



Case Study
Intel® Learn Program

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Jaffer Pariyarath
Intel Learn Program
Teacher/Mentor

The Intel® Learn Program Enables Students to Improve Their Village

When a remote village in southwest India became involved in the Intel® Learn Program, an after-school program designed to help children in developing countries develop key 21st century skills, the children of Pulvetta gained access to technology for the first time, the opportunity to develop digital literacy, problem solving, critical thinking, and collaboration skills. The experience has made a positive difference in the lives of villagers as the children engaged in projects to improve their local community. Additionally, the skills acquired through the program will continue to give these children new opportunities to contribute to their village, their country, and the global economy.

Challenges

- Many Indian students have limited or no access to technology.
- In order to improve their economic status and participate in the knowledge economy, Indian youth need to learn technology and other 21st century skills.

Approach

- Provide underserved youth with access to technology and the opportunity to learn key 21st century skills through the engaging, structured Intel Learn Program curriculum.

Benefits

- The Intel Learn Program is helping Indian youth gain hands-on experience with technology and acquire skills that enable them to contribute to their communities and to the global economy.
- The Intel Learn Program is helping break down economic and social barriers for underserved Indian youth.
- Children are awarded certificates of completion recognizing their successful participation in this professional development forum.

The Intel Learn Program: A Case Study

On the southwest coast of India, nestled in the hills of the Mallapurram district of Kerala, lies the village of Pulvetta. Due to its remote location and a lack of educational opportunities for its residents, this small community has fallen behind other settlements in the region in terms of economic development. Most of the village residents work in agriculture, small business, or government service. Many struggle to make a living for themselves and their families. Though a nearby government school exists to serve the children



of Pulvetta and surrounding villages, the majority of children in the area have low literacy skills. Additionally, due to economic and social issues, many children drop out by adolescence. The latter is especially true of girls, who are often expected to quit school at a young age to get married and raise a family.

Recently, though, things have begun to change for the young Pulvetta residents with the implementation of the Intel Learn Program at the local Akshaya Center, a government-supported community technology center. Akshaya Centers were established as part of a state-sponsored initiative to make technology accessible to citizens throughout Kerala. The Intel Learn Program, delivered as an after-school activity, is designed to give underserved youth ages 8 to 16 years the opportunity to acquire skills in digital literacy, problem solving, critical thinking, and collaboration through an engaging, project-based curriculum.

For six young Pulvetta residents—Moideen, 14, Abdul Jaseem, 14, Munavvirul Fairros, 14, Fathima, 13, Smahlenna, 13, and Skanya, 10—the experience was life-changing. Not only did the program give these children their first opportunity to access technology and learn practical applications, it also enabled them to acquire other valuable skills that have already made a difference in their lives and their community.

Intel Learn employs student-centered, project-based approaches where students collaborate with each other and with staff as they investigate the use of technology in the workplace and in their community. Through various hands-on activities, the Pulvetta students learned how to use word processing programs and how to create

spreadsheets, graphics, and multimedia presentations. They learned how to conduct Internet searches and other research. Most important, they learned to apply these new skills to issues in their community, which fostered critical thinking and problem solving. Finally, they worked collaboratively to engage in a final project integrating all their newfound skills.

In this case, these six young people of Pulvetta first used their new skills to create a community survey to identify areas of need in the village, and to assemble and analyze the data collected.

“During the process of planning, they came out with various problems of their village, like sporadic electricity, transportation problems, and inadequate potable water” explains Jaffer Pariyarath, a teacher and mentor in the Pulvetta program.

“I thought only our house and a few neighboring houses were affected by water shortage,” says Fathima. “But by doing this project, I realized the whole community is affected and I felt it is our responsibility to do something to solve this grave problem.”

The youngsters worked together to create a proposal to solve the water issue, as well as address the need for a safe playground for children. Specifically, they developed a plan to build a water tank to address the scarcity of potable water, and suggested renovating an old playground that could be used by village children. They then used their newly acquired technology skills to incorporate their recommendations into a presentation for the community. They also developed a flyer to invite their neighbors, including the president of the village council, to a public showcase of their work.

