

Impact Investing in K-12 Education in India

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1. Introduction

It is well recognized that education is a potential game changer when it comes to poverty alleviation. Investments in education generate by far the highest returns with respect to future earning potential, and have significant impact on person's life trajectory.

India has a population of 572 million people between the ages of 0-24 years (Census of India, 2015). This has led to significant government and private spending in education sector. The current K-12 school system in India is one of the largest in the world with more than 1.5 million schools that have more than 250 million students. According to India ratings, India's education market is USD 133 billion with USD 56 billion in private spend, out of which USD 40 billion is in K-12 Education (Kaizen Education (KE), 2014). The sector grew at a compounded annual growth rate of 16.5% during FY 05 – FY 12. (Shinde, 2013).

Despite vast amount of money, both government and private, being spent on education, the quality of education remains poor. Inefficient government expenditures, inability to attract quality talent, low quality fly-by night operators, and structural limitations have limited the education sector's ability to make and impact on people's lives, especially at the bottom of the pyramid. There are significant inequalities in access to education as far as income, gender, social group and geography are concerned. Almost 50% of students drop out before 5th grade, and 80% by the 8th grade (Gross Enrollment Ratio (GER) in Higher Education, India, 2015). Overall, the outcomes in education are demoralizing: insufficient improvements in basic skills as demonstrated by Pratham's ASER and PISA reports, delivering unemployable youth, huge dropout rates and lack of progress in encouraging early childhood education.

These challenges mentioned above have led to very low private investment in education, with less than 2% of total venture capital or impact investment. However, there are various factors that present need and hence opportunity for private sector participation in K-12 education sector in India. Firstly, there is huge supply-demand gap between number of students of school going age and number of students enrolled in schools. Out of 360 million children of school going age, only 250 million are enrolled in primary and middle schools. This number drops drastically by the time students reach higher education, with only 28 million students enrolled in higher education and vocational training (Gross Enrollment Ratio (GER) in Higher Education, India, 2015). Secondly, there is an eminent quality gap between government and private schools. 14% of grade 8 students in rural schools cannot read grade 2 text or 28% cannot divide numbers. 21% of grade 4 students in government schools in Mumbai cannot read grade 1 text. Poor quality of education in government schools are driving away students from government schools to private schools. Enrollments in private schools has been rising year on year and stands at 31% in FY 2014 (Annual Status of Education Report, 2014). In addition to these factors, growing middle class and lower-middle class with ability to pay, increasing penetration of technology, opening up of government regulations and increasing public-private partnerships are some factors that provide positive outlook for private investments in K-12 education sector.

2. Major Problems faced by K-12 Education in India

The K-12 education sector catering to low-income segments is facing certain serious challenges that need to be resolved both through policy as well as entrepreneurial initiatives. Impact Investment in education sector has a vital role to play to overcome these challenges.

Inefficiency in implementation of Right to Education Act

In 2009, the Indian Parliament passed the Right of Children to Free and Compulsory Education Act or Right to Education Act (RTE). The Act makes education a fundamental right of every child between the ages of 6 and 14 and specifies minimum norms in elementary schools. It requires all private schools to reserve 25% of seats to children from poor families (who will be reimbursed by the state as part of a public-private partnership plan), which will change the structure of classrooms in elite schools to school who are not yet enrolled.

However, there are many apprehensions with regard to achieving desired goals through RTE. In the 6 years since the RTE went into effect, implementation has been varied by state. While schools have implemented certain aspects of the Act, others including the 25% admission for students from lower-income backgrounds have not seen success.

There is opportunity for significant improvement in quality of education if the RTE is executed in its spirit and enterprises seeking to fill gaps in the system can impact school education in a big way.

Insufficient public spending

Government spending on education is considered not only 'insufficient' but also 'inefficient'. Considering global distribution patterns of public education expenditure (international PPP\$) and population, India's spend on education is highly disproportionate. While countries in North America and Western Europe account for more than half of the global spend on public education, less than 10% of the world's school-age population (5-25 years of age; from primary to tertiary levels) lives in these countries. The USA's assigned public spend amounts to 25% of the cumulative spend on just 4% of the target population group. In sharp contrast, India's public spend on education amounts to ~5.2% of the world's cumulative public spend, but the country is home to 20% of the population in the target group (The World Bank database, 2015).

