute, 2010
23. Rao, 2008

3. Schools are inadequately equipped to integrate CWSN

CWSN's accessibility to schools includes physical access as well as successful integration of CWSN into regular classrooms, which requires alleviation of attitudinal barriers, customised pedagogy, trained teachers and counsellors. Available data shows that less than 60% of teachers working in government schools have had formal training on working with CWSN. In addition, training provided is often introductory with no accompanying aids or tools, or follow-up mechanisms.[24] In Karnataka, for example, in 2012–13, there were 825 teachers with a degree in special education working in government and aided schools, while in the same year, 147,000 children in Karnataka were identified as CWSN.[25] Even with a conservative pupil-teacher ratio of 30:1, an additional 4,900 teachers with training in special education are needed. The National Council of Educational Research and Training (NCERT) has come up with easy-to-use training kits[26] for teachers but there is no data available on their implementation.[27] These issues multiply for children with ID, with a complete lack of standardised curriculum, training and assessment of their learning levels.[28]

4. Measuring learning outcomes has not been an area of focus

The focus of education for CWSN has been on access, while learning outcomes have not been measured in any rigorous way. One study which mentions learning outcomes highlights that CWSN fare worse on attainment: "Children who reported to have a physical impairment scored, on average, 12 scale points less than their peers in reading comprehension even after controlling for background characteristics."[29]

The SSA stipulates that CWSN should have access to a multi-option model of education delivery that provides them with need-based skills such as simple daily activities, functional literacy and vocational skills in the most appropriate learning environment. Basic literacy, numeracy and reasoning skills should therefore be important learning outcomes to be assessed for all progammes catering to CWSN.[30]

5. Girls with disabilities face double discrimination

Girls with disabilities face double discrimination as gender inequalities that persist in education are compounded by special needs.[31] While the gender split of the overall enrolment is almost equal, the share of enrolment for boys with special needs is higher. For example, a look at enrolment of CWSN in primary education shows that there are about 1.3 million boys and 0.97 million girls — 15% more boys enrolled in school than girls.[32]

24. Krishnakumar, 2017
25. Kulkarni, 2016
26. NCERT, 2014
27. Kulkarni, 2016
28. Rao, 2008
29. Singal 2016
30. Singal 2016
31. Singal 2016
32. DISE, 2015-2016

6. Disabled youth are underrepresented in the workforce

Various small-scale studies indicate that employment of persons with disabilities is very low in public and private organisations alike,[33] and unemployment rates differ by types of disabilities, location (rural/urban) and gender.[34] The majority of disabled people are outside the workforce, with disabled women in urban India being the most likely to be unemployed (Figure 3). Disabled youth therefore represent a significantly untapped potential workforce. The inequality they have been facing in gaining meaningful employment translates into missed opportunities for companies to increase their top and bottom lines, enhance staff morale and improve performances of other employees. In light of deficient career opportunities, barriers to education faced by disabled youth will unlikely be mitigated, and efforts to integrate them into the society will not be fruitful.

OUTCOMES AND INTERVENTIONS IN INCLUSIVE EDUCATION

Until almost a decade ago, most interventions in inclusive education were built on a care-based framework[35] – which meant a segregated model of private education, mostly home-based, for CWSN. The SSA, which adopts a "zero rejection policy", promotes multiple options of education for CWSN in the most appropriate environment including mainstream schools, special schools and home-based education. Despite a positive policy framework in place, a number of factors have impeded the effective implementation of inclusive education. These include: a lack of disaggregated data on children with disabilities which prevents proper targeting of interventions,[36] attitudinal barriers amongst parents and the larger community,[37] poor physical access,[38] and pedagogical barriers.[39] For adolescents and youth with disabilities, inadequate avenues for skilling and livelihoods prevent them from fully participating in the society and effectively contributing to the economy.[40]

The majority of the interventions in inclusive education, therefore, revolve around identification and enumeration of CWSN, enrolment into mainstream schools, supporting parents of CWSN with counselling and training, and building teacher capacity to handle diverse needs in a classroom. One of the newer areas

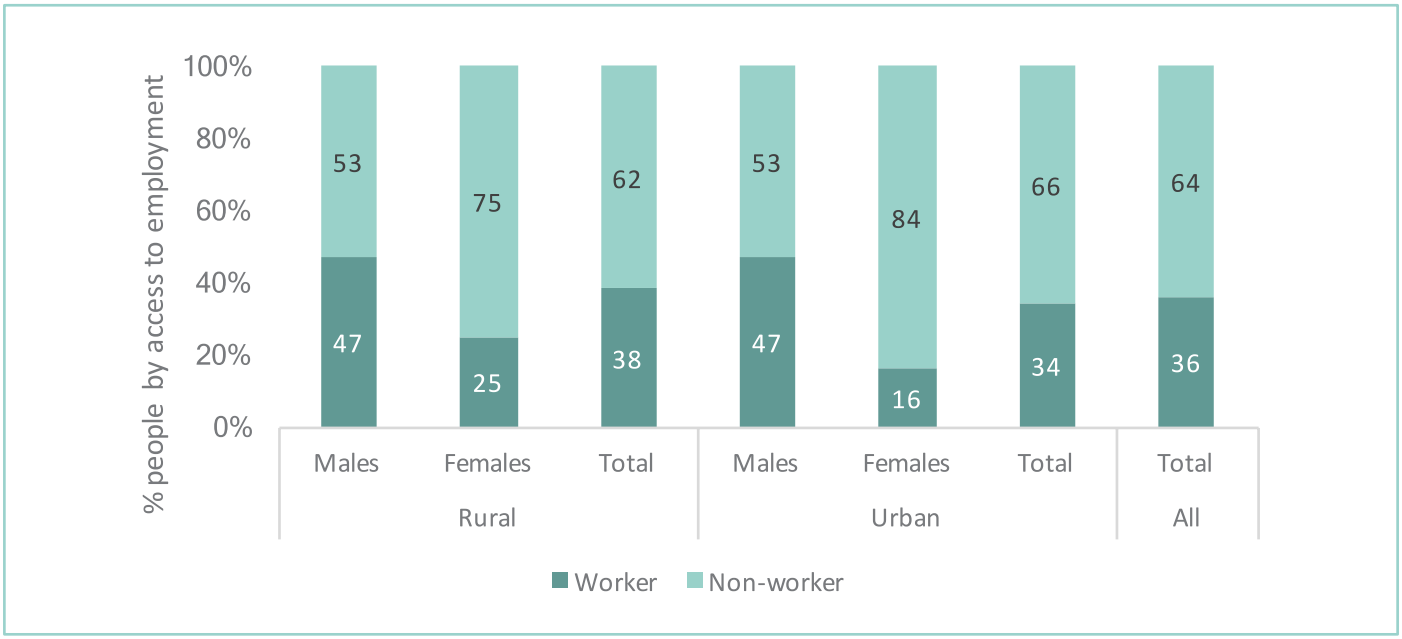


Figure 3: The majority of disabled persons are outside the workforce with disabled females in urban India being the most likely to be unemployed. **Source:** Census 2011

33. Economic Times, 2015
34. The World Bank, 2009
35. National Focus Group on Education of Children with Special Needs, 2006
36. The World Bank, 2015
37. The World Bank, 2009
38. Limaye, 2016
39. IDDC, 2016
40. UNDP, 2012

of focus has been innovative and low-cost assistive technologies to support CWSN to communicate effectively and increase mobility and to augment existing learning processes. For instance, Innovision and Invention Labs provide affordable digital Braille aid and communication app for children with speech disabilities, respectively.

Current models of educating CWSN are predominantly implemented by grant-funded non-profits and these include standalone special schools, alternative and non-formal centres, as well as partnerships with the government in integrating CWSN into regular schools and providing home-based education to the severely disabled.

The following table outlines intervention examples in inclusive education and SPOs working on these interventions, along with their legal structures and Lenses.

Note: These SPOs have been selected to represent a diversity of operating models, scale, geography and partnerships with the government. The lens reflects the focus of intervention by the SPO.

LENS LEGEND Government Rural Urban Gender Marginalised Private

OUTCOME	STAKEHOLDER	INTERVENTION	LENS	SPO
Enrolment	Student	Bridge programmes for integration[41]		Ummeed *Registered under Section 25*[42]
	Student	Standalone schools for CWSN[43]		Aakanksha Lions School for Mentally Handicapped *Charitable Society*[44]
	Community	Identification and assessment of disabilities[45]		Jai Vakeel Foundation *Charitable Society*[46]
	Community	Outreach and awareness towards enrolment[47]		Fourth Wave Foundation *Charitable Trust*[48]
	Teacher	Outreach, awareness and sensitisation[49]		Manovikas Kendra *Charitable Society*[50]
	School	Strengthening infrastructure in schools for access[51]		Tata Consultancy Services *Private Limited Company*
Retention, Attainment, Health and Well-being	Student	Therapy, regular counselling and rehabilitation[52]		Ambuja Cement Foundation *Registered under Section 25*[53]

41. Sreenath, 2007
42. Ummeed, 2017
43. Sreenath 2007
44. Indian NGOs List, 2017
45. Chadha 2005
46. Dasra, 2017
47. Hoogakker, 2017
48. Fourth Wave Foundation, 2017
49. Hoogakker, 2017
50. Manovikas Kendra, 2017
51. ADB 2010
52. Technical Support Group (SSA), 2010
53. Indian NGO List, 2017

LENS LEGEND Government Rural Urban Gender Marginalised Private

OUTCOME	STAKEHOLDER	INTERVENTION	LENS	SPO
Attainment	Teacher	Customised curriculum and lesson plans [54]		Jai Vakeel Foundation *Charitable Society* [55]
	Student	Assistive technology [56]		Innovision *Private Limited Company* [57] Invention Labs *Private Limited Company* [58]
	Teacher	In-service teacher training [59]		Action for Ability Development and Inclusion (AADI) *Charitable Society* [60]
Employability	Student	Home-based and centre-based vocational training [61]		Victoria Memorial School for the Blind, Mumbai *Charitable Trust* [62] Sarthak Educational Trust *Charitable Trust* [63]
	Student	Career counselling and employment [64]		Enable India *Charitable Trust* [65]
Holistic Development	Student, Community	Holistic well-being programmes [66]		Samarthanam Trust Charitable Trust [67]

FUNDING FOR INCLUSIVE EDUCATION

According to the World Bank, return of investment in education of persons with disabilities is 2 to 3 times higher than in persons without disabilities.[68] It is further stated that returns are even higher on investments in policies and programmes such as Digital Accessible Information System (DAISY) and sign language.[69] Making education and labour markets inclusive helps people with disabilities become independent and productive individuals, and contributing members of society. The primary funder in inclusive education in India, as in most countries, is the government. While corporate and family foundations have been the primary supporters of the disability cause, CSR has been given a new thrust with the passage of the Rights of Persons with Disabilities Act in 2016 which now provides corporates with further avenues to deploy funds in inclusive education.[70]

54. Ahmad, 2015
55. Dasra, 2017
56. Ahmad, 2015
57. Innovision, 2017
58. Invention Labs, 2017
59. MHRD, 2014
60. Aadi, 2017
61. Sreenath 2007
62. Help Your NGO, 2017
63. Sarthak Education Trust, 2017
64. Mohanty 2015
65. Indian NGOs List, 2017
66. Shrivastava, Shrivastava and Ramasamy 2015
67. Indian NGOs List, 2017
68. Patrinos, 2015
69. Daisy Consortium, 2017
70. Manku 2017

Government Funding

An analysis of the 2017 budget shows that there has been increased budget allocation for inclusive education compared to the previous years.[71] Specific allocation within the ambit of SSA has gone up almost 21% from USD 86.01 million to USD 132.53 million between 2014 and 2016, which provides a significant and positive thrust for inclusive education. However, this allocation is very low relative to the population of persons with disabilities in India — only 0.0039% of the 2017 budget was allocated to persons with disabilities who constitute at least 2.21% of the total population.

