



## Transforming the Lives of Women and Girls

### They say it takes a village to raise a child.

However, it was a group of young girls who raised the living conditions of their entire village through the Intel® Learn Program<sup>1</sup>, which helps young people in underserved communities prepare to succeed in the knowledge economy.

Five girls, ages 10 to 14, went door-to-door in their remote Indian village of Singodi, surveying the community about sanitation and hygiene. Because of their work, the Village Council president authorized the building of a water tank and placed the young girls on a committee to prevent outbreaks of infectious diseases, like malaria and typhoid. Traditionally, only men served on such committees.

From the United Nations to the World Bank, leading organizations have trumpeted the need to raise the economic status of women and girls worldwide. Intel is helping through diverse efforts to promote the math, science, business, and technology skills needed to engage in the 21st-century economy. Based on our experiences, we've identified four ways to improve the lives of girls and women, which in turn benefits their children, families, and communities:

**Educate the Teachers First.** A study from the University of Chicago is the latest research to indicate that female elementary school teachers who are anxious about math may undermine girls' confidence in their math abilities. Intel® Math<sup>1</sup> helps remedy this worldwide problem by providing teachers with 80 hours of instruction to improve their own math knowledge as well as to give them new, creative ways to teach the subject.

After going through Intel Math, Christine Wilson, an elementary school teacher in Fremont, CA, moved up from second grade to fourth grade (prior to training, she had been nervous about teaching higher-level math). "I'm so enthusiastic about math, it's the first thing my class does in the morning," she says. "What's even better is the kids have caught my enthusiasm." When her class had to take a national, multi-subject test, the kids voted to do the math part first.

In addition, more than 7 million teachers around the globe—including an estimated 4 million female teachers<sup>5</sup>—have participated in the Intel® Teach Program<sup>5</sup>, which helps educators integrate technology into the classroom to improve student learning.

### Why it matters

1. Broad social benefits of educating girls include increased family income, greater opportunities and life choices for more women, greater participation by women in development as well as political and economic decision making.
2. In a typical developing country, giving girls one additional year of schooling would save as many as 60,000 children's lives.<sup>2</sup>
3. It is widely recognized that devoting resources to quality education for girls is among the best investments that any society can make.<sup>3</sup>
4. Impact: It is estimated that a one percent increase in female education would increase the average level of GDP by 0.37 percent.<sup>4</sup>

**Make the Projects Matter.** Through Intel Learn, Intel Teach, and the Intel science competitions, we've seen that girls embrace science, math, and technology when it moves beyond abstract concepts, and they do projects that make an impact in their communities and the world.

For the past two years, the world's largest pre-college science competition—Intel International Science and Engineering Fair (Intel ISEF), a program of Society of Science & the Public—has been dominated by young women putting forth impressive work that could dramatically improve people's lives. For example, one of the top winners in 2009 was Olivia Schwob, a 16-year-old from Boston who isolated a gene that could be used to improve the intelligence in worms. This finding could help us understand how people learn and could even prevent, treat and cure mental disabilities in the future.



In one Intel Teach project, a group of 6th- and 7th-grade students in Southern India tackled the serious issue of young children dropping out of school to work. The project group used mathematical models to show the parents that, over the long run, their children would earn more if they stayed in school. As a result, seven parents allowed their children to return to school. In other Intel Learn projects, student groups developed a plan to successfully seek funding for a reforestation project in Mexico; created an advertising campaign to conserve water in Israel; and cut food waste in China by investigating the best breakfast choices and portion sizes for elementary-school students. Learning that makes a real-world impact seems to resonate well with girls.

**Provide Technology Tools.** Technology literacy and tools give women and girls, even in remote parts of the world, access to information, markets, and skills that allow them to become fully engaged in the innovation economy.

In Bangladesh, a group of women called “The Info Ladies” carry Intel-powered clamshell classmate PCs with mobile phones and digital cameras to remote villages, giving these communities telephone and Internet access. The “Info Ladies” are able to earn a decent living while giving one farmer a way to call an expert who told him how to save his diseased fruit tree; letting a mother find out what medicine her sick daughters needed; and allowing a man to chat with his cancer-stricken father on the other side of the world.

Simply having access to technology changes outlooks and transforms lives. The Intel Computer Clubhouse Network<sup>1</sup>, an after-school community-based technology learning program, inspired a 12-year-old girl named Nancy in inner-city Boston to eventually study human-computer interactions at the University of Michigan. “The clubhouse was an escape from the turmoil of all my foster homes,” she says. “I never guessed those fun things would turn into skills that would help me become a creative thinker.”

**Teach Entrepreneurial Skills.** Just as technology removes walls around the classroom, entrepreneurial skills removes the walls around women's lives.

A hundred Intel-powered PCs are being deployed throughout Asia in clubhouses operated by the Social and Financial Empowerment of Adolescents (SOFEA) project. For 95 percent of the girls in this program, this is their first exposure to a PC; the technology, business, and financial skills they're developing will help them overcome inequalities due to early marriage, war, domestic violence, and other widespread problems.

Entrepreneurial skills remove borders around the countries, as well. In one Intel-sponsored program, women developed a business where they collect and boil insects, extracting lacquer that is sold all over the world. With more countries seeing the vital role women play in economic development, expect to see a growing number of these success stories in the decade ahead.

Intel and the Intel Foundation continue to explore and expand the ways in which their philanthropy and education programs serve the needs of women and girls around the globe.

1. Funded by the Intel Foundation.
2. Knowles, S., P.K. Lorelly, and P.D. Owen. Are Educational Gender Gaps a Brake on Economic Development? Some Cross-Country Empirical Evidence. Oxford Economic Papers, Vol.54, No.1. (2002)
3. <http://www.oecd.org/dataoecd/46/1/2672316.xls>
4. [http://www.unesco.org/education/efa/wef\\_2000/strategy\\_sessions/session\\_1-2.shtml](http://www.unesco.org/education/efa/wef_2000/strategy_sessions/session_1-2.shtml)
5. [http://www.unescobkk.org/fileadmin/User\\_upload/appeal/gender/GirlsCantWait.pdf](http://www.unescobkk.org/fileadmin/User_upload/appeal/gender/GirlsCantWait.pdf)
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