Further, a break-up of government spend shows that only a tiny component (0.8%) goes towards capital expenditure. 80% of the revenue expenditure goes towards teachers' salaries, leaving little to be spent on infrastructure creation, which eventually translates into 'ineffective' infrastructure, and poor quality of education. While India has a network of more than 1 million schools, 66% of these are only till the primary level. Inefficiency of the public education system is amply captured in the fact that while gross enrollment rates are as high as 89% in upper primary and secondary schools, dropout rates can go up to 50% in certain states (District Information System for Education (DISE) database, 2015).

It is clear that the education space requires the private sector to come up with innovative content, delivery models and business models that are self-sustainable and do not rely on government funding or aid assistance. The Fund will play an important role in funding and supporting these models.

Poor quality of teaching

In both the government and affordable private school segments, there are concerns about content, quality and methods of teaching. Teaching quality also varies as a consequence of pre-service and in-service training available to teachers. While 80% of regular teachers have teaching qualification, only 55% of contractual teachers have some teaching qualification. Additionally, only about 22% of teachers receive any form of in-service training, a number that has steadily declined from 2005 (40% of teachers received in-service training) (Elementary Education in India, 2013-14). Despite recommendations for the central and state governments to increase the number of Teacher Education Institutions and a redesign of the teacher training curriculum, there has been a delay in implementation resulting in a lower number of qualified teachers within the system.

Teacher absenteeism has been identified as one of the major issues affecting student learning. According to the World Bank Study, absenteeism among government primary school teachers ranges from around 15-40%, with higher rates in poorer states (“The Hidden cost of corruption: Teacher Absenteeism and Loss in Schools, 2015).

Due to lack of innovative teaching methodologies, there is no growth in student learning outcome which is well reflected in the scores of standardized test taken by Indian students. In 2009, Indian students ranked 73rd out of 74 countries that took the OECD's Programme for International Student Assessment (PISA) and since then the government has declined to participate in the assessment (Times of India, June).

Hence, the need to elevate the quality of teaching is apparent. Enterprises with innovative business models will have to work towards increasing teaching quality and demonstrating increase in student learning levels.

3. Market Dynamics for Social Enterprises in K-12 Education

There are two major channels for sales for enterprises in K-12 education in India.

Business to Customer (B2C)

The per capita expenditure on education varies significantly between urban and rural populations, and between the top and bottom 5% of the population.

Table 1: Per capita spending on Education

Population	Per capita spending
Rural population (top 5%)	US\$ 4 per capita per month
Rural population (bottom 5%)	US\$ 0.08 per capita per month
Urban population (top 5%)	US\$ 13 per capita per month
Urban population (bottom 5%)	US\$ 0.2 per capita per month

(Source: World Bank Database)

It is clear that people at base of the pyramid spend less on education (about 3% of household income) as compared to total population. Hence, the solutions for low-income markets need to be cost-effective without compromising on the quality.

While this channel is more favorable for sales to high-income segment and urban population, it is very difficult to sell products/ services to low-income segment population directly through B2C channel.

Business to Business (B2B)

Social enterprises are looking for following avenues to sell their product/ services:

Schools

Based on the differential geography and income-levels of Indian population, three different sub-markets have emerged within private school segments:

- High-End Schools – Schools having fees more than INR 60,000 (USD 1,000) per annum. Parents of students studying in this segment have high aspirational value on student outcomes
- Mid-Market Schools – Schools having fees between INR 12,000 (USD 200) to INR 60,000 (USD 1,000) per annum. These schools are based especially in Tier-2 cities and are expected to double its market share in coming years.
- Affordable Private Schools – Fees under INR 12,000 (USD 200) per annum. These schools mainly cater to low-income population.

