

Education Needs an Upgrade

Technology can be the big disruptor in education, helping students, teachers and administrators achieve better results

Three key issues that are plaguing school education are a large learning gap in children, ineffective educators and poor accountability. Children in Class V cannot read Class II textbooks or do simple division. Our nine million teachers are deprived of rigorous and relevant opportunities to grow and apply best practices. Lack of authentic data leads to poor decision-making at all levels. In order to disrupt the education field, we need policy reforms and technology solutions that will make higher-quality solutions available at scale.

With digital learning solutions that focus on providing conceptual clarity and individual practice time, teaching and learning in India can move from being largely rote-based to deeper, personalised learning. Leveraging the growing use of smartphones, new development opportunities can be created for teachers to learn from experts and peers. This will help them go beyond their confines of classrooms or textbooks as the only source of teaching-learning material. Just like in other industries, collecting and analysing data in real time can resolve slow and ineffective decision-making in education.

The Disruptor

Technology has a huge potential to disrupt the education space in all three categories: (i) student's preparation (ii) educator's effectiveness and (iii) administration's efficiency.

Personalised tools help students learn and progress at their pace. Such tools, when integrated with the classroom, allow teachers to track the learning data of each child and provide individual intervention. There is also an increasing use of self-learning solutions, which are supplementing or substituting after-school tuitions especially in higher grades or for test-prep. Tools that provide intensive learning, cater to diverse learning needs and enable easy discovery can truly disrupt education.

Blended training programmes combine online learning with in-person or virtual facilitation, peer learning and one-to-one coaching. By linking such programmes to different competency levels, there is a potential to create individual professional development paths for educators.

There is also a latent demand in the teacher community for high-quality, bite-sized curricular resources, such as activities and worksheets, that they can use in classrooms. Several teachers are already on online communities, even WhatsApp groups, exchanging knowledge and information. These trends show how disruptive models can be created for teacher development.

Administrators are also increasingly looking at tech-based solutions to bring operational efficiency. State-level systems are adopting MIS (management information systems) that allow them to track individual child-, class- and teacher-level data. School principals are adopting mobile apps for better communication with teachers and parents, and improved collaboration among the staff.

More than Profit

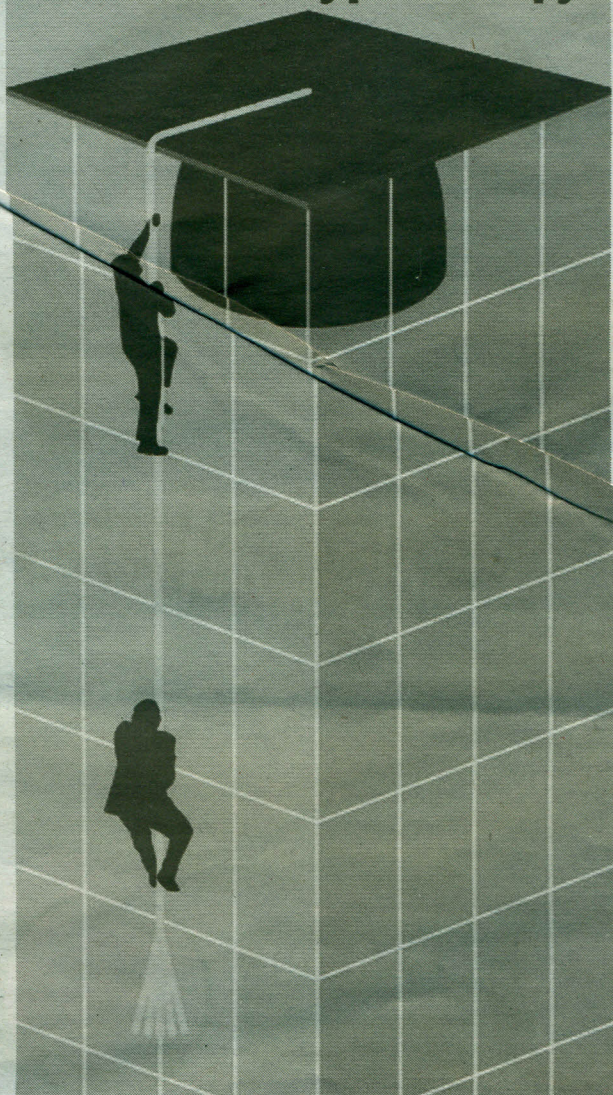
Even though education is called a multi-billion dollar market, the core of school education is still non-profit. Government school market is difficult to monetise and the highly fragmented private school market makes distribution cumbersome. Apart from textbook publishers, other for-profit organisations have not been able to successfully scale. In the last decade, smartboards have tried to penetrate the market but have seen very moderate success. The direct-to-learner model is yet to make its mark.

A critical mass of schools caters to low-income segment where markets do not make sense and hence there is a larger

need for scalable, non-profit models driven by philanthropy. Education is at an interesting inflection point with a lot of positive momentum in political and bureaucratic leadership. Today, several key initiatives are housed at the level of the ministry of human resources development. Many state governments such as Delhi, Rajasthan, Andhra Pradesh and Maharashtra have also been proactive about strategic reforms. There is also growing enthusiasm about using technology to rethink education delivery at all levels.

However, we still don't know how best to utilise technology. Infrastructure is improving with government and commercial interventions, yet there isn't sufficient penetration in schools. For example, effective student interventions would need 5:1 student-computer ratio in schools and high-speed internet connectivity. We are nowhere near such infrastructure in our schools. We also need to invest more in research and development of free, open-source digital solutions that will truly disrupt the education field.

Even though education is called a multi-billion dollar market, **the core of school education is non-profit. There is a need for scalable, non-profit models driven by philanthropy**



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