DFI Funding

DFIs have chosen to fund inclusive education through facilitating and optimising implementation of government schemes (the World Bank and DPEP,[72] UNICEF and Integrated Child Development Services[73]) as well as giving direct grants to SPOs working in the space (the UK Government's Department for International Development). An interesting and early funding model was the Community School Programme - a unique multi-state, multi-agency initiative launched in 2003 with the aim towards universal primary education. UN organisations including UNDP, UNICEF, the United Nations Population Fund (UNFPA), UNESCO and ILO participated in the programme in partnership with 5 nodal ministries and 9 state departments. Support has been provided primarily for improving teacher quality in the use of interactive, child-centred and gender-sensitive methods of teaching with a special emphasis on girls and CWSN.[74]

The UK Government's Department for International Development (DFID) funded the Poorest Areas Civil Society (PACS) programme. Launched in April 2009, the USD 40.16 million 7-year programme ended in March 2016. It gave out USD 20.33 million in grants to SPOs to support socially excluded groups.[75]

Grant recipients included the School for Potential Advancement and Restoration of Confidence (SPARC) which works in the space of inclusive education.[76]

Corporate and Philanthropic Contributions

While Section 135 of the CSR Act outlines investment in education, there is no separate category listed for investment in inclusive education. Among corporates, the IT sector has been the largest funder in disability-related programmes – with roughly 15% of all CSR funds from the IT sector being deployed in this area compared to an average of 2% across all sectors.[77] An analysis of 567 CSR projects implemented by 151 corporates in FY 16 in the space of education reveals that only 29 corporates are working in the space of inclusive education, implementing a total of 43 projects worth USD 5.6 million, less than 1% of the education CSR spending.[78]

A similar analysis of 40 corporate foundations and 92 CSR projects in FY 16 reveals only 7 projects in inclusive education, of which 5 work directly with persons with disabilities and one each on girl children and infrastructure. There is no CSR funding at the ecosystem level.[79]

Impact Investment

An analysis of 52 impact investment deals supporting 35 different investees focusing on education in India reveals a total of USD 136 million of capital raised — out of which USD 1.7 million has been invested in inclusive education through 2 deals. The investees are primarily technology firms creating assistive technologies such as communication apps and Braille readers.

The table below presents a list of funding examples across the spectrum of funders.

71. CBGA 2017
72. UNICEF 2003
73. UNICEF 2003
74. UNICEF 2003
75. PACS, 2017
76. PACS, 2017
77. Manku, 2017
78. Sattva analysis
79. Sattva analysis

Note: These are examples of funding, and the same SPO could have received funding from other funders as well which are not mentioned here. The table is not intended to recommend any one form of funding or one specific organisation.

LEGEND: CF – Corporate Foundation, IF – Impact Fund, GF – Global Foundation, FF – Family Foundation, CSR – Corporate Social Responsibility, NA – Not Available

FUNDER CLASS	ORGANISATION	SPO	INSTRUMENT	TICKET SIZE
CSR	Accenture	Enable India trains and counsels persons with disabilities and prepares them to join the mainstream workforce.[80] *Charitable Trust*	Grant (2016)	USD 0.25 million[81] to 3 non-profits
	Ambuja Cement	Ambuja Manovikasa Kendra is a special school in Punjab providing functional and vocational education for children with ID.[82] *Registered under Section 25*	Grant (2015-16)	USD 4.56 million[83] towards all education projects
	Citibank (India Innovation Grant Programme)[84]	Samarthanam Trust runs barrier-free residential schools for the disabled and a special school for children with intellectual disability.[85] *Charitable Trust*[86]	Grant (2016)	NA
	Credit Suisse[87]	Jai Vakeel Foundation runs multiple initiatives such as a special school for CWSN, independent education programmes with therapy, assessment of CWSN and bridge courses to enable CWSN to join regular schools.[88] *Charitable Society*	Grant (2016)	NA
	IBM India[89]	Victoria Memorial School for the Blind, Mumbai, works towards empowering visually impaired boys through multiple initiatives such as free holistic education, vocation-based training programmes, extra-curricular activities including music and art, and boarding and lodging.[90] *Charitable Trust*	In-kind grant in the form of hardware and software for Victoria Memorial school (2016)[91]	NA
	Mphasis[92]	Fourth Wave Foundation runs multiple initiatives to enrol CWSN in schools including "Nanagu Shaale", which works with different government and community stakeholders in Karnataka to build a scalable model for inclusive education.[93] *Charitable Trust*	Grant (2014 onwards)	NA

80. Enable India, 2017
81. Accenture, 2016
82. Ambuja Cement, 2017
83. Ambuja Cement, 2016
84. Citibank, 2016
85. Indian NGOs List, 2017
86. Indian NGOs List, 2017
87. Credit Suisse, 2016
88. Jai Vakeel Foundation and Research Centre, 2017
89. IBM India, 2006
90. The Victoria Memorial School for the Blind, 2017
91. Turnstone Global, April 2017
92. Mphasis, 2017
93. Fourth Wave Foundation, 2017

FUNDER CLASS	ORGANISATION	SPO	INSTRUMENT	TICKET SIZE
	Wipro	12 projects reaching 2,500 children through various SPOs and schools across cities.	Grant (2015-16)	USD 0.08 million[94]
CF	Tech Mahindra Foundation[95]	Sarthak Educational Trust runs multiple activities for CWSN to create an enabling environment for learning including assessment, remedial classes, rehabilitation and awareness workshops for teachers, parents and school management.[96] *Charitable Trust*	Grant (2015-16)	USD 0.41 million for the special needs education programme (ARISE+)[97]
	Cipla Foundation[98]	Ummeed runs multiple interventions including specialised therapy and care for children with developmental disabilities, research, advocacy and training of teachers.[99] *Registered under Section 25*	Grant (2016)	NA
FF	Narotam Sekhsaria Foundation[100]	Action for Ability Development and Inclusion (AADI) runs multiple interventions including research, advocacy and the School of Rehabilitation Sciences (SRS), which conducts pre-service and in-service training programmes to create a cadre of professionals addressing specific needs of persons with disabilities.[101] *Charitable Society*	Grant	NA
GF	Paul Hamlyn Foundation[102]	Aakanksha Lions School for Mentally Handicapped, which started as a special school for persons with intellectual disability, now also runs a vocational training centre for mentally challenged adults and recognised degree programmes for teachers in special education and therapy centres.[103] *Charitable Society*	Grant (2012-13)	USD 84,389[104]
	The Hans Foundation[105]	Satya Special School provides rehabilitation therapy for children with physical and intellectual disabilities.[106] *Charitable Society*	Grant (2015)	USD 0.11 million[107]

94. Wipro, 2016
95. Sarthak Educational Trust, 2017
96. Sarthak Educational Trust, 2017
97. Tech Mahindra Foundation, 2016
98. Ummeed, 2017
99. Ummeed, 2017
100. Narotam Sekhsaria Foundation, 2017
101. AADI, 2017
102. Aakanksha, 2017
103. Aakanksha, 2017
104. Paul Hamlyn Foundation, 2012-13
105. The Hans Foundation, 2017
106. The Hans Foundation, 2017
107. Satya Special School, 2015

FUNDER CLASS	ORGANISATION	SPO	INSTRUMENT	TICKET SIZE
IF	Angel Investors (Individual HNWIs)[108]	Innovision creates low-cost electronic Braille readers for the visually impaired.[109] *Private Limited Company*	Equity (2016)	USD 0.19 million[110]
	Inventus Capital, The Mumbai Angels[111]	Invention Labs creates assistive technologies for children with autism to help them communicate and integrate effectively into the society. *Private Limited Company*	Equity (2016)	USD 0.51 million[112]
DFI	DFID's Poorest Areas Civil Society (PACS)[113]	School for Potential Advancement and Restoration of Confidence (SPARC) India runs multiple initiatives such as medical interventions, awareness programmes, resource centres and linking persons with disabilities to government schemes. *Charitable Society*	Grant (up to 2014)	NA

Technical Assistance: The REACH India programme is an initiative funded by USAID to reach 200,000 out-of-school children in 6 geographical locations, implemented on the ground through partners including Ummeed, AADI, Manovikas Kendra and Digdarshika.[114] REACH India Programme's interventions include: (i) strengthening of NGO capacity, (ii) capacity building and promotion of networks among NGOs, (iii) encouraging relationships between government programmes and NGO interventions and (iv) Introduction of specific tools and methods.
Pro-bono: NASSCOM Foundation seek to improve employability in the IT sector by funding innovations in disabilities through the National Social Innovation Forum. In addition, NASSCOM Foundation helps organisations working on disabilities build capacity and embed technology in their operations.[115]

BARRIERS TO FUNDING

One of the major challenges hampering larger-scale interventions that would attract funding in inclusive education is the lack of reliable data on needs, educational participation and achievement of CWSN.[116]

Not many SPOs have reached scale in the inclusive education sector. Smaller scale implies that SPOs cannot afford to build staff capacity as these would drive up administrative costs.[117] Given the scattered nature of efforts, these SPOs often do not have the capacity or processes in place to meet the reporting, assessment and other requirements of funders.[118] The lack of skilled educators and counsellors who contribute to achieving outcomes is another factor that affects the decisions of funding organisations.[119]

In terms of impact funding, larger funds and institutional investors tend to seek investments with lower perceived risks and greater potential for returns to capital.[120] SPOs in the inclusive education space often do not meet these criteria due to low scalability[121] and lack of frameworks or tools to measure progress. Effective solutions also require significant support activities among community,

108. Rao, 2016
109. Innovision, 2017
110. Ayyar & JI, 2016
111. Peer, 2014
112. Ayyar & JI, 2016
113. PACS, 2017
114. Sreenath, 2007
115. NASSCOM Foundation,2017
116. Sæbønes, 2015
117. Interview with Edelgive Foundation,June 2017
118. Interview with Deutsche Bank, June 2017
119. Yadavar, 2017

parents and other stakeholders which investors often do not prioritise.[122]

RECOMMENDATIONS

The following recommendations emerge from gaps, interventions and funding analysis outlined above, as well as interviews with funders and SPOs working on inclusive education:[123]

Enrolment and Retention

- **Data collection and identification of CWSN**: A supportive policy framework has been in place for a few decades for inclusive education, and is strengthened through recent changes. However, data collection on CWSN remains inadequate, which poses a significant challenge in identifying children who need interventions. Investment in creating systems for data collection and identification of CWSN is a critical need across the country.
- **Supporting girls with disabilities:** As noted, girls with disabilities face double discrimination with regards to access to education and employment opportunities. They therefore require special interventions that address both gender disparity and special needs education. Funding for such interventions is paramount to enable them to effectively acquire skills and participate in the workforce.
- **Counselling and advocacy:** Prevalent attitudinal barriers to inclusive education for CWSN mean that interventions around community advocacy, parent counselling, and integration support for government programmes should be promoted. Social investment in these areas could go a long way in increasing enrolment and retention rates among CWSN.