Social enterprises sell their products/ services to schools which in turn pass the cost to students through fees. Various social enterprises are looking to build hybrid model to cross-subsidize products/ services to serve low income population. The payment structure depends on segment of schools. While some social enterprises charge one time fees to schools, some are charging schools subscription fees per student basis depending on the business model.

Government

It is very difficult for social enterprises to sell directly to government schools. The decision is taken by government and is implemented in all the schools. While it is very lucrative to sell to government because of the sheer size of the sale, the sales cycle is very long and can go up to years together. Most social enterprises are staying away from selling directly to government because of delay in payments.

Corporate Social Responsibility (CSR)

This is one channel that is becoming popular among social enterprises. Indian government has passed a law that large organizations have to donate 2% of the profits towards social causes every year as part of their Corporate Social Responsibility (CSR). Education has been part of mandate on many Corporations. Some social enterprises are looking to sell their product/ services to them that in turn is donated to government schools.

4. Landscape of Education Enterprises in India

Current trends in India's education sector are focused on three broad market segments:

- a. **Core education** that comprises K-12 schools, undergraduate and graduate colleges
- b. **Parallel education** that includes child care, preschools, tutoring and test preparation classes, teacher training and other vocational training services
- c. **Ancillary education** that includes products and services provided to core and parallel segments such as ICT and multimedia, books, stationery, etc.

Core Education

The core education has always been the prime focus of policy making. Private spending in this segment is approximately US\$35 billion annually with CAGR of 12%. (Kaizen Education (KE), 2014) However, one important barrier to attracting quality entrepreneurial talent to K-12 education is the fact that this segment highly regulated. Educational Institutions in India are required to be non-profits. Enterprising entrepreneurs have to find a work-around this regulation by setting up infrastructure companies that provide the school (which is registered as a non-profit) with services such as land, teachers, supplies, etc.

Due to poor quality of education arising from lack of teacher accountability and insufficient infrastructure in government schools, private schools have been able to drive growth by focusing in their resources on teaching and better infrastructure. This, in turn, has resulted in high fees for the students that people from low-income segment are unable to afford. To cater to the need of parents who can't afford high fees of the private schools but want to give their children best education, there has been rise of Affordable Private Schools (APS) or budget schools that charge fees under INR 12,000 (USD 200) per annum. Even though the quality of these APS is not as good as high or mid-market private schools, parents still prefer to send their children to these schools as compared to government schools. However, even these APS are registered as non-profit and are very highly regulated.

Some entrepreneurs have attempted to solve this issue by starting school management company that leverage existing school infrastructure and take over day-to-day operations of school. Their services include content/curriculum development, teacher training, recruitments, transportation, online courses, school management software, etc. that are sourced out to different schools. Last year Acumen supported one such initiative called Standard of Excellence in Education and Development (SEED) to improve current state of low-cost private education in India. SEED works with underperforming low-cost private K-10 schools to institute a standardized curriculum, teacher training and other operational processes to improve efficiency and help these schools deliver the best quality education at the most affordable levels. They also provide teachers with detailed lesson plans and comprehensive support to deliver the best possible instruction in classrooms.

Recently, government has recognized the need for public private partnership (PPP) to deliver quality education. Some organizations and entrepreneurs have come forward to grab this opportunity to solve the problem in government schools. One such example of successful PPP model is iTeach Schools in Pune, Maharashtra, started by two budding entrepreneurs Soumya Jain and Prashant Mehrishi.

iTeach Schools, Pune

In Pune, there are 330 schools that are run by Pune Municipal Corporation (PMC) but on 26 of them go all the way to grade 10. Out of these 330, 50 schools are English medium and only two of them go up till grade 10. Realizing the huge need for students who drop out after grade 7 in Maharashtra schooling system, iTeach started two schools with classes from grade 8 to 10 in Public Private Partnership with the objective to provide good quality education to students coming from low-income background.

Both Soumya and Prashant, co-founders of iTeach are passionate about changing the face of education for students coming from low-income segment. During their fellowship with Teach for India, they identified this big gap and decided to bridge it by leveraging existing infrastructure of government schools and mobilizing capital from various corporates that support education through their Corporate Social Responsibility (CSR) mandate. Currently, iTeach schools are catering to 240 students studying in grade 8 and 9 with total of 8 teachers and supporting staff in each school.



