

Sarthak edit

Poor learning outcomes are the leitmotif of the various assessments of India's schools conducted so far, including the recently published National Achievement Survey (NAS) and the Annual Status of Education Reports generated by the NGO, Pratham, since 2005. With many of the hurdles to achieving better learning outcomes identified, the focus must now be on finding solutions to these. This is where technology can play a big role. While the ministry of human resource development must be at the forefront of deployment of technology to improve learning outcomes in schools, states have already begun experimenting, and as school education secretary Anil Swarup pointed out recently, at The Indian Express's Idea Exchange, states must learn from each other when it comes to replicable solutions.

A school in Pashtepada village of Thane district, Maharashtra, for instance, provides a template for how a nondescript government (zilla parishad-run) school can be made "smart". Students at the Pashtepada school—most of whose parents are farmers or daily-wage labourers—learn through tablets and computers. All the credit for this goes to Sandip Gund, a primary-level teacher at the school. When Gund joined, in 2009, conditions were bleak—students often didn't turn up for classes. To change this, Gund used a donated computer and started using digital content to teach. Next, he bought a tablet PC and a projector with his own money and contributions from colleagues and some villagers. Once students got hooked to learning the digital way, attendance improved. Now, each student at the Pashtepada school had tablets of her/his own, funded by a generous donation by Shraddha Shah, who gave the entire amount gifted to her at her wedding, and textbook lessons are PDF files projected on to a touchscreen that was bought with prize money that the school had won from the state Council of Educational Research and Training. Dropout rates have fallen since.

Maharashtra, seeing the success of the Pashtepada model, now plans to make 500 schools in the state "digital shalas". Imagine the gains for the learning outcomes of the state—as per the NAS, class 3 students responded to 65% of the mathematics questions, 69% of the environmental science questions and 70% of language questions correctly—when these 500 digital-shalas are up and running. And it is not just the government—residents of nearby villages have approached Gund to replicate the model in their schools. Another example of a tech-boost to learning comes from Tamil Nadu, where textbooks will carry QR codes near pictures. Students of class 1, 6, 9 and 11 can scan these QR codes to access additional information and learning material on the topic the picture corresponds to. This reduces the burden of procuring and carrying hard-copy reference books.

The DIKSHA platform launched by the Centre can be a real game-changer— using this, teachers can exchange innovations in teaching and learn from each other. While 2,500 content pieces to supplement class-room teaching have already been uploaded to DIKSHA, 15,000-plus are estimated to come in the next six months. There are over 20 content partners, and over 2 lakh teachers from six states have signed on. 'Digital' is already empowering teachers and bridging gaps in access to content and bringing about a marked change in teaching quality. If the Centre and the states were to facilitate this in every way possible, poor learning outcomes could soon become history.