120. D. Capital Partners, 2013
121. Interview with Deutsche Bank, June 2017
122. Chodos & Johnson, 2016
123. Interviews with Mphasis CSR, Jai Vakeel Foundation and Nadathur Foundation, May and June 2017

Attainment and Employability

- **Teacher capacity and pedagogy:** Irrespective of the models of inclusive education, specialised curriculum development and building teacher capacity are critical to improving learning outcomes and employability for CWSN. Employing special educators/counsellors under the SSA, for instance, has produced proven results in integrating CWSN effectively into schools and should be scaled.[124] Further, a more systemic approach to providing continued professional development and appropriate support for teachers is important for them to be able to overcome challenges.
- **Assistive technologies:** In light of the scale and returns possible in assistive technologies which support therapy, mobility and enhanced learning for CWSN, this is an area of opportunity for impact funding. Integrating such technologies into the classroom and building them into pedagogy might be other potential areas that impact investors as well as other funders can consider.
- **Skilling and career pathways for disabled youth:** Disabled youth remain a significantly untapped productive workforce. Efforts to improve their employability and effectively integrate them into the workforce could help to alleviate attitudinal barriers towards education for CWSN. Further, it is an area that can yield substantial social returns for companies looking to maximise their CSR impact. The International Labour Organisation (ILO) reports that hiring persons with disabilities can have a positive impact on the company bottom-line and can result in a stronger company morale and improved performance of co-workers.[125]

124. Yadavar, 2017
125. ILO, 2014

ECOSYSTEM FUNDING

> **"One critical insight we've gleaned from our work is that funders seeking impact at scale must view their work within the context of a broader ecosystem and adjust their behaviour in response to change within that system."[1]**
>
> **Edmondson et al, 2015**

As the Indian education system undergoes a profound shift from focusing on access to ensuring quality, the need for various structures to design, measure and scale quality initiatives has become more imperative. In turn, this requires a concerted approach towards innovations and investment across the ecosystem. Understanding the ecosystem is therefore the first step to affect systemic change for any intervention, SPO and funder purporting that intervention.[2]

Ecosystem funding aims to create "system-level change by influencing specific stakeholder groups such as policymakers, HNWIs, business leaders, entrepreneurs and others."[3] They also focus on "the connectivity among the range of programmes and service providers in communities," and address "systems-level topics such as funding flows, policies, coordination, and de-fragmentation among sectors, as well as leadership capacity building."[4]

Ensuring every child enjoys quality education involves a complex set of activities — from addressing gaps in policy frameworks to overcoming challenges in teacher quality and pedagogy to scaling organisations, among others. Issues may occur across levels ranging from the firm itself to the industry value chain and ultimately to government policies and actions,[5] including deficit in financial resources or knowledge, a lack of network and influence and poor understanding

1. Edmondson et al, 2015
2. Bloom and Dees, 2008
3. Mack and Lisak, 2016
4. Hills and Bockstette, FSG and CECP, 2015
5. Koh et al, FSG, 2014

of barriers.[6] Addressing these requires facilitating organisations and initiatives that work at an ecosystem level.[7] Ecosystem funding allows multiple actors to join forces and effectively and efficiently create sustainable impact at scale.

BARRIERS TO FUNDING

Despite the obvious advantages of investing in potentially game-changing interventions at the ecosystem level, less than 3% of philanthropic funding goes into building capacities of SPOs and ecosystem-level institutions for creating sustained societal change.[8] Similarly, an analysis of 151 companies and 567 projects revealed only five companies implementing six projects that support ecosystem interventions, amounting to a CSR spending of just USD 7.4 million.[9] The data revealed no evidence of impact funding going into this space.[10]

The following are some key barriers to ecosystem investing:

Impact is difficult to measure

Impact resulting from ecosystem interventions such as capacity development or stakeholder convening is typically more difficult to assess as compared to the more tangible measures of programmatic interventions such as school enrolment and teacher training.[11] Current monitoring practices that emphasise impact attribution reflect this difficulty.

Understanding that ecosystem initiatives need to be measured for "contribution" and not "attribution" is an important step in this direction. Since impact achieved through ecosystem interventions is brought about through the combined efforts of different partners, it is more important to understand how

6. Koh et al, FSG, 2014
7. Koh et al, FSG, 2014
8. McKinsey, 2013
9. Sattva analysis, 2017
10. Sattva analysis, 2017
11. Karunakaran, 2014

such joint efforts have produced positive changes that affect various actors in the ecosystem, as opposed to attributing that impact to individual partners.[12]

Opportunities for ecosystem funding are insufficient

The scarcity of interventions at the ecosystem level is also an issue. While there is not yet a comprehensive mapping of such interventions in the education space in India, the number of incubators, accelerators and capacity builders relative to NGOs is one instance which may shed some light on this. There are 16 social incubators, accelerators and capacity builders as identified by AVPN[13] compared to more than 3.1 million NGOs in India.[14] This signifies a need for more funding towards strengthening the capacity of SPOs, improving financial flows as well as creating a common pool of knowledge and tools to enable them to operate more effectively and efficiently. Further, scaling social impact necessitates an evaluation of the ecosystem to find the right partners and secure sufficient financing.[15]

Public-private partnerships remain challenging

The government of India is the largest funder and provider of education in India. Partnering with the government could thus potentially result in systemic impact affecting a larger number of stakeholders, especially students, across the country. Nonetheless, public-private partnerships (PPP) in the education sector have not been without challenges.
Private aided schools, which are privately managed with grants and infrastructure support from the government, are the oldest and most common forms of PPP in India. However, they have not brought about improved learning outcomes.[16] PPP models implemented by local governments such as those in Punjab, Rajasthan and Mumbai have encountered viability issues as private operators have been unable to achieve scale.[17]

GAPS AND OPPORTUNITIES

Based on an extensive analysis of the Indian education ecosystem, the following gaps and opportunities for ecosystem funding have been identified:

1. Creation of Commons

Common needs which are addressed by market infrastructure are most economically served in collective form.[18] In the space of education, such common needs include curricula, standards, data on overall performance (such as learning outcomes), methodologies and tools for teachers, students and school management. The lack of such commons often results in multiple organisations duplicating efforts

to address gaps and arriving at multiple sub-optimal solutions, no standardisation and a waste of funding. Commons provide "sector-specific infrastructure" such as tools, resources, data frameworks, benchmarks and methodologies that can be shared across multiple organisations. Benchmarks in learning outcomes are particularly critical to understand what interventions are working and what can be scaled, given the diversity which exists in the educational institutions and the economic and social profiles of students in India. In other words: "Benchmarks (in education) bring back focus to what is really important – learning for all students to their full potential."[19]

In the education space, governments are increasingly on the lookout for accurate and innovative solutions to collect, manage and effectively use data around education systems. At an SPO level, the nationwide household-based ASER survey undertaken by Pratham has now become the benchmark to measure progress in access, infrastructure and learning outcomes.[20] While such solutions demonstrate the potential of commons, there are still gaps to be addressed. For instance, while ASER provides learning outcomes for rural areas, a lack of standardised data exists across urban areas. This is echoed in the secondary education space where there is a lack of a nationwide source for learning outcomes and in the inclusive education sector where there is also a lack of standardised data on the number of people with disabilities and the types of disabilities.

With a multitude of disparate and redundant metrics, monitoring of education outcomes in India till date has primarily been in the form of "compliance monitoring."[21] While establishing data systems with current data across 1.44 million schools in 604 districts is a remarkable achievement,[22] of the 40 metrics tracked in District Information System for Education (DISE),[23] almost all measure inputs. Niti Aayog has recently launched the School Education Quality Index (SEQI) with the aim of institutionalising focus on outcome-based monitoring which has 44 metrics across learning quality, access, equity and governance outcomes.[24] There is therefore still much room for investing in these initiatives to allow them to reach their full potential.

The following table provides examples of funding in commons, which can be built on:

INTERVENTION	ORGANISATION	INITIATIVE
Data and Benchmarks	Karnataka Learning Partnership *Charitable Trust*	Data platforms for budgeting, accountability and transparency[25]
	Pratham Education Foundation Registered under Section 8[26]	National level data collection and reporting on status of education[27]
Knowledge, Research & Advocacy	Central Square Foundation (CSF) *Charitable Trust*[28]	Collating best practices in policy and evidence from successful education programmes to influence mainstream education[29]
Open-source Tools	Central Square Foundation in collaboration with MHRD	Online portals to collect and report data on schools and training institutions thereby helping to assess quality and performance[30]

12. Bill & Melinda Gates Foundation, 2010
13. AVPN, 2017
14. Anand, 2015
15. AVPN, 2017
16. BCG, 2016, unpublished
17. BCG, 2016, unpublished
18. Omidyar, 2012
19. Educational Initiatives, 2016
20. Socialcops, 2015
21. UNESCO, 2016
22. DISE 2015-16
23. DISE, 2017
24. NitiAayog, 2017
25. Dener and Min, 2013
26. Pratham Education Foundation, 2017
27. Aggarwal, 2002
28. Interview with Central Square Foundation, Aug 2017
29. CSF, 2017
30. MHRD, 2017

2. Capacity Building for SPOs

There is growing emphasis by governments, donor agencies and international development organisations on capacity as being crucial to sustainable development especially in the context of reaching the Education for All (EFA) goals.[31] SPO efforts by virtue of being flexible, adaptive, local, efficient and innovative are complementary to state-level interventions and vital to the ecosystem.[32] On the funder side, it is worthwhile to consider embedding capacity-building funding into grants to facilitate programme success.[33]

India has more than 3.1 million non-profits working across 26 states,[34] which is more than twice the number of schools in the country. In India, non-profits are the government's biggest partner in ensuring education for all. However, a significant number of them struggle with scaling their impact, and articulation of clear sustainability plans regarding funds or leadership.[35] Despite the need to create sustainable institutions that can effectively implement social programmes, most non-profits face persistent underfunding of their overheads, fuelled by what Bridgespan calls the "non-profit starvation cycle."[36] This issue extends to social enterprises, who often channel funds into the revenue generating activities and/or are funded by investors with a focus on maximising the programmatic investments over funding for the organisation. Funders' unrealistic expectations trigger low spending on overheads or underreporting of expenditures by SPOs, which in turn perpetuates funders' expectations that grantees will do more with less, creating a cycle that slowly starves non-profits.[37] The absence of skilled teams and strong leadership in non-profit organisations is often a direct result of this cycle.[38] Funding capacity building for non-profits including their internal systems and processes, the quality of leadership and the access to talent is thus critical.

For social enterprises, sector specific accelerators such as the Atma Accelerator[39] or EduGild[40] which help education start-ups scale, are important to build capacity in the innovation ecosystem.

All SPOs require access to expertise and services.

31. UNESCO, 2009
32. UNESCO, 2009
33. Brothers, 2011
34. Anand, 2015
35. CII, 2013
36. Bridgespan, 2009
37. Bridgespan, 2009
38. Dasra, 2016
39. Atma, 2017
40. EduGild, 2017

While these can sometimes be open-source and free, the majority come at a cost which funders can decide to cover with the incentive of investing in scaling the organisation and hence helping to solve the underlying issue.