Parallel Education

“Parallel Education Sector” comprises of after-school tuitions, coaching classes, pre-schools and related activities. Some interesting models are emerging that use technology to reduce dependence on teacher quality in order to overcome the challenges of lack of quality teaching talent and

consumers' inability to discern quality. This segment is highly fragmented with few organized players in the market.

Tutoring and test preparation is the largest segment in parallel education and is expected to grow at 15% CAGR from US\$11 billion to US\$16 billion by 2017 ((IBEF), 2013). Poor quality of teaching in schools drives the demand for after-school coaching classes. As this segment is not regulated, the market is highly localized and competitive.

Avanti Learning Centers

Avanti, founded by Krishna Ramkumar and Akshay Saxena, is funded by Michael and Susan Dell Foundation and Pearson Affordable Learning Fund. Avanti's goal is to create a high-quality, affordable, and scalable education model that can prepare these students adequately for college and the workforce. Avanti identifies high potential low-income students and provides them with supplementary science and mathematics education at learning centers in the cities of Mumbai, New Delhi, and Kanpur.

Avanti is a hybrid social enterprise. Its non-profit arm creates and owns Avanti's content and curriculum, and delivers it for free in eight government schools in Chennai, Pondicherry, and several Tibetan settlements, serving 400 students. The for-profit arm runs five stand-alone centers in the metropolitan cities of Mumbai, Delhi and Kanpur. 200 students are enrolled in these centers at a cost of 20 USD per month, which is one-sixth the cost of alternative options available to these students.



Image Source: Avanti Website

Pre-schools are also an attractive vertical for the impact investors as these are the only schools that fall outside government regulations. With a market size of USD 1.18 billion, India has highest number of preschool children enrolled globally (Kaizen Education (KE), 2014). The preschool market is highly fragmented and competitive. There are several local operators that operate out of standalone centers without any standardized curriculum. Even though parents prefer organized preschools with standardized curriculum, the fees charged by them is high and parents from low-income segment group are unable to afford it. There are several players that are trying to build cost-effective centers to cater to low-income segment group such as Sudhiksha and Hippocampus Learning Centers.

Hippocampus Learning Centers

Hippocampus Learning Centres (HLC), started in 2010, aim to increase access to quality early childhood education in rural India and bridge gaps in the local education system. This is done through establishing kindergarten program for children between the ages of 3 and 6 that seeks to provide foundational early learning for children who otherwise would not have the resources to access such services. These centers are run by two teachers and one assistant, and a typical day lasts from the early morning through the afternoon.

HLC has developed its own curriculum in conjunction with international education experts, which promotes a student-centric, creative style of pedagogy that does not rely on rote learning and memorization. HLC recruits predominantly female teachers from the rural villages where centers are located, and provides them with rigorous teacher training and an employment opportunity in communities where alternative livelihood options outside of agriculture or manual labor are scarce.

The centers charge an affordable monthly fee that ranges from INR 100-250 (2-5 USD) that is affordable for bottom-of-the-pyramid consumers in rural India. These fees go towards teacher salaries and the maintenance of the centers. HLC keeps fees low by maintaining low start-up and material costs for each center. The per capita income level of parents of these children varies between INR 13,000 and INR 14,000 (USD 200 – 250) per annum.

HLC has been funded by Acumen, Lok Capital and Unitus Seed Fund.



Image Source: Hippocampus website

Teacher training is emerging as a huge need area as teacher quality is a big barrier to improvement in learning outcomes. Most of the solutions fail due to inability of teachers to execute them in the classrooms. Pre-service teacher training has mainly been in the hands of government and private institutes that provide Bachelor's and Master's degree in education. The quality of these training institutes has always been questionable. Social enterprises in this vertical has mainly been driven by non-profit models such as Baran, Azim Premji Foundation and Kaivaliya. Some for-profit models are emerging but it is too early to comment on the success of such models. Aspire, funded by Capital Foundation, Guru-G Learning labs, funded by IEIF, iTeach Fellowship supported by Villgro are some examples of for-profit social enterprises that are working to provide in-service training to teachers to improve the quality of teaching.

