Across the U.S., States Turn to Intel® Teach Elements to Deliver Effective Online Professional Development

CHALLENGE

Professional development budgets are tighter than ever as a result of the economy, forcing educational organizations to do more with less.

As professional development for educators shifts from strictly face-to-face meetings to more online and blended (a combination of face-to-face and online) methods of delivery, professional development providers must build capacity to deliver quality online and blended PD.

As technology evolves at a rapid pace, teachers need professional development to effectively engage students with emerging new technologies in the classroom.

With states’ voluntary adoption of internationally-benchmarked Common Core standards, teachers need professional development that supports the transition to instruction aligned to new standards and assessments.

SOLUTION

Partnering with experts in online education and educational technology, Intel has redesigned its proven professional development as the basis for Intel® Teach Elements, a series of interactive, multimedia courses designed specifically for online and blended use by educators.

The Intel Teach Elements courses include key areas of instruction deemed important by educators: Project-Based Approaches, Assessment of 21st Century Skills, Educational Leadership, Thinking Critically with Data, Collaboration, Science Inquiry, and Designing Blended Learning.

The content of Intel Teach Elements courses has been aligned by participating States to support transition to the Common Core State Standards.

The Intel Teach Program is offered free of charge to local education agencies, including state or regional agencies, districts, and schools.

In a tough economy where education budgets have been stretched tighter than ever and teachers struggle to find time to stay abreast of new developments in education research and technology, there has been a shift in the method of professional development delivery from face-to-face courses and workshops, to online and blended (a combination of online and face-to-face) learning opportunities. Because of the rapid evolution of technology and the vast array of software, these new methods offer a multitude of learning tools and strategies that simply didn’t exist before.

Many educators have found that this new model of professional development is extremely effective. It is especially so when a program is designed with quality content, infused with rich technology tools and resources, and guided by trained facilitators who engage participants in deep discussions about practice and guide the formation of learning communities. Building capacity for delivery of this kind of high quality blended professional development has emerged as a priority nationwide.

Developing Effective Online Learning

Respected throughout the global education community, the Intel® Teach Program has been providing quality professional development to educators for more than a decade. To date, the program has reached more than 500,000 educators in all 50 U.S. states. Participants have consistently rated the program as effective in helping to improve teacher practice and enhance
student learning. To build on this foundation and develop an online program as successful as the original face-to-face version, Intel partnered with an expert in the field of online learning, Ed Tech Leaders Online (ETLO). ETLO is a program of the Education Development Center (EDC), a global non-profit organization that addresses some of the world’s most urgent challenges in education.

“Intel has always provided fantastic content that teachers love, that professional developers love to deliver, and that has demonstrated impact,” observes Barbara Treacy, ETLO Director. “The problem is that finding the time to meet and get everything done is getting more and more challenging for teachers. Intel has recognized this and sees the advantages that online professional development can offer to address those needs.”

ETLO has worked with Intel to reformat the Intel Teach content for optimal online delivery, breaking it into smaller modules and integrating elements such as videos, interactive exercises, and group discussions to enhance learning. Additionally, all of the courses have been formatted to run on a wide variety of learning management systems to ensure that any education organization interested in offering the content will have access to a compatible version.

ETLO has also helped Intel train facilitators for the program. “This is especially important,” explains Treacy, “because online learning differs from face-to-face. The learning goals are the same. The core principles are the same. What’s different is the structure of the content, the tools, the pacing, the way interactions happen. It takes a different skill set to effectively facilitate online learning, particularly when it comes to initiating and guiding online discussions. We train facilitators not just how to open up a discussion board, but how to help participants be more reflective. That generally doesn’t happen by itself. Facilitators need to use strategies, tools, and techniques to probe, to keep people engaged and reflective, and to provide a safe environment so that they actually will put themselves out there.”

Each week of the online courses, a well-crafted, open-ended question is used as a prompt to open a conversation on a discussion board or, sometimes, in a synchronous virtual meeting. Course facilitators are trained to guide the discussion, being careful not to dominate, but also knowing when to step in and probe for more critical thought or when to redirect a group to stay on task. “Often,” says Treacy, “discussions are very rich because teachers can participate on their own schedule, when they have time to think and reflect. So you get lots of beautiful, thoughtful postings from people who will also tell you that if it were a normal face-to-face course, they might never have contributed those things because they might not have occurred at the moment they were in the meeting, or they might not have been able to get a word in edgewise because other people were talking.”