The following table provides examples of funding in creating an enabling environment for SPOs in terms of non-financial support and access to expertise and services:

INTERVENTION	ORGANISATION	INITIATIVE
Non-financial Support for SPOs	ATMA[41] *Charitable Trust*[42]	Building capacity of education NGOs to achieve sustainability and scalability[43]
	EduStars *Private Limited Company*	Facilitating visibility, support and mentoring for early stage start-ups working in the education sector[44]
Access to Expertise and Technologies	Sambodhi[45] *Private Limited Company*[46]	Programme monitoring mechanisms and quantitative techniques to measure impact[47]
	Abdul Latif Jameel Poverty Action Lab (J-PAL) under Institute for Financial Management and Research (IFMR) Charitable Trust[48]	Evidence on policies to increase access to, and improve the quality and relevance of education[49]

3. Partnerships for Impact

The total financial requirement for India to reach its Sustainable Development Goal (SDG) on education by 2030 is USD 2,258 billion,[50] which for the years from 2017 to 2030 averages USD 173 billion per year. The government of India, which is the largest funder in the education space, has consistently improved its focus on education. Yet, in the most recent budget (2017-18) the union budget outlay expenditure on education is USD 12.34 billion, which is an increase of only 9.9% compared to the previous year.[51] Next to the government of India, CSR funders have contributed to solving social causes in education. Education was a priority area for CSR in 2016, with 36% of total funding going to this space.[52] In contrast, of the USD 4.1 billion impact funds invested from 2010 to 2015 in India, only 2% was in education.[53] Impact investment in education appears to be only emerging, and has primarily focused on technology interventions.

Ensuring maximum leverage for every rupee invested is critical. If these different parties across all sectors would work together, risks can be reduced and impact can be maximised. However, the majority of stakeholders appear to largely operate in silos. Complex social issues can only be solved when various stakeholders come together to create "collective impact" by putting in place these 5 conditions – a common agenda, a shared measurement system, mutually reinforcing activities, continuous communication among stakeholders, and a backbone organisation to support the effort.[54] In India there has

41. Dasra, 2017
42. Dasra, 2017
43. AVPN, 2016
44. Yourstory, 2013
45. Vakil Search, 2017
46. Vakil Search, 2017
47. Busjeet, 2011
48. IFMR
49. Banerjee et al., 2013
50. UNDP
51. Nanda, 2017
52. Shah, 2017
53. Sengupta, 2016
54. Hanley-Brown and Oomer, 2012

not been significant movement yet in this direction. That said, a few partnerships have emerged, presenting opportunities for ecosystem investment. FSG, for example, partners with the Central Square Foundation, Children's Investment Fund Foundation (CIFF), UBS Optimus Foundation, Marshall Foundation and Omidyar Network to implement the Programme to Improve Private Preschool Education (PIPE) with an aim to scale up the affordable ECE industry in India and sustainably provide high-quality services to the urban poor.[55] To date, PIPE has conducted focus group discussions with 108 parents across 3 cities and interviews with more than 6,000 parents in 8 cities to understand their aspirations for their children aged 2-6 years.[56]

The Development Impact Bond, which made a debut in India with the "Educate Girls" project, is bringing together multiple stakeholders playing different roles – those of outcome payer, programme investor, implementation agencies, monitoring and evaluation (M&E) agencies and independent project managers – to create collective impact.

As the government is the largest funder and provider of education in India, several organisations have focused on forging public-private partnership (PPP) or influencing different levels of government. For instance, The Education Alliance (TEA) aims to help governments in India provide quality education to every child, by facilitating effective partnerships between state and non-state actors.[57] Another organisation with similar goals is the India Education Collective which aims to "facilitate a stakeholder owned government schooling system that is equitable, accountable and qualitative."[58]

The following table provides examples of PPP and collective impact initiatives that have been implemented in the education space in India:

INTERVENTION	ORGANISATION	INITIATIVE
Partnering with the government	EdelGive Foundation[59] *Registered under Section 25*	EdelGive Coalition for Transforming Education brings donors and NGOs together to work with the government in backward districts in Maharashtra to improve learning quality.
	Boston Consulting Group (BCG), Michael & Susan Dell Foundation (MSDF), Haryana Department of School Education	Quality Improvement Programme working with the state government to bridge learning gaps of students
	The Education Alliance *Non-profit Organisation*[60]	Platform to facilitate partnership between non-profit educational organisations and the government to operate government-partnership schools
Collective Impact	FSG, CSF, CIFF, UBS Optimus Foundation, Marshall Foundation and Omidyar Network	Programme to Improve Private Preschool Education (PIPE) in order to scale sustainable solutions in providing quality affordable pre-school education.[61]
	Educate Girls *Registered under Section 25*[62]	Development Impact Bonds initiative encourages private sector to fund international development projects that are outcome focused.
	MSDF's India Educational Investment Fund Investments in Menterra Social Impact Fund (launched by Villgro) and Unitus Seed Fund	Early stage investments in education startups by funding incubators.

55. FSG, 2015
56. FSG, 2015
57. The Education Alliance, 2017
58. India Education Collective, 2017
59. EdelGive Foundation
60. The Education Alliance
61. FSG PIPE
62. Karma Yog, 2017
63. Hanley-Brown and Oomer, 2012

RECOMMENDATIONS

Investment in standards and benchmarks

Setting a commonly understood and agreed set of standards and benchmarks could go a long way in orienting funding requirements towards desired outcomes, thereby enabling SPOs to access funding more effectively and efficiently. The adoption of such standards and benchmarks jointly stipulated by funders would also serve to catalyse quality improvement at the intervention as well as ecosystem level.

Advocacy efforts will contribute towards a more enabling environment for SPOs to implement their interventions. Investment in open-source tools, knowledge and research will allow SPOs to better define their strategies and design their interventions. Likewise, existing and potential investors looking to invest in education in India will also benefit from these commons. Fruitful partnerships can then be formed based on a clear understanding of the sector shared by all actors. In this respect, the PIPE programme by FSG could serve as an instructive example of how investment in research has enhanced the understanding around ECE in India.

Investment in building the capacity of SPOs

The success of interventions is usually positively correlated to the capacity of the SPOs implementing them. While building up the capacity of SPOs will enable them to achieve impact and scale, this has not been an area of focus among funders in the education space in India. Concerted efforts by funders to develop and nurture SPOs will go a long way in scaling, sustaining and deepening impact.

A good example is Dasra which works closely with high-potential SPOs over 3-5 years to build robust

strategic plans to help them achieve impact at scale. They also implement the Leadership Development Programme, a peer learning initiative aimed at leaders of SPOs focusing on multiple aspects of institution building including strategy, fund raising, impact assessment and talent management.

Multi-stakeholder partnerships

Deeper engagement with other stakeholders across the ecosystem will enable funders to pool resources and maximise impact at scale. It will also augment funders' knowledge about the sector and the investment landscape while creating space for creative solutions, leveraging on individual strengths. For such partnership to be effective, 5 conditions need to be met: a common agenda, a shared measurement system, mutually reinforcing activities, continuous communication among stakeholders, and a backbone organisation to support the effort.[63]

Partnership models of FSG's PIPE and MSDF's partnership with Unitus and Villgro, as well as government partnership models by The Education Alliance, EdelGive and BCG should be studied and adopted more widely across the ecosystem. Given the fact that very few private operators have been able to achieve scale, prevalent gaps in the Indian education sector would be best addressed through multi-stakeholder collaboration.

METHODOLOGY

The *Funding Education with Impact - A Guide for Social Investment in India* report seeks to serve as an essential guide for existing and potential social funders in the education space in India. Education remains one of the most invested areas in India by the government, social purpose organisations (SPOs), companies, philanthropic funders and social investors. Nonetheless, challenges remain in light of poor learning outcomes and low quality of education delivered across the country.

This report aims to provide funders with a better understanding of the current gaps of the education sector in India and relevant funding opportunities by providing a holistic overview of the journey of a student through different education segments in the education system in India — from early childhood education to K-12 and vocational education. Each section outlines the objectives of education in that education segment, related policy frameworks, government schemes and initiatives, key gaps, trends and interventions to achieve these outcomes. Examples are presented on both the demand and supply side of the social investment ecosystem. For the demand side, which represents the recipients of funding, we present a mix of interventions by SPOs across different operational models with their corresponding legal structures. For the supply side, which represents social investment capital providers, notable funding examples have been provided by funder class. Barriers to funding and recommendations for funders have also been discussed.

While annual national surveys do provide useful information, comprehensive mappings of the social

investment landscape in education are still lacking, partly due to poor data availability. In order to maintain consistency throughout the report and attempt a near-comprehensive classification of activity, the research team compiled numbers from multiple databases and annual reports of SPOs and funders and corroborated the same with primary research.

RESEARCH FRAMEWORK

For the purpose of the report, we broke down the Indian education sector into different segments as follows:

EDUCATION SEGMENTS	
Early Childhood Education	3-6 years of age
Primary Education	Grades 1-8 (could be various ages)
Secondary Education	Grades 9-12 (could be various ages)
Vocational Education	A follow-on from Grade 9 that caters to the age group of 15-18.
Inclusive Education	Special category for students between 3-18 years of age who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.

We have examined the status of the following outcomes:

OUTCOMES	
Enrolment	Students are enrolled in government or private educational institutions appropriate to their grade.
Retention	Students continue education and progress to higher levels of education
Attainment	Students progress and transition appropriately for aparticular learning level
Holistic Development	Students receive non-cognitive development including executive function, 21st century skills and social-emotional development
Health & Well-being	Students receive development opportunities that address mental/ psychological, physical and social dimensions.
Employability	Individuals are enabled to progress towards or get into employment, to stay in employment and to progress during career.

We have examined gaps and trends in relation to the following outcomes for each education segment as follows:

Early Childhood Education	Enrolment, Retention, Attainment, Holistic development, Health and Well-being
Primary Education	Enrolment, Retention, Attainment, Holistic development, Health and Well-being
Secondary Education	Enrolment, Retention, Attainment, Holistic development, Employability, Health and Well-being
Vocational Education	Enrolment, Retention, Attainment, Employability
Inclusive Education	Enrolment, Retention, Attainment, Holistic development, Employability, Health and Well-being

Not all education segments aim to achieve all outcomes. For instance, in early childhood education, employability is not an outcome but health and well-being are, while in vocational education, employability is an outcome.

Lenses

In order to understand gaps in outcomes, and delve deeper into examining communities, geographies or institutions which might have pronounced trends or disparities in the status of outcomes, we expanded the gaps at each education segment according to the following lenses. These lenses are also indicated in the list of interventions in each education segment.

- Government vs. private institutions
- Rural vs. urban areas
- Gender
- Marginalised communities (including socio-economically backward communities such as Scheduled Castes, Scheduled Tribes, other backward classes, migrant children and religious minorities)

Stakeholders

The report adopts a student-centric focus on education. As such, we analysed gaps, solutions and financing that enable the achievement of education outcomes for the student. In addition, the following stakeholders are taken into account when we present interventions in each education segment:

- Teacher (part-time and full-time teachers in an educational institution)
- School (school management, school principals, school leadership and other key officials related to the school)
- Community (parents, community workers, para-teachers, school management committees SMCs, and other community stakeholders in a student education)

DATA SOURCES

The research team relied on the following databases to provide a holistic picture of education gaps and funding in India's education space:

- **ASER:** Anchored by the non-profit Pratham Education Foundation, ASER, which stands for

Annual Status of Education Report, is a citizen-led household survey on learning levels among children in India. The annual survey aims to provide reliable estimates of children's schooling status and basic learning levels in reading and arithmetic for each state and regions within the state in India. ASER has been conducted every year since 2005 except in 2015 in almost all rural districts of India, the latest one being conducted in 2016. ASER is conducted in rural India, and samples children between the ages of 3-16 (enrolment data is collected for children from 3 to 5, and learning levels data is collected for children from 5-16). ASER 2016 was conducted in 589 districts surveying a total of 562,305 children from 350,232 households across 17,473 villages.