Ancillary Education

Ancillary Education comprises of companies indirectly supporting the larger cause of improving the quality of education thereby improving the student learning outcomes. Enterprises developing innovative content and curriculum, standardized assessments, accelerated learning programs for English, Math and Science including teaching aid, technology enabled school administration, etc. fall under this category.

Most companies developing content and curriculum are focused on high and mid segment schools since willingness to pay among APS segment is very low. Moreover, it is difficult for the entrepreneurs to establish the value proposition for providing only content without any delivery mechanism to APS. XSEED is one such company that has succeeded in selling to mid-segment schools but is still struggling to capture the APS market. For such models to work in APS, firstly they should be cost effective and secondly, they should come along with a high touch support to teachers to use the innovative content in the classrooms. One company that has been able to penetrate APS market to some extent is EduTel. Founded by Harha K Mahabala and supported by Michael and Susan Dell Foundation, EduTel offers satellite-based delivery of lessons with experts in the studio and a facilitator in the schools. They have broadcasted to over 0.2 million students so far.

Assessment and Data Analytics is emerging as one of the need areas for understanding growth of students and provide them with individual feedback to improve their learning outcome. Teachers can also use the data to design teaching methodologies that work for students with different learning levels. Educational Initiative (EI) is the leading organization to create student assessments. EI has worked with over 3,000 schools with over 350,000 students across 21 states of India. Another startup that has recently raised funding from India Educational Investment Fund, Report Bee, provides data analytics of student assessment data and helps schools monitor the growth of individual students.

In addition to student assessment and data, there is an organization that does school assessments and measures the performance of the schools across various parameters.

Gray Matters India

Many low cost private schools do not implement consistent assessments or evaluations. Gray Matters India assesses low cost private schools in India to determine students' reading, arithmetic, and English language skills. GMI uses a three pronged approach to address service providers, schools, and students on behalf of parents who otherwise will not receive this information. GMI assesses how well teachers speak and teach English in their classrooms. GMI also places emphasis on parent satisfaction surveys, school leader interviews, and infrastructure audits. These assessment technique leads to an automated rating of gold, silver, or bronze performance.

GMI's school report translates to model action plans for schools. Action plans encompass five to six priority items for schools to address, then GMI returns to the school every two months to monitor and reevaluate progress. In the future, GMI plans to use more data and accountability within their action plans to encourage growth.

As GMI is a private institution, schools must pay to have this service. GMI also does impact assessment for education service providers and aims to implement a direct-to-parent model. Parents can also request GMI's assessments for their children's schools; however, parents then must pay for assessments as well. GMI tries to incentivize parents to pay for their services through scholarships. Currently, school and student assessment do not go hand-in-hand.

The biggest challenge faced by GMI is to encourage low-income schools and parents to enforce school diagnostic data.

The need for proficiency in English, Science and Math drive the business for accelerated learning programs that improve the learning outcomes in English, Math and Science. This need arises from lack of good quality teachers that can teach these subjects. There are lot of innovators who are trying to develop solution to meet the needs of the students. There are lot of online interactive English learning platforms such as Thulir, English Helper, In-Open Technologies that have shown initial growth in the market. However, it is challenging to sell these solutions directly to parents. In low-income schools, lack of infrastructure becomes a challenge to adopt such technologies.

There are some enterprises that are providing Science Activity kits to the schools to make Science learning fun and engaging. However, biggest roadblock again becomes the ability of teachers to use it in the classroom. Butterfly Fields, Experifun, Curiosi and Life Lab are some of the examples that have developed Science Activity kits and are selling directly to schools.

Schools tend to spend on smart classes and digital classrooms as this is direct tangible investments that parents can see and schools pass over the cost to students as fees. However, utilization of these digital platforms beyond the initial phase remains a challenge.

