

CHANGING THE WORLD, ONE VOLUNTEER AT A TIME

How the Intel Employee Service Corps creates shared value, not only for underserved communities and the corporation, but also for the volunteers themselves. Case in point: John Cartwright.



When John Cartwright traveled to earthquake-shattered Haiti in 2011 to install a computer lab in an elementary school, he never imagined that one of the lives most impacted by the experience would be his own.

At the time, the Intel IT manager was a member of a team sent there as part of the Intel Employee Service Corps. The program, launched in 2009, seeks to improve the quality of education and access to technology in developing countries, while enhancing Intel's reputation and boosting employees' skills and job satisfaction.

Volunteers receive extensive training and travel in teams to help set up technology in environments ranging from education to health to agriculture.

The program has been described as Intel's version of the U.S. Peace Corps.

Chosen volunteers often possess a unique set of skills. Cartwright, for example, not only offered valuable technical expertise, but also practical skills acquired from his formative years growing up on a farm and from building two houses.

So when the team arrived in Haiti to discover that the school where they intended to install the computer lab was still under construction and had no electricity, Cartwright grabbed a tool belt and went to work, helping the local contractors run wiring to the school while his teammates moved teacher training to a nearby hotel.

During their two-week stint in the country, Cartwright and team finished the installation of the computer lab, installed interactive learning software, and provided training for teachers to help them improve pedagogy and effectively integrate the new technology into instruction.

The Intel team also gleaned valuable insights that they could take back home with them, such as how to make Intel's education solutions more relevant in resource-constrained regions of the world.

For example, the adaptive learning software deployed by Cartwright's team in Haiti was originally designed to run on a wired network powered by a back-end server that required air conditioning and a battery back-up system.

"I had to ask myself 'Is that really sustainable? Is it extendible to other schools?'" Cartwright questioned. "The answer was no."

After returning home, Cartwright helped reengineer the application so that it could run wirelessly using an Intel® Classmate PC as the server.

Additionally, Cartwright realized how quickly technology can become out of date, leaving systems in need of patching or reconfiguration. As a result, he worked to develop services that enable PCs and tablets nearly anywhere in the world to be remotely serviced, updated, and reconfigured.

But, perhaps the most important takeaway for Cartwright, personally, came from his interactions with the Haitian people and, in particular, the children he had the opportunity to work with and teach.

"I don't know how you quite describe that look, that spark that you see in their eyes," he said. "Just joy, utter joy for learning."

Being able to deliver such an experience to children who might not otherwise have such an opportunity to improve their lives was, for Cartwright, extremely moving.

So when, six months later, the Intel Employee Service Corps was headed back to the same Haitian school to provide additional support, Cartwright jumped at the chance.

And when, the following year, a team was headed to Africa, Cartwright volunteered again, despite the fact that he was on an extended sabbatical at the time.

This time, he led a volunteer team to Kenya to deploy the model he'd developed for classrooms without power in Haiti. Not only had Cartwright adapted the system to run wirelessly from a PC, instead of a server, it could also be powered by a car battery.

Cartwright spent five weeks in Kenya, volunteering at a preschool and a community education center, where he installed a computer lab with multiple Classmate PCs and adaptive learning software.

While there, he helped preschoolers learn to navigate the PCs to supplement their classroom learning and boost their chances of passing the kindergarten entry test required of all students prior to acceptance in a kindergarten program.

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—John Cartwright



Lalitpur Madhyamik Vidyalaya (LMV), Nepal

The Intel Employee Service Corps is an innovative skills-based volunteer program that harnesses the passion of Intel employees while advancing the company's mission to push the boundaries of smart and connected technology to make amazing experiences possible for every person on Earth.

Intel Employee Service Corps volunteers work with governments and non-governmental organizations (NGOs) in developing countries.

With extensive training and preparation, volunteer teams provide technical assistance on the installation and maintenance of technology, as well as training for end users on effective usage. The program supports Intel® solutions deployed to address global challenges ranging from education and digital inclusion to agriculture and healthcare.

In addition to the benefits delivered to underserved communities around the world, more than 90 percent of IESC alumni report increased confidence in leadership, teamwork, dealing with ambiguity, cross-cultural situations, training/coaching, and inspiring others.

Again, and again, he saw "that look" in the children's eyes.

"The students were so excited and inspired, and there was such an outpouring of appreciation," said Cartwright. "I felt like a rock star."

By this time, Cartwright was hooked.