Intel and ETLO share this vision for creating online learning communities where teachers can share ideas and anecdotes, and engage in collegial discussions with the goal of improving practice. Elements courses are designed to support completion by cohorts of teachers engaged in communities of practice.

Additionally, both organizations are committed to helping local education organizations build internal capacity to further the work on their own.
The guiding principle of the work is always to help educators build and hone 21st century skills and instruction, with the ultimate goal of enhancing student learning.

Intel Teach Elements Connects in Arizona

An Intel Teach Affiliate since 2002, Arizona has long used Intel Teach to help teachers build and hone skills in areas such as project-based learning, best assessment practices, and technology integration. But despite the popularity of the program, enrollment declined after the 2008 economic crash. “We loved Intel Teach courses,” says Cathy Poplin, Deputy Associate Superintendent of Education at the Arizona Department of Education (ADE), “but it was getting harder and harder to get big enough groups together to do the face-to-face training. So the first time I heard that Intel was developing the online Elements program, I thought ‘Hallelujah!’ And as soon as I saw the material, I knew this would be our main vehicle for getting the content out to the entire state.”

“The Intel courses are great at introducing teachers to key 21st century skills,” says Poplin. “The ‘4 Cs,’ as they are sometimes called—communication, collaboration, creativity, and critical thinking—are interwoven through all of the courses. Intel equips teachers with a true, 21st century learning experience and helps them understand how important those skills are to their students. They learn how to incorporate project-based approaches, how to collaborate effectively with others, and how to conduct 21st century assessments which go far beyond multiple choice tests. And the new science inquiry course is a huge addition to the course list. Intel truly shows teachers a new way of approaching learning and their own practice, and it’s all rooted in 21st century skills.”

Brenda Wright, Education Program Specialist for ADE, says that the Intel Teach Elements courses, each offered four times a year, fill up fast. “Within a day or two, the courses are always full. If we had enough facilitators to offer multiple sessions of each course, those would fill up, too. The interest is just so great. Teachers love the program. It has opened their eyes to see how they can connect all that they do

The Fundamentals for Effective Online Learning

So what does it take to create an effective online learning program?

According to ETLO, the fundamentals include:

- Quality content appropriately designed and formatted for optimal online delivery.
- Technology, including an education management system. Some states have developed their own systems. Other states and education organizations make use of popular Learning Management Systems such as Moodle or Blackboard.
- Trained facilitators who can guide learners through content, engage them in deep discussions about practice, and help them participate in a learning community, as well as assist when issues arise.
- Leadership to run the program, including people to advertise and market the courses, set the schedule and enroll participants, and manage facilitators.
- Networking with higher learning institutions to provide credit for participation is not required, but can be helpful.

Important to note, however, is that lack of any of these should not be a barrier. Intel offers the Intel® Teach Elements content free of charge to support any organization building capacity for these components online professional development.
in the classroom through projects and with technology. And with alignment to the Common Core, they’re going to be an even bigger draw.”

Arizona encourages teachers to start with the Project-Based Approaches course and then take the lesson plan they develop in that course into each of the other courses so that they can continue to develop and enhance it. “They expand their lesson plan with the assessment course, the collaboration course, and so on, and that expandability has been of huge benefit to many of our teachers. They see the connections. Plus, they’re being exposed to all of these 21st century tools that they didn’t even know were available—all at no cost or low cost—and the facilitators show them how to use them. And they have the opportunity to use these things in their classrooms and then come back online and share. They love it.”

Teachers appreciate the anytime, anywhere accessibility of the online format, and benefit greatly from connections with peers across the state. Geographically, Arizona is the sixth largest state in the union, and most of it is rural. Notes Wright, “With all the mountain ranges and the Grand Canyon, the state is pretty split up. Our teachers are widespread, and travel can be challenging, time-consuming and expensive. Online, they can collaborate with teachers they would never have met before, and the learning that comes from these interactions is often invaluable.”