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By the end of their presentation, the council president was so impressed that he pledged to adopt their recommendations. Specifically, he authorized the building of a water tank and the renovation of an old playground in the village. Construction on both projects began soon after, with the participation of the entire community, and the work was completed in record time.

Today, Pulvetta’s water tank and safe playground provide evidence that, given the chance, young people can take on real-world problems, come up with solutions, and make a difference in their communities. “The way these children came up with possible suggestions for these problems was really amazing,” observes Pariyath. “The Intel Learn Program has enabled children to think about their community problems and made them more aware and conscious overall.”

Further, the program was instrumental in helping break down some of the economic and social barriers that often prevent Indian youth from participating in educational opportunities and gaining skills that enable them to be successful in the knowledge economy. Whereas very few Indian families can afford a computer or technology courses, Pulvetta children now have access to both. Also, whereas girls in this predominantly Muslim community lack the same educational opportunities as boys and are generally discouraged from interacting with boys in social and educational settings, the Intel Learn Program has enabled girls to actively participate in the educational process, collaborating with their male peers as equals.

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 lives in the country’s 650,000 rural villages, where infrastructure is often lacking and poverty is widespread.²

Educating its population has been challenging for India, due to a lack of opportunity in some areas, as well as social and economic barriers that have kept much of the population from taking advantage of existing opportunities. Currently, only 53 percent of India’s youth is enrolled in secondary education.³ The national adult literacy rate is only 61 percent for both genders and only 48 percent for adult females.⁴

The Indian government recognizes that improved education is crucial to spurring sustainable economic development and creating enough 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, as much of the power to implement programs resides at the state level, many Indian states are taking action to improve educational quality and access, and boost economic development at the same time.

For example, Kerala—one of India’s most densely populated states, with 38 million citizens—has taken on the admirable goal of becoming the leading knowledge society in the region, and is instituting policies and programs that are helping its citizens to reach that goal.

In 2002, Kerala launched the Akshaya project as an initiative to provide equitable access to information and communications technology (ICT) throughout the state. This project has involved setting up 5,000 multipurpose community technology centers across Kerala. The goal is to have an Akshaya center within two to three

kilometers of every household, each serving the needs of approximately 1,000 to 3,000 families. Akshaya serves as a social and economic catalyst focusing on the various facets of e-learning, e-transaction, e-governance, information, and communication. A variety of services—including vocational training, financial services such as e-banking, business process outsourcing such as paying university or utility bills remotely, and other online services—have been made available to the rural population. The project, piloted in the district of Mallapuram, is being replicated all over the state. The Intel Learn Program has been a key partner in this effort.

Data suggests that Kerala's approaches are working. Though certain areas of the state are still struggling, (Pulvetta, for example), the state as a whole currently has the highest Human Development Index in the country, including an adult literacy rate of 91 percent for both adult genders and 88 percent for women.⁵

Intel Learn in India launched in India in November 2004, the Intel Learn Program focuses on building 21st century skills for youth living in underserved communities, who have had little or no access to technology in an informal environment. Through its project-based, student-centered curriculum, the program has helped more than 24,000 young people in Indian villages acquire collaboration, problem solving, critical thinking, and technology skills—skills they will need to participate in the knowledge economy.

The Intel Learn Program has since expanded to Chandigarh Government schools and Navodaya Vidyalaya Samiti's (NVS) schools—upper secondary schools, primarily in rural areas, that have been established to educate talented youth regardless of their socio-economic conditions. The Ministry of Human Resource Development, the department that runs NVS schools around the nation, has chosen the Intel Learn Program as the preferred curriculum for its Pace Setting Program, the objective of which is to provide quality education to children with little or no access to technology.

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 Learn Program, visit: www.intel.com/education/learn.

1. Human Development Report. See http://hdr.undp.org/hdr2006/statistics/countries/data_sheets/cty_ds_IND.html for more information.
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.
4. Human Development Report. See http://hdr.undp.org/hdr2006/statistics/countries/data_sheets/cty_ds_IND.html for more information.
5. Human Development Report. See http://www.kerala.gov.in/dept_planning/er/chapter20.pdf for more information.

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