- **U-DISE:** The Unified-District Information System for Education (U-DISE) is an initiative to maintain an educational management information system in India. U-DISE is implemented in all 640 districts across the country, covering over 1.52 million primary and secondary schools in both rural and urban regions. U-DISE collects information on government, private aided, private unaided, and other types of schools covering a total of 260 million children from Grade 1 to Grade 12. The information collected within U-DISE is focused on school-related, facility-related, enrolment-related, and teacher-related indicators.
- **Census 2011:** The Census 2011 covered 640 districts, 5,767 tehsils, 7,933 towns and more than 600,000 villages across 29 states and 7 union territories for population enumeration. The census data has been collected every 10 years since 1872.
- **National Sample Survey of Estimation of Out-of-School Children in the Age 6-13 in India (2014):** The third round of sample survey of households was conducted using the Census 2011 sample frame in 640 districts from 29 states and 7 union territories. This study gathered information on children in the 6-13 age category from a sample of 99,929 rural and urban households within 5,005 villages and urban wards.
- **CSR data:** CSR funding information used in the report was extracted from the 'India CSR Outlook 2016' report published by NGOBox.org[1] and the 2017 CSR Yearbook published by the Credit Rating Information Services of India Limited (CRISIL) titled 'Altruism Rising', an analysis of 1,158 companies listed on the Bombay Stock Exchange that reported spending on CSR in FY 16[2]. In addition, the research team has compiled the CSR spending information in FY 17 (last reported year) of the top 100 companies by market capitalisation from their annual reports of FY 17 as well as utilised CSR project related information from another NGOBox report titled 'CSR Projects in Education', an analysis of 151 companies and 575 projects in education.
- **Impact investment data:** The impact investment data used in the report has been taken from the Venture Intelligence private equity deal database for the period 2014-2017. The Venture Intelligence private equity deal database lists cash-for-equity investments in India-based companies by private equity and venture capital firms. The database includes financial investments by strategic investors which function similarly to private equity/ venture capital firms and often co-invest with them. The database also features sub-databases tracking angel investing, impact investing, cleantech deals and incubation/acceleration activities. This report incorporates an analysis of 52 impact investors in India.

RESEARCH PROCESS

The research team used a combination of primary and secondary research methods and a particular process to assemble the information into useful insights.

1. For each education segment we first mapped its status by examining:

1. NGO Box, 2017
2. CRISIL, 2017

- Total number of children in the age group.
- System of education for students in the age group (in government/private schools, special schools, home-based education, or out-of-school).
- Policy framework, government priorities, flagship schemes and policies.
- Supply infrastructure for education in the segment (number of schools, number of teachers/trainers, standardised curricula and certifications).

2. We then sought to understand the gaps and trends in the education segments by analysing:

- Overall gaps and trends in student enrolment, retention, attainment, employability, health and well-being and holistic development by examining relevant data sources as well as qualitative gaps from literature review.
- Gaps across the 5 lenses: rural-urban disparities, government-private disparities, gender gaps, gaps pertaining to marginalised communities, and geographical gaps.

3. We mapped solutions addressing the gaps by analysing:

- Policy framework: The evolution of policies and investments by the government for delivering education to the target groups.
- Interventions that could achieve outcomes by creating and delivering solutions targeted at the four stakeholders: students, schools, teachers and the community.
- Demand side: We performed an analysis of SPOs working on different education segments, including NGOs, SEs, hybrids, operating foundations and mainstream companies. Private schools are classified as NGOs, SEs, hybrids, operating foundations or mainstream companies as appropriate.
- Supply side: We performed an analysis of funding examples by social funders across the spectrum who are investing in interventions across different education segments.
- Partnerships, collaborations and new co-investing models and platforms that have emerged in the last 1-5 years.

4. We expanded on the understanding from secondary research by conducting interviews with 30 key actors, ranging from grant-making foundations, corporates, impact investors, enablers to social entrepreneurs, to understand their investment/implementation philosophies, their current investments and interventions in education, challenges and barriers they face, and key recommendations they have for anyone looking to invest in a particular education segment or education as a whole.

5. We corroborated the information we received from the interviews with the secondary data in order to analyse it for common issues, contexts and evolutions which have led to certain trends.

6. Throughout each education segment, we have categorised every investable opportunity based on the legal structure of the SPOs, the interventions being implemented, stakeholders being engaged and funders funding them, along with the financing instruments, in order to make practical recommendations to funders on potential models for investment.

7. We vetted the data and insights for each section with education experts from different partner organisations. We also vetted the data for funding opportunities with each SPO highlighted in the tables.

8. Overall, we aimed to bring the data and analysis together to provide practical insights and recommendations for social funders across the spectrum.

CRITERIA FOR HIGHLIGHTING SPOs AND SOCIAL FUNDERS

The SPOs listed in this report are by no means the only ones working on education in India; there are several thousands of SPOs addressing education challenges in the country. Likewise, the funders listed in this report are by no means the only ones investing in the education space in India. The intention of the report is to give examples of credible SPOs and funding examples for each education segment.

SPOs

We selected a mix of SPOs covering the various operational models relevant to the education segment including: government school operating models, private school operating models, franchise models, and classroom/school-based intervention models. We arrived at a list of credible SPOs by assembling a list from investees and partners of AVPN members, organisations that Sattva has engaged or worked with, and SPOs that were invited to work with the government of India. In addition, we ensured that the SPOs listed represent a mix of:

- Organisations with high scale and reach (in a state or across states)
- Organisations that have revenue and grant models
- Innovative early-stage organisations
- Award-winning organisations

However, we have not performed a comprehensive due diligence on these organisations in the context of this report.

Funders

We studied prominent funders across the spectrum of funders — CSR, corporate foundations, family foundations, global foundations, impact funds and development finance institutions (DFIs) — who have a history of providing philanthropic funding and social investments in education in India. The term 'funder' is used as an umbrella term for grant makers, social investors and impact investors and connotes a resource provider interested in generating impact and providing financial and non-financial resources to SPOs.

DEFINITIONS

Funder Class

FUNDER CLASS	DEFINITION IN THIS REPORT[3]
CSR	Indian corporate that invests under the CSR Act — Section 135 under the Indian Companies Act. With effect from April 1, 2014, every company, private limited or public limited, which either has a net worth of USD 78 million or a turnover of USD 155 million or net profit of USD 780,000 USD, needs to spend at least 2% of its average net profit for the immediately preceding three financial years on CSR activities.[4]
Corporate Foundation	A non-profit established by a corporate. *E.g., EdelGive Foundation*
Family Foundation	Wealth management advisory or establishment for high net worth and ultra-high net worth individuals, which invests in philanthropic causes. *E.g., Praveen Agarwal Foundation, Narotam Sekhsaria Foundation*
Global Foundation	Non-profit organisation that funds social causes, established by private wealth globally. *E.g., Ford Foundation, Rockefeller Foundation*

3. Ministry of Corporate Affairs, 2016
4. The Organisation for Economic Co-operation and Development (OECD), 2017
5. India Law Journal, 2017
6. AVPN, 2014

FUNDER CLASS	DEFINITION IN THIS REPORT
Impact Fund	A fund that makes investments into social enterprises and businesses with a sustainability focus, with the intention to generate social and environmental impact alongside a financial return. *E.g., Unitus, LGT Impact Ventures*
Financial Institution	A financial intermediary or a non-banking finance company that provides credit to organisations and individuals. *E.g., Bandhan Bank, Microgram, Varthana*
DFI	DFIs are specialised development banks or subsidiaries set up to support private sector development in developing countries. Their source of capital is usually from national or international development funds.[5] *E.g. IFC, USAID, DFID*

Demand-side Organisations

ORGANISATION	DEFINITION IN THIS REPORT
Social Purpose Organisation (SPO)	Umbrella term used for NGOs, social enterprises and hybrids.
NGO	A non-governmental organisation (charitable organisation/non-profit organisation) that can receive grants. An NGO can be registered as a Trust/Society with a 12A registration and FCRA clearance to receive foreign funding. NGOs can also be registered as Section 25/Section 8 companies.
Social Enterprise	Term used to describe organisations with a social mission which are aspiring to or are able to generate revenues out of their products and services. They can be registered as Private Limited/Sole proprietorship/LLP/Trust.
Hybrid	An organisation that has multiple entities combining non-profit and revenue generating activities. For instance, Hippocampus and Hippocampus Learning Foundation are for-profit and non-profit arms of Hippocampus, an early childhood and primary education company.
Operating Foundation	An operating foundation can be registered as a trust/society/Section 25/Section 8 company. It can absorb funds from philanthropic organisations and usually implements own programmes to create social impact. *E.g., Bharti Foundation, Srinivasan Services Trust (TVS SST)*

Legal Entities

	DEFINITION IN THIS REPORT
FOR-PROFIT ENTITIES	
LLP	The Limited Liability Partnership (LLP) Act 2008 provides an alternative to the traditional partnership business, with unlimited personal liability on the one hand, and the statute-based governance structure of the limited liability company, on the other, so that businesses can organise themselves and operate in a flexible, innovative and efficient manner.[6]
Private Limited Company	In a private limited company, the shareholders right to transfer shares is restricted. The number of shareholders is limited to fifty. An invitation to the public to subscribe to any shares or debentures is prohibited.

LEGAL ENTITY	DEFINITION IN THIS REPORT
NON-PROFIT ENTITIES	
Section 25/Section 8 Company	Section 8 and Section 25 companies are governed under the Companies Act of 2013. Most of the substantive provisions of Section 25 of the old Act have been incorporated into the new Companies Act under Section 8. A Section 8 company can be set up for the promotion of commerce, art, science, sports, education, research, social welfare, religion, charity, protection of environment or any such other object.[7]
Trust/Society	A public trust generally means an expression or constructive trust for either a public, religious or charitable purpose or both and includes any religious or charitable endowments set up for the aforesaid purposes. Different states in India have different Trusts Acts in force; in the absence of a Trusts Act in any particular state, the general principles of the Indian Trusts Act 1882 are applied.[8]

Financing Instruments

INSTRUMENT	DEFINITION IN THIS REPORT
Grant	Grant is an award of donation-based funds to an organisation or individual to undertake charitable activities with no financial return expectation.
Debt	Debt is an amount of money borrowed by one party from another. The most common form of debt is loan under which the borrower is required to repay the balance by a certain date, usually with interest expressed as a percentage of the loan amount.
Convertible Debt	Convertible debt, or convertible bond, is a type of debt security that can be converted into a predetermined amount of the underlying company's equity at certain times during the bond's life, usually at the discretion of the bondholder.
Equity	Equity refers to the process of raising capital through the sale of shares in an enterprise. Equity financing involves not just the sale of common equity, but also the sale of other equity or quasi-equity instruments such as preferred stock, convertible preferred stock and equity units that include common shares and warrants.
Social Impact Bond	A social impact bond (SIB) is a contract with the public sector or governing authority, whereby it pays for better social outcomes in certain areas and passes on part of the savings achieved to investors. A social impact bond is not a bond, per se, since repayment and return on investment are contingent upon the achievement of desired social outcomes; if the objectives are not achieved, investors receive neither a return nor repayment of principle.

