



Case Study

Intel® Teach Program

“Thanks to the Intel Teach Program, our children are marching toward the technological era with confidence.”

B. Magdalene Premalatha,
Teacher
Panchayat Union Middle School

In a Rural Indian Village, the Intel® Teach Program Helps Students Bring School Dropouts Back to School

When a teacher at a rural Indian village school participated in the Intel® Teach Program, she learned how to integrate technology effectively into classroom instruction and help her students develop key 21st century skills such as digital literacy, problem solving, critical thinking, and collaboration. She also learned how to motivate her students to take up a cause and improve their community. As a result, her students initiated a project geared toward convincing the parents of young school dropouts to allow their children to return to school instead of earning wages for the family as farm laborers. This involved educating adults in the village about the value of education and the disadvantages of child labor. The students’ effort resulted in several families shifting their priorities and making sacrifices to allow their children to return to the classroom to gain the benefit of an education.

Challenges

- Indian youth need to learn technology and other 21st century skills to improve their economic status and participate in the knowledge economy.
- Teachers are in need of effective strategies to help their students acquire such 21st century skills.
- In many communities, barriers—economic and other—exist that preclude some students from acquiring the skills they will need to succeed in the future.

Approach

- Provide professional development to teachers to enable them to integrate technology effectively in their classrooms and to help students acquire key 21st century skills, including digital literacy, problem solving, critical thinking, and collaboration.
- Employ project-based learning to help engage students in meaningful learning experiences, including projects addressing real-world issues where students think about existing problems, propose solutions, and implement strategies to work toward those solutions.

Benefits

- Through the Intel Teach Program, more than 695,000 Indian educators are now able to effectively integrate technology in instruction and help their students learn the skills they will need to succeed in the knowledge economy.
- Indian students are learning the necessary tools to take on real-world issues, offer solutions, and make a difference in their communities.



Intel Teach Program: A Case Study

When B. Magdalene Premalatha, a teacher at Panchayat Union Middle School in the village of Karakottai, India, became involved in the Intel Teach Program, it was with the vision of expanding future opportunities for her students. In this rural community—located in the Thiruvarur District of Tami Nadu, in southern India—approximately 90 percent of the population work in the agriculture industry, primarily as farm laborers in the nearby paddy, groundnut, maize, black gram, and ginger fields. The work is physically demanding and the pay is low. As a result, the majority of families in the community cannot afford permanent housing; instead, they live in temporary and makeshift structures, often deprived of basic amenities such as indoor plumbing.

Premalatha believes in the power of education and its ability to improve the lives of her students. Thus, she was thrilled to participate in the Intel Teach Program, a professional development program designed to help teachers integrate technology into instruction and help students acquire such skills as digital literacy, problem solving, critical thinking, and collaboration. By teaching these essential 21st century skills to her students, Premalatha knew she would be opening new doors of opportunity for these children.

One of the key elements of Intel Teach is a project-based learning approach—that is, integrating learning into projects that make the work relevant and more meaningful for students.

Premalatha says her pupils were motivated by the process and, as a result, their skill set rapidly grew. Before long, the teacher reports, they voluntarily gave up play time to engage in schoolwork, particularly when a project involved using technology in the school's computer lab.

The students were further inspired when they had the opportunity to take on a social science project focusing on child labor, an issue prevalent in their own community. Because many of the families in Karakottai struggle economically, they often kept their children out of school—or forced them to drop out—so that they could work in the fields alongside their parents to earn money for the family. Premalatha and the school principal had tried repeatedly to persuade the parents—and members of the village council—to allow these children to return to school. Unfortunately, few listened. The problem continued to exist.

But that all changed when Premalatha's students took the issue into their own hands and made it their mission to make a difference in their community.

They started by conducting research on child labor via the Internet, says Premalatha, and discovered a wealth of information, including that “the reasons for child labor were poverty and a lack of awareness.”

As a result, the students used their new skills to create an awareness campaign. They developed public presentations, including dramatic plays and songs expressing “the condition, emotion, and

unfulfilled dreams of child laborers,” reports the teacher. They conducted public rallies where they carried educational placards they’d made using presentation and word processing software, and spoke out against child labor, using slogans they had discovered during their research. Because the students knew their audience would not attend events at the school, they conducted these performances on the streets during evening hours. The students even visited the homes of the dropout children, sharing news of the computer facility at school, as well as their excitement about learning and their hopes for the future.