Zaya Learning Labs

Zaya’s ultimate goal is to build a global network of “Learning Labs” that educate and empower millions of students at the base of the pyramid. Zaya labs take two forms – labs set up in partnership with low-income schools where Zaya will be used to aid instruction as well as stand-alone after-school labs.

At the core of these learning labs is a blended learning approach, which combines traditional teaching methods with small-group and individual learning. One-to-many learning is still the primary vehicle for teaching new concepts for the first time with small group and one-to-one self-paced learning used to achieve mastery and help students in addressing personal strengths and weaknesses. This shifts the focus of the classroom from teacher to student, catering to the needs of individual students vs. a “one-size-fits-all” approach.

Zaya’s labs are powered by a unique Class Cloud technology, which allows teachers to bring the best of educational content on the web as well as supplementary content specifically tailored to the local curriculum into their classrooms. The Class Cloud “Hotspot” is lightweight, mobile, and battery-operated and can operate without an internet connection (internet is only required when new content needs to be synced from the central server). The Class Cloud, which can store content ranging from instructional videos to e-books, is part of a Lab Kit bundle, which includes tablets, earphones, a projector, and peripherals.

Realizing that teacher training is as critical to driving learning outcomes, Zaya is investing significant energy in developing training modules to train teachers on blended learning. Its platform provides teachers with feedback and analysis on students’ progress and performance, allowing students to track learning deficits at the skill or micro-skill level. With this information, teachers can more effectively invest their time in the areas where students need the most help.



Image Source: Zaya Learning Labs website

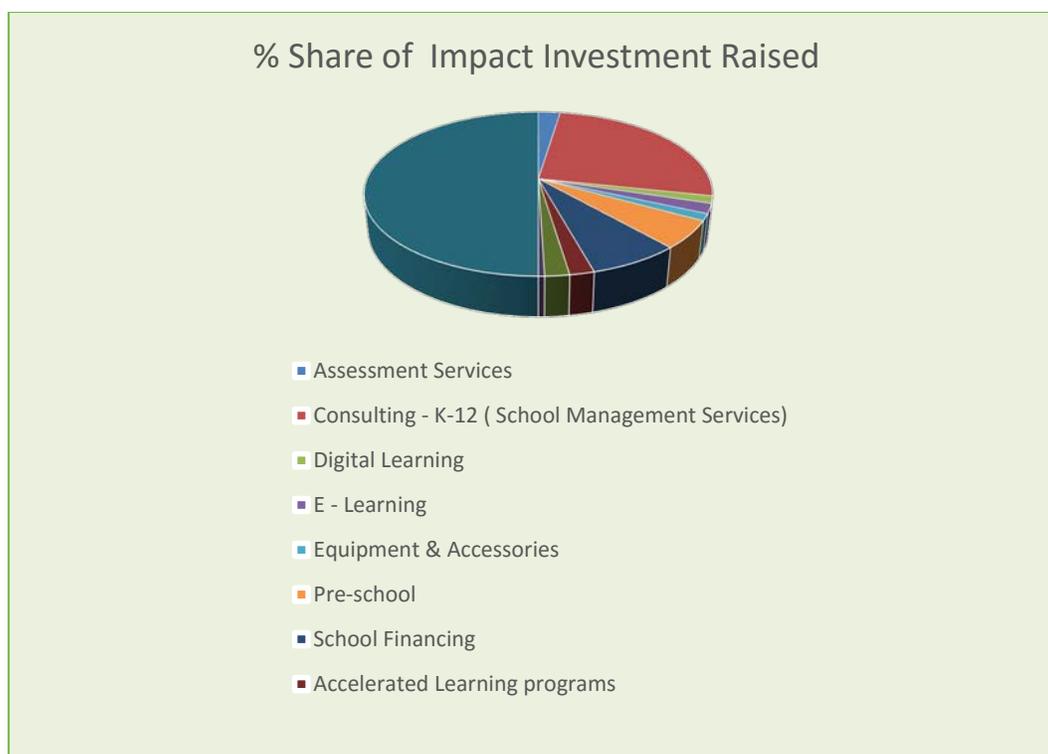
5. Impact Investments in K-12 Education Enterprises

The following section concentrates on the major equity deals done by impact investors in the last five years in education sector in India. The idea is to understand the business models in K-12 education that investors are backing and have potential to scale to attract mainstream capital to achieve high growth both in terms of financial returns as well as social impact. Based on the data gathered on the equity deals from early 2010 onwards, education enterprises have attracted around USD 52 million.