7. AVPN, 2014
8. AVPN, 2014

RECOMMENDED READING

AED Center for Gender Equity. 2009. "Mentoring Guide for Life Skills." http://www.ungei.org/LifeSkills.pdf.

Aggarwal, Megha, Devesh Kapur, and Namrata Tognatta. 2012. "The Skills They Want: Aspirations of Studdents in Emerging India." Center for the Advanced Study of India. https://casi.sas.upenn.edu/sites/casi.sas.upenn.edu/files/uploads/The%2BSkills%2BThey%2BWant%2C%2BAspirations%2Bof%2BStudents%2Bin%2BEmerging%2BIndia%2B-%2BAggarwal%2C%2BKapur%2C%2BTognatta_1.pdf.

Aggarwal, Yash. 2002. "Revitalisation of Educational Statistics in India." http://www.dise.in/Downloads/Reports&Studies/REVITALISATION%20OF%20EDUCATIONAL%20STATISTICS%20IN%20INDIA.pdf.

Ahmad, Fouzia Khursheed . 2015. "Use of Assistive Technology in Inclusive Education: Making Room for Diverse Learning Needs." https://www2.hu-berlin.de/transcience/Vol6_No2_62_77.pdf.

Aide et Action. 2015. "UNESCO." https://www.unescogym.org/wp-content/uploads/2015/07/NCCIM_Background-Note_23072015.pdf.

Alur, Mithu. 2007. "Education of Children and Young Adults." https://docmh.com/education-of-children-and-young-adults-by-mithu-alur-pdf.

Ambuja Cement Limited. 2016. "Annual Report 2016." http://www.ambujacement.com/Upload/PDF/ambuja-cement-annual-report-2016.pdf.

Asian Development Bank. 2010. "Strengthening Inclusive Education." http://www.eenet.org.uk/resources/docs/5165.pdf.

Attendance Works. 2014. "Attendance in the Early Grades: Why it Matters for Reading." http://www.attendanceworks.org/wordpress/wp-content/uploads/2014/03/Attendance-in-the-Early-Grades.pdf.

AVPN. 2016. "A guide to Effective Capacity Building. AVPN." https://avpn.asia/wp-content/uploads/2016/05/AVPN-CB-report-2016-web.pdf.

Baird, Ross. 2009. "Private Schools for the Poor-Development, Provision, and Choice in India". Gray Matters Capital. http://dise.in/Downloads/Use%20of%20Dise%20Data/Ross%20Baird.pdf.

Banerjee, Abhijit , Paul Glewwe, Shawn Powers, and Melanie Wasserman. 2013. "Expanding Access and Increasing Student Learning in Post-Primary Education in Developing Countries: A Review of the Evidence." https://www.povertyactionlab.org/sites/default/files/publications/PPE%20Review%20Paper%20April%202013.pdf.

Bartlett, Kathy, and Louise Zimanyi. 2001. Early Childhood Indicators. The Consultative Group on Early Childhood Care and Development. http://www.globalchilddevelopment.org/sites/default/files/resources/cn25indicators.pdf.

Better Education Through Innovation (BETI) Foundation. 2010. "Annual Report 2010-11." http://www.betifoundation.in/custom/reports/annual-report-2010-11.pdf.

Bhattacharjea, Suman , Wilima Wadhwa, and Rukmini Banerji. 2011. "Inside Primary Schools." http://img.asercentre.org/docs/Publications/Inside_Primary_School/Report/tl_study_print_ready_version_oct_7_2011.pdf.

Bhunia, Gouri Sankar, Pravat Kumar Shit, and Soumen Duary. 2012. "Assessment of School Infrastructure at Primary and Upper Primary Level: A Geospatial Analysis." Journal of Geographic Information System 412-424. https://file.scirp.org/pdf/JGIS20120500007_28973302.pdf.

Busjeet, Gita. 2011. "Planning, Monitoring, and Evaluation: Methods and Tools for Poverty and Inequality Reduction Programs." http://siteresources.worldbank.org/EXTPOVERTY/Resources/ME_

ToolsMethodsNov2.pdf.
Centre for Budget and Governance Accountability. 2017. “What do the Numbers Tell? An Analysis of Union Budget 2017-18.” http://www.cbgaindia.org/wp-content/uploads/2017/02/Analysis-of-Union-Budget-2017-18-2.pdf.

Centre for Early Childhood Education and Development (CECED). 2010. “Preparing Teachers for Early Childhood Care and Education.” http://www.teindia.nic.in/e9-tm/Files/Preparing_Teacherins_for_Early_Childhood_care_and_Education.pdf.

Chadha, Anupriya. 2005. “NGO initiative in Inclusion: SSA Experience.” http://ssa.nic.in/inclusive-docs/ngo-initiative.pdf.

Chodos, Michael, and Anne Johnson. 2016. “From Innovation to Practice.” http://beeckcenter.georgetown.edu/wp-content/uploads/2016/08/From-Innovation-to-Practice-Impact-Investing-Education-and-Training_Beeck-Center.pdf.

Chugh, Sunita. 2011. “Dropout in Secondary Education: A study of children living in slums in Delhi.” http://nuepa.org/new/download/Publications/Occasional%20Paper%20No.%2037.pdf.

Colclough, Christopher, and Anuradha De. 2010. The impact of Aid on Education Policy in India. Research Consortium on Educational Outcomes and Poverty . http://ceid.educ.cam.ac.uk/publications/WP27-CC_ADfinal.pdf.

Confederation of Indian Industry (CII). 2013. “Urgent needs of NGOs in the Education Sector.” https://www2.deloitte.com/content/dam/Deloitte/in/Documents/IMO/in-imo-ngo%27s-in-the-education-sector-noexp.pdf.

CRISIL Foundation. 2017. “Altruism rising : The CRISIL CSR Yearbook.” https://www.crisil.com/pdf/corporate/CRISIL-CSR-year-Book-Altruism-rising-30Jan2017.pdf.

D. Capital Partners. 2013. “Impact Investing in Education: An Overview of the Current Landscape.” https://www.opensocietyfoundations.org/sites/default/files/impact-investing-education-overview-current-landscape-20140106_0.pdf.

Daulet Singh, Bikkrama, and Rashmi Menon. 2015. “Life Skills in India.” http://www.centralsquarefoundation.org/wp-content/uploads/2015/12/Life-Skills-Education-in-India.pdf.

Dener, Cen, and Saw Young Min. 2013. “Financial Management Information Systems and Open Budget Data : Do Governments Report on Where the Money Goes?” https://openknowledge.worldbank.org/handle/10986/15897.

Department of School Education & Literacy, MHRD. 2012. “Implementations in Private Schools – India.” http://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/Annexure%20V.pdf.

DHFL. 2016. “One DHFL Fulfilling Multiple Aspirations.” Dewan Housing Finance Corporation Limited. http://www.dhfl.com/wp-content/uploads/2016/06/DHFL-Annual-Report-FY-2015-16.pdf.

Downes, Paul. 2012. “The key role of the nonformal education sector, including community lifelong learning centres, in engaging part-time students from backgrounds of social marginalization and diverse ethnicities.” https://www4.dcu.ie/sites/default/files/edc/pdf/hearesponseparttimestudents2012.pdf.

Ernst and Young. 2017. “Vision for School Education 3.0.” http://www.ey.com/Publication/vwLUAssets/EY-vision-for-school-education-3.0/$FILE/EY-vision-for-school-education-3.0.pdf.

Eusebius, Unnattee, Vaibhav Kumar, and James Townsend. 2017. “Improving teacher quality and motivation in the Budget Private Schools sector.” In Report on Budget Private Schools In India, by Centre For Civil Society. http://ccs.in/sites/default/files/publications/chapter_7_improving_teacher_quality_and_motivation_in_the_budget_private_schools_sector_-_stirs_learning_from_working_with_bps_in_delhi_a_case_study.pdf.

FICCI. 2014. Reaping India's promised demographic dividend — industry in driving seat. EY. http://www.ey.com/Publication/vwLUAssets/EY-Government-and-Public-Sector-Reaping-Indias-demographic-dividend/$FILE/EY-Reaping-Indias-promised-demographic-dividend-industry-in-driving-seat.pdf.

Gadkari, J. P. , and S. K. Mishra. 2007. "Mental Retardation." http://www.rehabcouncil.nic.in/writereaddata/mr.pdf.

Gazely, Beth, and Jeffrey L. Brudney. 2007. "The Purpose (and Perils) of Government-Nonprofit Partnership." http://journals.sagepub.com/doi/abs/10.1177/0899764006295997.

Goel, Vijay P. 2011. "Technical and Vocational Education and Training (TVET) System in India for Sustainable Development." http://www.unevoc.unesco.org/up/India_Country_Paper.pdf.

Government of India. 2009. "National Policy on Skill Development." http://www.dget.nic.in/upload/uploadfiles/files/NationalPolicyonSkillDevelopment.pdf.

Herberger, Audrey. 2017. Collaborative Approaches to Maximize Access to Quality Education. https://avpn.asia/blog/collaborative-approaches-maximize-access-quality-education/.

Herbst, Lisa . 2016. "Early Childhood Education Quality and Family Engagement." https://jscholarship.library.jhu.edu/bitstream/handle/1774.2/40364/HERBST-DISSERTATION-2016.pdf?sequence=1&isAllowed=y.

ICAI. 2012. "Evaluation of DFID's Support for Health and Education in India." https://icai.independent.gov.uk/wp-content/uploads/ICAI-Evaluation-of-DFIDs-Support-for-Health-and-Education-in-India-Final-Report.pdf.

ICF Consulting Services. 2016. "Evaluation of the Technical Assistance Component of DFID India's Education Portfolio." https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/632438/Evaluation-of-TA-Component-of-DFID-Indias-Education-Portfolio.pdf.

IDDC. 2016. "Costing Equity: The case for disability-responsive education financing." IDDC. https://www.iddcconsortium.net/sites/default/files/resources-tools/files/iddc-report-short_16-10-17.pdf.

Information Technology Industry Council. 2012. "Moving Education Forward: Strengthening STEM in Today's Classroom." https://www.itic.org/dotAsset/7574a607-101e-44cc-bf98-2ccf920f4c0d.pdf.

Irish National Teachers' Organisation . 2009. "Creativity and the Arts in the Primary School ." https://www.into.ie/ROI/Publications/CreativityArtsinthePS.pdf.

Jagannathan, Shanti. 2000. "The Role of Non-Governmental Organizations in Primary Education." http://documents.worldbank.org/curated/en/760201468771257407/130530323_20041118114646/additional/multi0page.pdf.

K. Biswal. 2011. "Secondary Education in India: Development Policies, Programmes and Challenges." http://indiagovernance.gov.in/files/secondaryeducation.pdf.

Kaizen Private Equity. 2013. "Implication of evolving Educational Technologies (Ed-Tech) on the Indian market - A PE/VC perspective." http://www.kaizenpe.com/kies2014/pdf/Education-Technology-in-India-Kaizen-INSEAD-Team-May-2013.pdf.