Of course, the students faced challenges along the way. Initially, the reception for their efforts was quite frosty, says Premalatha, who reminded them, “Rome wasn’t built in a day.” Recognizing the importance of their mission, the students overcame their frustrations and kept working toward their goal: a child-labor-free village.

At last, things began to change. “The villagers started realizing the importance of education,” says Premalatha. The village council decreed that they would work toward Karakottai becoming a child-labor-free village. Parents of the dropout children realized that a shift in priorities and some sacrifices were necessary to give their children the chance for a future without poverty. And one by one, the dropout children started returning to school.

“As a result, seven children regained their childhood enjoyment, their rights, and their education,” says Premalatha. “Thanks to the Intel Teach Program, our children are marching toward the technological era with confidence.”

Education Landscape in India

With a population of more than a billion people and a growth rate of 1.9 percent a year, India is expected to become the most populous country in the world by 2015.¹ Though economic prosperity has reached some metropolitan areas of the country, more than 70 percent of India’s population live in the country’s 650,000 rural villages, where infrastructure is often lacking and poverty is widespread.²

Despite access to schools in these rural areas, economic issues often hinder children from taking advantage of educational opportunities. Oftentimes in poor areas, children are forced to work to help the family secure basics like food and housing. Currently, only 53 percent of India’s youth are enrolled in secondary education.³

The Indian government recognizes that improved education is crucial to spurring sustainable economic development and creating jobs to accommodate both the large number of young people entering the work force and the increasing number of rural citizens moving into the formal economy.

As a result, the central government has increased funding for education, and supports programs that strengthen teacher education, improve the quality of the curriculum, increase the availability and usage of information and communication technologies, and boost educational access, especially for females and others who have traditionally been excluded or underserved in the educational system.

Additionally, state governments are responsible for implementing statewide education programs to improve educational quality and access, and through these efforts, boost economic development.

1. Human Development Report. See http://hdr.undp.org/hdr2006/statistics/countries/data_sheets/cty_ds_IND.html.*

2. Census Data for India. See <http://www.censusindia.net/results/rudist.html>.*

3. See http://www.ilo.org/public/english/region/asro/bangkok/skills-ap/skills/india_secondary_education.htm.*

In Tamil Nadu, for example, the state government is collaborating with the Sarva Siksha Abhiyaan—meaning “Education for All”—association (SSA) and the Intel Teach Program to improve education for all students in the state’s 48,359 schools.

Specific educational goals in Tamil Nadu include providing free and compulsory education for all children aged six to 14, improving basic amenities in school facilities, eradicating dropouts before 2010, enriching the syllabus and promoting activity-based learning, and building teacher capacity by providing appropriate professional development.⁴

Intel Teach in India

The Intel Teach Program was introduced in India in 2001 to support the education goals of the Indian government, specifically addressing desired improvements in professional development for teachers, the quality of curriculum, and effective

integration of technology. As a result, Indian youth involved in the program will acquire the skills they need to participate in the knowledge economy.

In 2004, the Intel Teach Program was introduced in the state of Tamil Nadu. Technology access for the program is provided in schools (where a technology lab exists) or in district or block Computer Aided Learning (CAL) centers.

To date, 18,842 teachers from 1,150 schools and 412 blocks from 30 districts in Tamil Nadu have participated in the program. Plans are underway for continued training in schools throughout the state and in university pre-service education programs.

Across India, more than 695,000 teachers from over fourteen states and various teacher education institutes have been trained through the Intel Teach Program.

The Intel® Education Initiative

The Intel Education Initiative is Intel’s sustained commitment to prepare all students, anywhere, with the skills required to thrive in the knowledge economy by improving teaching and learning through the effective use of technology, and advancing math, science and engineering education and research. Through a sustained public-private partnership with educators and governments in more than 50 countries, Intel works with international organizations and governments at an international, national, and local level and invests approximately USD 100 million per year in education programs adapted to address the needs of each country to advocate for 21st century educational excellence through policy work and awareness efforts.

For more information, visit: www.intel.com/education.

For more information on the Intel Teach Program, visit: www.intel.com/education/teach.

4. See <http://www.tn.gov.in/>, <http://www.tn.gov.in/schooleducation/>, and <http://tn.nic.in/schools>.*

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