Table 2: Impact Investment in K-12 Education

Business Models	Investments (USD Million)	% Share	Companies (Examples)
Assessment Services	2.52	5%	Gray Matters, Xamcheck
Consulting - K-12 (School Management Services)	27	52%	Vienova, K12 TechnoServices, SEED Schools
Digital Learning	1.5	3%	Zaya Labs, Inopen
E - Learning	2	4%	Edutel
Equipment & Accessories	1.4	3%	Agastya, QED
Pre-school	5.65	11%	Sudiksha, Hippocampus
School Financing	7.53	14%	Varthana, ISFC
Accelerated Learning programs	2	4%	Karadi Path
Teacher Training	2	4%	Guru G Learning Labs, Aspire
Test Preparation (Entrance Coaching)	0.5	1%	Avanti
Total Investment	52.10	100%	

It can clearly be seen that more than 50% of the investment from the impact investors has gone in School Management Services. Since pre-schools don't fall under the purview of government regulations, there are some chains of low-cost pre-schools that have emerged and are have attracted capital from impact investors.



To understand how these business models are faring among mainstream investments, it would be useful to see the investment trends in K-12 education sector by mainstream investors.

Table 3: Mainstream Investment in K-12 Education Sector

Business Models	Investments (USD Million)	% Share	Companies (Examples)
After school intervention - Out of School Courses	1.5	1%	SmarQ, K2 Learning Resources
K- 12 Schools	39.2	18%	MIPS
Digital Learning	26.5	12%	iProf, LabInApp
Educational Aids	1.7	1%	Experifun, Madrat
E-Learning	63.5	29%	Tutorvista Vedantu
Online Services	0.9	0.41%	Jombay, Nopaperforms
Pre-School	16.3	8%	Treehouse, KlayPrep
Learning Services	21.5	10%	Beacon, iNurture
Sports Education	1.0	0.46%	SV Edusports
Test Preparation	43.6	20%	Toppr, Rankjunction
Total Investment	215.6	100%	

As seen from the data above, e-learning and competitive exam test preparation are two sub-sectors where majority of mainstream capital has been invested. Hence, there lies a huge opportunity for social entrepreneurs in education sector to develop innovative solutions in e-learning and exam test preparation and prove the business model to attract mainstream capital that can be used for growth. However, social entrepreneurs would need to be careful while raising investment from mainstream capital. Mainstream investors may want to shift the focus of the enterprises from serving low-income segment population to high and mid segment population. Therefore, social entrepreneurs would need to prove that profitability of the model even while serving low-income segment groups.



6. Investment Opportunities in K-12 Education in India

India's education sector has witnessed a paradigm shift in last decade, both in mainstream and impact sectors. Several initiatives taken by Government of India at center and state level have led to better access of education to people at base of the pyramid. However, improvement in quality of education remains a big question mark that needs to be answered.

This section focuses on future trends in K-12 education sector considering both need for solution and market opportunities.

Assessment and Data Analytics

Assessment is an important part of teaching process as it is used to determine whether the learning objectives of a course are met or not. This data can be used to assess students in different competencies both academic and non-academic and to provide personalized feedback to individual student. While there are different assessment and data analytics platforms available, there is lack of standardization enough to cover different curriculums followed by different Indian states. Moreover, there is no solution that captures students' progress based on mastery.

One of the key challenges for the success of enterprises providing assessment and data analytics solutions is dependency on teachers. Teachers need to utilize these platforms to monitor student learning outcomes and design various methodologies and implement it to achieve desired outcomes. Especially in government and Affordable Private schools, teachers are not incentivized enough to put extra efforts to use the data in the most effective way. Hence, the standalone assessment and data analytics solutions are struggling to scale.