Kapur, Kriti. 2008. "Assessment for Improving Learning in Schools in India : A perspective." http://www.iaea.info/documents/paper_2b71209fa.pdf.

Kaul, Venita. 2008. "Early Childhood Education in ICDS IV." http://icds-wcd.nic.in/icds/icds-worldbank/ECE%20Workshop_All%20PPTspart2.pdf.

Kaul, Venita, and Deepa Sankar. 2009. "Early Childhood Care and Education in India." http://www.educationforallinindia.com/early-childhood-care-and-education-in-india.pdf.

Kaul, Venita, Punita Mathur, Parul Kohli, and Poorva Chadha. 2015. "Early Childhood Education in India: A Snapshot." http://ceced.net/wp-content/uploads/2015/03/ECED-Brief-2.pdf.

Kingdon, Geeta Gandhi. 2017. "The Private Schooling Phenomenon in India: A Review." http://ftp.iza.org/dp10612.pdf.

Kohama, Angela. 2012. "Inclusive Education in India: A Country in Transition." https://pdfs.semanticscholar.org/c242/1e87e27791c7f49dddf15665d32c7462f71b.pdf?_ga=2.13378039.1327378535.1502712737-1605622113.1502712737.

Kotak Mahindra Bank. 2015. Annual Report 2015-16. http://ir.kotak.com/downloads/annual-reports-2015-16/pdf/Kotak%20Mahindra%20Group_2016.pdf.

Krishnan, Prasad, and Sivaram Hariharan. 2016. "Challenges in STEM education for 'Skill India'." http://www.natureasia.com/en/nindia/article/10.1038/nindia.2016.99.

Kwauk, Christina, Jenny Perlman Robinson, and Samantha Spilka. 2016. Teach For All: Building a Pipeline of Future Education Leaders Around the World. The Brookings Institution. https://www.brookings.edu/wp-content/uploads/2016/07/FINAL-Teach-For-All-Case-Study.pdf.

Laurillard, Diana. 2014. "Thinking about blended learning." http://www.kvab.be/sites/default/rest/blobs/101/DP_BlendedLearning_Thinking-about.pdf.
Laurus Institute. 2007. "Mobilising the Masses-Solving India's Student Crunch in Vocational Education." https://www.laurusedutech.com/li/4Mobilising%20the%20Masses-%20solving%20India%27s%20student%20crunch%20in%20vocational%20education.pdf.

Lewis, Ingrid, and Sunit Bagree. 2013. "Teachers for All: Inclusive Teaching for Children with Disabilities." http://www.eenet.org.uk/resources/docs/IDDC_Paper_Teachers_for_all.pdf.

Limaye, Sandhya. 2016. "Factors Influencing the Accessibility of Education for Children with Disabilities in India." http://files.eric.ed.gov/fulltext/EJ1115090.pdf.

Lok Sabha. 2016. "Shortage of Teachers." http://164.100.47.190/loksabhaquestions/annex/10/AS265.pdf.

Maclean, Rupert, and Margarita Pavlova. 2013. "Vocationalization of secondary and higher education: pathways to the world of work." http://www.unevoc.unesco.org/fileadmin/up/2013_epub_revisiting_global_trends_in_tvet_chapter2.pdf.

Malani, Sudhanshu. 2016. Impact Investing in K-12 Education in India. Villgro. http://www.villgro.org/blog/wp-content/uploads/2016/05/Impact-Investing-in-Education-Sector-in-India-V1.01.pdf.

Mehrotra, Santosh , Ravi Raman, Neha Kumra, Kalaiyarasan, and Daniela Röß. 2014. "Vocational Education and Training Reform in India." https://www.bertelsmann-stiftung.de/fileadmin/files/BSt/Presse/imported/downloads/xcms_bst_dms_39337_39338_2.pdf.

Ministry of Health & Family Welfare . 2013. "A Strategic Approach to Reproductive, Maternal, Newborn, Child and Adolescent Health (RMCH+A) in India." 11. http://nhm.gov.in/images/pdf/RMNCH+A/RMNCH+A_Strategy.pdf.

Ministry of Human Resource Development. 2013. "Annual Report 2013-14." http://mhrd.gov.in/sites/upload_files/mhrd/files/document-reports/AR2013-14.pdf.

Ministry of Human Resource Development. 2014. "Annual Report 2014-15." http://mhrd.gov.in/sites/upload_files/mhrd/files/document-reports/Part1.pdf.

Ministry of Human Resource Development. 2011. "Guidelines for conducting Teacher Eligibility Test (TET)." http://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/RTE_TET.pdf.

Ministry of Human Resource Development. 2014. "Guidelines for Inclusive Education for CWSN." http://rmsaindia.gov.in/images/IEDSS_Guidelines.pdf.

Ministry of Human Resource Development. 2016. "National Policy on Education." http://www.nuepa.org/New/download/NEP2016/ReportNEP.pdf.

Ministry of Human Resource Development. 2011. "Statistics of School Education." http://mhrd.gov.in/sites/upload_files/mhrd/files/statistics/SSE1112.pdf.

Ministry of Human Resource Development. 2014. "Status of Secondary Education: Trends under RMSA." http://rmsaindia.gov.in/images/Trends_and_Indicators_under_RMSA.pdf.

Ministry of Human Resource Develpment . 2016. Education Statistics at a glance. http://mhrd.gov.in/sites/upload_files/mhrd/files/statistics/ESG2016_0.pdf.

Ministry of Skill Development and Entrepreneurship. 2015. "National Policy for Skill Development and Entrepreneurship." http://msde.gov.in/assets/images/Skill%20India/policy%20booklet-%20Final.pdf.

Ministry of Statistics and Programme Implementation. 2016. "Disabled Persons in India: A Statistical profile 2016." http://mospi.nic.in/sites/default/files/publication_reports/Disabled_persons_in_India_2016.pdf.

Ministry of Statistics and Programme Implementation. 2017. "Youth of India." http://mospi.nic.in/sites/default/files/publication_reports/Youth_in_India-2017.pdf.

Ministry of Women and Child Development. 2012. "ICDS Mission: The Broad Framework for Implementation." https://www.bpni.org/WBW/2013/Broad-Framework-of-Implementation-ICDS-Mission.pdf.

Mohanty, Atasi. 2015. "Vocational Counselling and Transition Skill Training for Adolescents with Special Needs." Creative Education 255-261. http://file.scirp.org/pdf/CE_2015022716082995.pdf.

Moloney, Mary, and Eucharia McCarthy. 2010. "Development of a Framework for Action for the Inclusion of Children with Special Needs in Early Childhood Education Settings." https://www.education.ie/en/Schools-Colleges/Information/Early-Years/eye_framework_development_special_needs.pdf.

Molz , Alessandra . 2015. "Delivering TVET through Quality Apprenticeships." http://www.unevoc.unesco.org/e-forum/BackgroundNote-VC-Apprenticeship-Molz.pdf.

Morrin, Jacob , Olivia Huang , and Ryan Whalen. 2014. "21st Century Skills and Digital Literacy: An India Case Study." http://www.sais-jhu.edu/sites/default/files/Publishable%20ASER%20Deliverables.pdf.

Mukherjee, Sharmila B, Satinder Aneja, Vibha Krishnamurthy, and Roopa Srinivasan. 2015. "Incorporating Developmental Screening and Surveillance of Young Children in Office Practice." Indian Pediatrics 627-635. http://medind.nic.in/ibv/t14/i8/ibvt14i8p627.pdf.

National Commission for Protection of Child Rights. 2013. "Status of Children in 14-18 Years : Review Of Policy,Programme and Legislative Framework." http://ncpcr.gov.in/view_file.php?fid=466.

National Council Of Educational Research And Training. 2005. "School and Classroom environment." http://www.ncert.nic.in/rightside/links/pdf/framework/School%20and%20Classroom%20environment.pdf.

National Institute of Public Cooperation and Child Development. 2008. Research on ICDS: An Overview. National Institute of Public Cooperation and Child Development. http://nipccd.nic.in/reports/icdsvol3.pdf.

National Sample Survey Office (NSSO). 2015. "Key Indicators of Social Consumption in India on Education." (Ministry of Statistics and Programme

Implementation). http://pib.nic.in/newsite/PrintRelease.aspx?relid=122881.

Nedungadi, Prema , Raghu Raman, Radhika Menon, and Karunya Mulki. 2016. "AmritaRITE: A Holistic Model for Inclusive Education in Rural India." https://www.researchgate.net/publication/311532152_AmritaRITE_A_Holistic_Model_for_Inclusive_Education_in_Rural_India.

Nielsen. 2009. "An Evaluation Study for 'Lifelines for Education' project in West Bengal ." http://www.questalliance.net/wp-content/uploads/2017/05/Lifeline-Evaluation-_Report.pdf.

NITI Ayog. 2016. "Sustainable Development Goals (SDGs), Targets, CSS, Interventions, Nodal and other Ministries." http://niti.gov.in/writereaddata/files/Mapping-SDGs%20V19-Ministries%20Feedback%20060416_0.pdf.

NUEPA. 2014. Education for All : Towards Quality with Equity. Ministry of Human Resource Development. http://unesdoc.unesco.org/images/0022/002298/229873E.pdf.

Pandya, Rameshwari, and Avani Manar. 2014. "Non Formal Education: An Indian Context." http://www.isca.co.in/SOC_HU_SCI/book/ISBN%20978-93-84648-51-0.pdf.

Patra, Ritwik. 2007. Out of School Children : the abhiyan to bring them to school. Ministry of Human Resource Development GoI. http://ssa.nic.in/publication/Out%20of%20School%20Word%20File.pdf/at_download/file.

Patrinos, Harry. 2015. Disability and Education: From Charity to Investment. http://blogs.worldbank.org/education/disability-and-education-charity-investment.

Planning Commission Government of India. 2013. "Twelfth Five Year Plan (2012–2017), Social Sectors." http://mhrd.gov.in/sites/upload_files/mhrd/files/document-reports/XIIFYP_SocialSector.pdf.

PRS Legislative Research. 2016. "Vital Stats : Overview of education sector in India." http://www.prsindia.org/administrator/uploads/general/1488775749~~Overview%20of%20Education%20Sector%20in%20India.pdf.

Rajput, J.S. 2007. "Vision 2020 - Education." http://www.planningcommission.gov.in/reports/genrep/bkpap2020/14_bg2020.pdf.

Rao, Indumathi. 2003. "Inclusive Education in the Indian Context." http://www.eenet.org.uk/resources/docs/inclusive_education_indian.php.

Rashtriya Madhyamik Shiksha Abhiyan (RMSA). 2014. "Vocationalisation of Secondary & Higher Secondary Education." http://rmsaindia.gov.in/administrator/components/com_pdf/pdf/caab02cd7fe6b3d40c811d8601fc7d72-Implementation-Guidelines-for-Vocational-Education.pdf.

Sæbønes, Ann-Marit. 2015. "Education, Towards a Disability Inclusive." Oslo Summit on Education for Development. https://www.usaid.gov/sites/default/files/documents/1865/Oslo_Ed_Summit_DisabilityInclusive_Ed.pdf.

Sahin, Mehmet. 2010. "Blended learning in vocational education: An experimental study." International Journal of Vocational and Technical Education 95-101. http://www.academicjournals.org/article/article1379337687_Sahin.pdf.