When the Intel Employee Service Corps does work in developing countries, volunteers work closely with non-governmental organizations (NGOs) and governments.

In 2014, Cartwright joined the board of one of these NGOs, Hands in Outreach, a nonprofit working to provide education for girls in Nepal, where he has spent significant time conducting outreach in recent years.

While the IESC continues to work with existing partners in current service locales, including Nepal, Kenya, and Haiti, the program will continue to expand reach into other countries and communities in need.

For example, through its Vision 2020 program, the Rwandan government is currently working to transform its country into a knowledge-based, middle-income economy by improving education for its citizens.

To help the East African nation achieve this goal, Intel is working with the government, NGOs, educators, and others to transform Rwandan education through the effective use of technology.

Intel's involvement includes serving as a trusted advisor to the Ministry of Education as it develops a master plan for the education system and providing technical expertise, professional development for teachers, curriculum content, and more.

IESC volunteers also help to deploy computers in schools and provide hands-on training for teachers.

Additionally, teams are being deployed to Puerto Rico and Jojutla, Mexico, to help assess technical needs and rebuild in the wake of recent natural disasters.



Victor Hugo School, Nepal

The following year, Cartwright started his own nonprofit, Just Learning Opportunities, dedicated to providing opportunities for youth through educational technologies. To help fund Just Learning Opportunities, he launched Just Coffee and Tea, a charitable company that sells tea and coffee from the countries where Cartwright has volunteered.

Over the past several years, working as part of the Intel Employee Service Corps program and in partnership with it and other organizations, Cartwright has been instrumental in setting up computer labs and installing educational software in multiple schools and community centers in Nepal, both in the populous Kathmandu and in remote communities.

One of the most memorable was Yalbang, a school nestled high up in the Himalayas, which required special permits to visit. To access the school, Cartwright and his team had to fly to a small airstrip in northwest Nepal and then hike for three days—with all necessary gear—to get up to the community.

“Thankfully, the Sherpas carried up the PCs and other technology,” said Cartwright, who—despite lacking acclimatization—carried all his personal gear on his back.

“John is an educator in his heart. For him, technology is not an end in itself. It has to serve the best interests of students. Most of all here at LMV, we value his calming presence, his incredible hard work, and his commitment to providing the best that technology can bring to the students.”

— Madhab P. Sitaula, Principal, Lalitpur Madhyamik Vidyalaya (LMV) Secondary School, Nepal



Adara Group Office, Nepal

“At the Department of Education of Puerto Rico, we are most grateful for the efforts and collaboration from Intel and its partners in helping us with the process for recovery and reestablishment of our schools in the district of Mayaguez. The students of Puerto Rico along with the teachers and school administrators are most thankful for the assistance from Intel in our time of need.”

—Mr. Carlos Vega, Director of Technology and Curriculum, Department of Education Puerto Rico

While hydropower was used to power everything in Yalbang, including the new tech lab, Cartwright had to get creative in other locales. At Lalitpur Madhyamik Vidyalaya School in Patan, Nepal, for example, he set up a solar array to provide electricity for the PCs.

Often, Cartwright said, the team had to work on the fly.

“We’re not talking about out-of-the-box applications,” he said. Even educational software was adapted to meet the needs of each locale.

And, as in Haiti and Kenya, Cartwright found further inspiration from the locals and their children.

“There was such excitement about learning and such an outpouring of gratitude,” he said.

In 2015, Cartwright was honored for his extraordinary record of service when he was selected as one of 55 Heroes of the Fortune 500 by Fortune Magazine.

Though Cartwright retired from Intel in 2016, he continues to partner with Intel Employee Service Corps efforts.

Reflecting on his experiences through the Intel program, Cartwright said the experience has been transformative.

“Quite simply, I’ll never be the same,” he said. “Once you’ve been bitten by the bug, it can’t help but impact the way you think, the way you act, the way you view the world around you. You’re dealing with children who have so few opportunities in life and you really get the sense that, through this volunteer work, you have the ability to provide children with opportunities they wouldn’t otherwise have. It really drives home what you can do with the technology that Intel delivers, and how you can benefit people who are most in need of it.”

Each year, through the Intel Employee Service Corps program, thousands of Intel employees donate their time and expertise in underserved communities around the globe.

To date, close to 600 volunteers have traveled to more than 25 countries, where they have logged some 119,000 volunteer hours on more than 120 separate projects, positively impacting more than 200,000 people.