For an effective solution that can be well accepted by the market, entrepreneurs will need to keep two things in mind. Firstly, they should develop a solution that can be customized based in the curriculum followed in different states or develop assessment that standardized and give fair way to evaluate learning outcomes of all students. Secondly, for wider acceptance from the market, these platforms should provide a complete solution so that teachers don't have to put efforts in designing the methodologies. This can be achieved either by in-house content development or partnering with already existing content providers.

School Management Services

Due to poor quality of teaching and inefficiencies in the ways that schools operates, there are few enterprises emerging that provide school management services and implement their own methodologies to improve the learning outcomes of the school. These enterprises follow revenue sharing model with the management of the school. The value proposition for the school management is that they don't need to worry about hiring and training teachers. These models bring more discipline and efficiency to the quality of teaching as they follow innovative curriculum, teacher training methodologies and student assessments. One of the biggest advantages of this model is that the investment in school infrastructure is minimum.

One of the key challenges here is to find motivated teachers. This risk can be mitigated by developing strong teacher training curriculum and deliver standardized training to all teachers preferably by leveraging use of technology.

Pre-schools

According to 2011 census data, there are 164 million children in the age group of 0-6 years. The research data shows that child develops cognitive, physical, social and emotional skills most in this age group. Interventions in early childhood are proven to have on future of kids. However, many low-income families are unable to support early childhood education of their kids due to lack of financial resources. Moreover, in rural areas there are no pre-schools that students can go to. Hence, there is a strong need to develop cost-effective pre-schools that kids can go to.

One of the biggest challenges with any school would be to establish credibility and create demand among the parents to send their kids to school. The gestation period for these schools to achieve break even can be long. Secondly, find good quality teachers can also be difficult.

In most cities, while there are chains of pre-schools catering to high and mid income segment people, the pre-school market is largely scattered. One of the business model that have good potential to scale is to create standardized curriculum and activities for these pre-schools and create a brand to get these fragmented pre-schools under one umbrella.

Accelerated Learning Programs

There is a huge need especially among affordable segment to improve proficiency in English, Math and Science. It is very difficult for schools to find teachers that are good in these subjects. Most of the existing solutions catering to these subjects are just enablers and still depend on ability of teachers to implement them in the classrooms. Hence enterprises that can provide holistic solution to schools and reduce dependency on teachers to teach English, Math and Science have huge potential to scale.

From students' point of view, the content platform should be such that it makes learning fun and keep them engaged. Many solutions, including Khan Academy videos give initial excitement to kids from low-income segment as they see and use technology for the first time. But students slowly start losing interest and need lot of push to use these solutions.

Teacher Training

The underlying fact for each of abovementioned solutions to succeed, there is requirement for good teachers. Despite being the second largest education system in the world, there is serious shortage of good faculty in India. There is a huge need for both pre-service and in-service training for teachers. Currently, the formal degree programs are ineffective and don't help in developing skills of teachers.



While there is a strong need to change the policy to revamp teacher training in India, there is huge opportunity for entrepreneurs to design solutions that can help train teachers to be more effective in the classroom. However, key here would be to show tangibles in growth of teacher performance for schools or parents to pay for the services.

After-School Remediation and Test Preparation

The competitive test preparation market in India is highly fragmented with some big players who are backed by big private equity investors achieve nationwide scale. Most of these courses are very expensive and are present in cities making it difficult for students from low-income and remote areas to access them. There are solutions such as online classes and peer learning platforms, but even they cater to high and mid income segment population. The students coming from low-income segment require more handholding as they start few levels below their peers. The test preparation solution catering to affordable segment should be a cost effective solution along with a facilitator that can oversee students using the solution in effective manner.

Similarly, many students even those who are going to government schools go to after school remedial classes and pay INR 300-500 (USD 5-8) per month. There is a huge market for a cost-effective solution that can provide after-school remediation and improve student learning outcomes.



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References

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