Sahoo, Jyotiranjan, Preetam B Mahajan, Sourabh Paul, Vikas Bhatia, Abhinash K Patra, and Dilip Kumar Hembram. 2016. "Operational Assessment of ICDS Scheme at Grass Root Level in a Rural Area of Eastern India: Time to Introspect." http://www.jcdr.net/articles/PDF/9041/23059_CE(RA1)_F(T)_PF-1(GU_AH)_PFA(AK)_PF2(PAG).pdf.

Samhita Social Ventures. 2014. "Education & CSR: Mapping initiatives of the top 100 companies ." http://www.samhita.org/wp-content/uploads/2014/11/CSR-in-Education-Report.pdf.

Sattva. 2016. “Every Child in School and Learning Well : Innovations and Partnerships in Education CSR in India.” http://iica.in/images/2.%20COMPENDIUM%20-%20CSR%20AND%20EDUCATION.pdf.

Sharma, Sushma, Santosh Jain Passi, Salila Thomas, and Hema S. Gopalan. 2006. “Evaluation of Mid-Day Meal programme in MCD Schools.” http://mdm.nic.in/Files/Initiatives%20&%20Case%20Studies/NUTRITION_%20FOUNDATION_%20OF_%20INDIA.pdf.

Shinde, S. P. , and V. P. Deshmukh. 2012. “Blended Learning Methodology in School Education.” http://www.researchmanuscripts.com/may2012/4.pdf.

Singh, Bikkrama Daulet, and Rashmi Menon. 2015. “Life Skills in India: An Overview of Evidence and Current Practices in our Education System.” http://www.centralsquarefoundation.org/wp-content/uploads/2015/12/Life-Skills-Education-in-India.pdf.

Siperstein, Gary, Keerthi Sugumaran, Jennifer Bardon, and Robin Parker. 2005. “Attitudes of the Public in India towards People with Intellectual Disabilities.” http://media.specialolympics.org/soi/files/healthy-athletes/Research-Studies/India_FullReport.pdf.

Social & Rural Research Institute. 2014. “National Sample Survey of Estimation of Out-of-School Children in the Age 6-13 in India.” http://ssa.nic.in/pabminutes-documents/NS.pdf.

Sreenath , K. C. 2007. “Breaking Barriers: Towards Inclusion.” http://www.equip123.net/docs/E1-REACHInclusion.pdf.

Sujatha, K. 2002. “Distance education at secondary level in India: the National Open School.” http://unesdoc.unesco.org/images/0012/001262/126210e.pdf.

Swaminathan, Mina. 1992. Training for Child Care Workers in India. Consultative Group on Early Childhood Care and Development. http://www.ecdgroup.com/docs/Training_for_Child_Care_Workers_in_India-16_05_2001-11_25_56.pdf.

UK India Business Council. 2011. “Vocational Education for School Learners in India and the UK.” http://ficci.in/spdocument/20109/UKIBC-Report.pdf.

UN Girls’ Education Initiative. 2010. “Equity and Inclusion in Education.” https://www.unicef.org/education/files/Equity_and_Inclusion_Guide.pdf.

UNESCO. 2016. “Education for people and planet.” http://unesdoc.unesco.org/images/0024/002457/245752e.pdf.

UNESCO. 2001. “Technical and Vocational Educational Training for the Twenty-first Century.” http://unesdoc.unesco.org/images/0012/001260/126050e.pdf.

UNFPA. 2011. “Concurrent Evaluation of The Adolescence Education Programme (2010-11).” http://southasiainstitute.harvard.edu/website/wp-content/uploads/2013/06/UNFPA-Concurrent-Eval.pdf.

UNICEF. 2009. “Child Friendly Schools.” https://www.unicef.org/education/files/CFSManual_Ch04_052009.pdf.

UNICEF. 2011. “The Situation of Children in India - a Profile.” https://www.unicef.org/sitan/files/SitAn_India_May_2011.pdf.

University of Sussex. 2014. “Evidence Brief.” https://eppi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaries/Final%20pedagogy%20evidence%20brief.pdf?ver=2014-08-26-101500-750.

USAID. 2014. “India’s Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCH+A) Strategy.” http://www.mchip.net/sites/default/files/RMNCH+A%20in%20India.pdf.

Zaidi, S.M.I.A. , K. Biswal, N. K. Mohanty, and A. A. C. Lal. 2012. “Secondary Education Planning and Appraisal Manual.” http://www.nuepa.org/download/publications/1-secondary%20education%20manual(prof%20zaidi%20).pdf.

ORGANISATIONS STUDIED FOR THE REPORT

Aakanksha Lions School for Mentally Handicapped
Abdul Latif Jameel Poverty Action Lab (J-PAL)
Accenture
Action for Ability Development and Inclusion (AADI)
Acumen Fund
Aditya Birla Group
Adobe Foundation
Aga Khan Foundation
Agastya International Foundation
Airtel Bharti Group
Akshara Foundation
Akshaya Patra
Ambuja Cements Ltd.
AMD
American India Foundation
Antarang Foundation
Asian Development Bank (ADB)
Asian Paints
ATMA
Azim Premji Foundation
Bank of America
Barclays Bank
Bharti Foundation
Bill & Melinda Gates Foundation
Bisleri
Bodh Shiksha Samiti
Bread for the world
Central Square Foundation
Children's Investment Fund Foundation (CIFF)
Cipla Foundation
Citibank
Coal India Limited
Credit Suisse
Dalyan Foundation
Deloitte
Design for Change
Dewan Housing Finance Limited
DFID's Poorest Areas Civil Society (PACS)
Door Step School
Draper Richards Kaplan Foundation
Dream a Dream
DS Group
EdelGive Foundation
Educate Girls
Educational Initiatives
EduStars
Enable India
Ennovent and Sadeesh Raghavan
European Union
EY Foundation
FICCI
Footprint Ventures
Fourth Wave Foundation
Global Fund for Children
Godrej
Going to School
Gray Matters Capital
Gyan Prakash Foundation
HDFC Bank
Hindustan Petroleum Corporation
HPCL
HSBC
IBM India
ICICI Foundation
IFMR Trust
India School Leadership Institute (ILSI)
Infosys Foundation
Innovision
Invention Labs
Inventus Capital
Jai Vakeel Foundation
Kaivalya Education Foundation
Kaizen Private Equity
Karnataka Learning Program
KC Mahindra Educational Trust
Khosla Impact
Kotak Education Foundation
KPMG Foundation
LabourNet
Larsen & Toubro
Lend-A-Hand
LGT Impact Ventures
MacArthur Foundation
Magic Bus
Mahindra Group
Manovikas Kendra
Masoom
Mastercard Foundation

Medha
Michael & Susan Dell Foundation
Microsoft
Misereor
Mobile Creches
Mothercare
Mphasis
Muktangan
Narotam Sekhsaria Foundation
Nettur Technical Training Foundation
Novak Biddle Venture Partners
Oberoi Family Foundation
Omidyar Network
Opes Impact Fund
OSCAR Foundation
Parle
Paul Hamlyn Foundation
Pearson Affordable Learning
Piramal Foundation
Pratham Education Foundation
Prayas
Quest Alliance
Reliance Foundation
Rolls-Royce
Saint Gobain India Foundation
Salaam Bombay Foundation
Samarthanam Trust
Sambodhi
Samsung India Electronics Pvt. Ltd
Samvada (Baduku Community College)
Sarthak Educational Trust
SEED Edu. Corp. (India) Pvt. Ltd.
Sesame Workshop India
Setco Foundation
Sir Dorabji Tata Trust
SRF Foundation
SRF Ltd.
STIR (India)
Sudiksha Knowledge Solutions
Sutradhar
Suzlon Foundation
Swades Foundation
Swami Vivekananda Youth Movement
Tata Consultancy Services
Teach for India
Tech Mahindra Foundation
The Education Alliance
The Hans Foundation
The Mumbai Angels
The NAZ (India) Foundation Trust
The Tata Trusts
The World Bank
Titan
Trent-Westside
Ultra Tech Cement
Ummeed
UNICEF
Unitus Seed Fund
USAID
Varthana
Victoria Memorial School for the Blind
Vigyan Ashram
Vikramshila Education Resource Society
Village Capital
Wipro Cares
Zaya Learning Labs

ABOUT THE PARTNERS

ABOUT AVPN

AVPN is a unique funders' network based in Singapore committed to building a vibrant and high impact philanthropy and social investment community across Asia. As an advocate, capacity builder, and platform that cuts across private, public and social sectors, AVPN embraces all types of engagement to improve the effectiveness of members across the Asia Pacific region.

The core mission of AVPN is to increase the flow of financial, human and intellectual capital to the social sector by connecting and empowering key stakeholders from funders to the social purpose organizations they support. With over 380 members across 28 countries, AVPN is catalysing the movement towards a more strategic, collaborative and outcome focused approach to philanthropy and social investing, ensuring that resources are deployed as effectively as possible to address key social challenges facing Asia today and in the future.

Visit us at: www.avpn.asia

Reach us on: knowledge@avpn.asia

Follow us on: **LinkedIn** https://www.linkedin.com/company/1531427/

Twitter @avpn_asia

Facebook @asianvp

ABOUT SATTVA

Sattva (www.sattva.co.in) is a social impact strategy consulting and implementation firm. Sattva works closely at the intersection of business and impact, with multiple stakeholders including non-profits, social enterprises, corporations and the social investing ecosystem. Sattva's work spans across multiple states in India, multiple countries in Africa and South Asia, on the ground, and Sattva has engaged with leading organisations across the globe through its practice in strategic advisory, realising operational outcomes, CSR, knowledge, assessments, and co-creation of sustainable models. Sattva works to realise inclusive development goals across themes in emerging markets including education, skill development and livelihoods, healthcare and sanitation, digital and financial inclusion, energy access and environment, among others. Sattva has offices in Bangalore, Mumbai, Delhi and Paris.

Visit us at: www.sattva.co.in

Reach us at: knowledge@sattva.co.in

Follow us on: **LinkedIn** https://www.linkedin.com/company-beta/2635534/

Twitter @_sattva

Facebook @SattvaIndia

Instagram @sattvaindia

CREDIT SUISSE

ABOUT CREDIT SUISSE

As one of the world's leading banks, we are committed to delivering our financial experience and expertise to corporate, institutional and government clients and to ultra-high-net-worth individuals worldwide. Founded in 1856, Credit Suisse today has a global reach with operations in around 50 countries. We believe that our responsible approach to business and the dedication and expertise of our 47,170 employees are key factors determining our long-term success.

For Credit Suisse, corporate responsibility is about creating sustainable value for our clients, shareholders, employees and other stakeholders. We strive to comply with the ethical values and professional standards set out in our Code of Conduct in every aspect of our work – including in our relationship with our stakeholders. We do so based on our broad understanding of our duties as a financial services provider and employer and as an integral part of the economy and society. Our approach also reflects our commitment to protecting the environment.

Visit us at: https://www.credit-suisse.com

Reach us at: https://www.credit-suisse.com/in/en/contact-form.html

Follow us on: **LinkedIn** https://www.linkedin.com/companies/credit-suisse

Twitter @csapac

Facebook @CreditSuisse

AVPN is a unique Pan-Asian funders' network catalysing the movement toward a more strategic and collaborative approach to philanthropy and social investment to address key social challenges facing Asia today and in the future.

Email address:
knowledge@avpn.asia

Address:
3 Shenton Way, Shenton House #22-08, Singapore 068805