Embracing Digital Education

Story of integrating digital learning in Government Schools in Maharashtra

Technology is neither foreign nor a fancy for the primary school children in Zilla Parishad School Maliwada, Shevgaon block in Ahmednagar district of Maharashtra. For digital education is well integrated with other ways of learning and part of daily routine in this school. Students watch educational films, practice sums, gain exposure of world beyond, and comprehend abstract concepts through multiple digital devices available in the school.

"Digital tools can be used in numerous ways as independent learning aids as well as to reinforce learning gained through other methods," observes Mr. Ganapat Daspute, the Maliwada School Teacher. Being tech-savvy himself, he has also developed digital content for his students with his smartphone and user-friendly editing mobile apps.

The breed of tech-savvy teachers like Mr. Daspute has swept Maharashtra making digital education a reality in Government run schools. By April 2017 almost 79% government schools in the 36 districts in Maharashtra - 53,193 schools out of total 67663 Government Schools - have turned digital. This means, these schools are making use of digital devices - from tablets, casting devices to projectors with interactive features and integrated computer - in their education with the sole aim of enhancing learning experience of the students.

Mr. Balaji Jadhav, a teacher in Maan block in Satara district has developed many digital videos himself. "Most of the student in my school are children of brick kiln workers. Earlier their attendance was irregular. But now with interesting films and teaching aid, they are more keen to come to school." The student enrolled in this primary school doubled, and now reached to 47, in the recent past.

Mr. Sandeep Gund, a young and enthusiastic teacher posted in remote village Pashte Pada in Thane district also experienced parent apathy towards Government schools, as they wanted the schools to have modern gadgets. Taking on this challenge Mr. Gund transformed his school. Now the classrooms have digital blackboards, educational approach is interactive, and children do their homework and solve test papers on tablets. Digital content is developed in the school studio with the help of students.

Digital Education was systematically promoted and supported by the School Education Department of the state through a programme Pragat Shaikshanik Maharashtra, initiated to work concertedly on improving learning achievements of students in the government run schools. PSM encourages many teachers to learn and adopt newer ways of learning, digital education is one of them.

Mr. Nand Kumar, Principal Secretary, School Education, encouraged teachers to explore the digital devices, "The smartphones in your hand are the most advanced digital device. If you can use a smartphone, you can surely learn digital technology," he assured. His appeal, along with the

proactive initiative of a few tech-savvy teachers, gave the needed impetus to digital school movement in Maharashtra.

“When we started in April 2016 there were only 88 teachers in the group,” recalls Suresh Bharati, one of the leading teachers in the techno-savvy teachers movement in Maharashtra. Although few were actually using digital tools, many teachers were interested in learning it. There was also a need to de-mystify digital education.

Accordingly a basic training course was designed, which included basic online operations such as opening and operating e-mail account, creating power point and other digital presentations, developing and accessing online learning aid, using various educational sites, and starting a blog etc. After every training participants formed a WhatsApp Group and shared their activities and material with one another. Gradually Techno-savvy WhatsApp Groups were formed at tehsil, district and state level, so that important information is shared to each and every teacher.

So far, by April 2017, total 75972 teachers received training in making and using digital learning tools, 5314 teachers have their own websites and blogs to share digital technique and their learning, and 3482 teachers have developed educational applications on various subjects that are shared online for public use.

The expansion of digital drive also gave rise to experimentation and innovation to make learning process interesting and engaging for children.

Mr. Somnath Walke a teacher in Ashti block in Beed district uses plicker card, a mobile app that allows assessment of the class in no time. “I use this method to assess the objective multiple option questions. I get results immediately and then I can help the students who have incorrect answers.”

Mr. Ranjitsinh Disale, a teacher in Zilla Parishad Primary School in Kadamvasti (Paritewadi) in Solapur district in Maharashtra organises ‘virtual trips’ of his students to places like Africa, Thailand, Malaysia and other countries virtually.

These and other similar initiatives showed the potential of digital technology and possibility of their integration in school education. With such role models and with consistent training inputs on how to adopt digital learning aids in school, the idea of digital education caught of the imagination of teachers in the government schools.

In order to upscale this trend of keeping government school abreast with technology, the School Education Department issued Government Order the Jalad Pragat Shaikshanik Maharashtra, issued on 9 January 2017.

Setting the goal to turn all school teachers in tech savvy teachers keeping in pace with the changing trend in education, GR boosted the digitisation process. The number of digital schools doubled from 29258 in January 2017 to 59153 by April 2017. Each district worked out systematic plan to bring in this transformation.

Dhule district in North Maharashtra pioneered in this endeavour, becoming the first district to equip all its 1103 schools with digital education. Digital Dhule became a reality with the initiative of Mr. Harshal Vibhandik, a US based Indian Banker, with Dhule as his native place. Mr. Vibhandik, together with with the District Education Department, reached out village community and

organised motivation meetings – Prerana Sabha, explained importance of digital schools by showing the digital classrooms demo and different techniques of digital education by showing the videos of the digital schools and sharing their teacher's experiences. He also proposed that he would support 30% if the villagers raised 70%. Aspiring to go digital and ensure a good education for children the communities responded very well; a total of Rs. 2.71 crores collected in donations from teachers, villagers and Grampanchayat in respective villages. Importantly more than 50% amount - Rs. 1.56 Crore - raised through people's contribution.

Dhule has inspired several other districts, blocks and clusters to make concrete plan for covering all schools in their jurisdiction.

The best part of the initiative is that it does not offer a ready-made package for everyone, but accommodates needs of every school. Thus a school with small student strength and limited resources could start with the tablet; an 8'-10' tablet costs around Rs. 8000-10000. The schools with a large number of students can go for a projector with interactive features or integrated computer, which would cost from Rs. 50,000 to Rs. 1,00,000 roughly. The needed funds are raised from public contribution. Parents are willing to contribute to fund and help to raise the funds because they want to upgrade the schools. Some schools have sought funding support under CSR from local companies. More than Rs.301.00 crores have been raised through community participation across the state.

"Digital education gives the kids an edge over others and helps them stay ahead," said Dr. Ajit Lanke, whose son studies at the ZP Primary School in Vadgoan Gund village, situated 200 KM from the State Capital Mumbai. Like Dr. Lanke, majority parents look at their contribution in school improvement as investment in the future of their children.

Adoption of digital education also increased the demand for digital content. In response, the School Education Department has compiled quality digital material online through a user-friendly mobile app MITRA -Maharashtra In Service Teachers Resources APP developed by teachers as teaching aid for teachers. Maharashtra Academic Authority, the state's apex body for teacher training and research in education, has set up Information Technology Cell to provide a continuous hand-holding to digital education.

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