As Poplin puts it, “The use of Intel Teach Elements online courses has leveled the playing field for access to high quality professional development in the state. A teacher in rural Arizona can learn alongside a teacher in urban Phoenix or Tucson, and get the same quality of information.” Further, she says, “Statewide use of the program provides ‘cross pollination’ of ideas and viewpoints from other teachers in the state.”

Connecting Across the Country

Three years ago, Iowa began the process of developing an online professional development system when local area education agencies (AEAs) pooled resources to make their shared vision a reality. “Online is the way people want to learn,” explains Sue Swartz, Instructional Technology Consultant for the Iowa Department of Education (IDE). “The AEAs pooled their resources, brought in a project manager and instructional designers, set up a governance board and an advisory council, established a mission statement, and began training people. We (at IDE) came on board as they were putting on the finishing touches, and were involved to see the first classes launch online.”

To date, 21 master instructors have been trained to facilitate the Intel Teach Elements courses via the Iowa AEA professional development system. “We included the Intel content because it’s appropriate. It’s timely, well-designed and engaging. The Elements courses support the state’s focus on the ‘instructional core’, that is, ‘the interaction between teacher

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and student in the presence of content,’ as Richard Elmore defines it,” says Swartz. “They support the Board of Education priorities: online learning, competency-based education, and reducing the achievement gap.”

Regarding results, Swartz says, “The classes have been very well received. In addition to providing professional development for the practicing teachers, several faculty members at the University of Northern Iowa completed ETLO training and have facilitated Intel Teach Elements courses through the statewide online system. This supports the state’s vision of providing a seamless professional development system for all Iowa educators.

Delaware, one of the first states to deliver statewide student assessments online, has also taken professional development for teachers online with their eLearning Delaware program. As Wayne Hartschuh, Executive Director of the Delaware Center for Educational Technology notes, “We can take professional development to the educator now, 24/7/365. We don’t need to bring the educator into a central location. It saves on time and travel. And teachers can do it on their time, when they get a chance. They can do it in their jammies at two in the morning, if that’s what works for them.”

Says Hartschuh, Intel Teach Elements fit perfectly into eLearning Delaware. “Intel had always done a good job of putting forth quality material that was relevant and timely. We wanted to do it before, but it would have been ‘one more thing to do,’ whereas now it fits right into our model. In other words, it’s one more thing without being one more thing. In the new format, it allows us to expand our eLearning Delware course catalog with quality material.”

The Leadership course, in particular, filled a gap in the Delaware program. “We really didn’t have a course geared toward building level administrators, and the Intel Educational Leadership in the 21st Century course helps build strong leadership, particularly in the areas of technology integration and the use of data to identify areas of need and adjust instruction.”

New Hampshire was one of a handful of states included in a five-year federal grant—with ETLO as a partner—to develop online professional development programs in their states. All of the Intel Teach Elements courses have been added to their course catalog. “The content is really good;” says Stan Freeda, New Hampshire Educational Technology Director. “The information in these courses is timely and appropriate, and will address content gaps in our course offerings. Intel Teach Elements courses also fit into our basic course model. Teachers learn content through readings, videos and activities. They engage in opened-ended, framed discussions about how the content applies to their lessons and how to help students become more successful with learning. Finally, they work on an authentic course project—normally a lesson plan or action plan—that can be used immediately in the classroom or school.”

Connecting with Educators

Of course, teachers are the best judges of the effectiveness of professional development, and in state after state; they give Intel Teach Elements courses rave reviews.

Colorado’s Carolyn Gardner, a veteran teacher and facilitator for eNet-Colorado, has been a trainer for the Intel Teach Program since 2003. The latest evolution of the program to online learning made perfect sense to Gardner. “Intel always keeps updating their courses, which is outstanding. The content is so valuable that many teachers want to take the courses multiple times to build additional action plans and to gain more resources. Many sign up for all of the courses, one after the other, because they see the connections—how this connects to that, and that connects to the next thing—and they want to learn more.”

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The fact that Intel Teach Elements courses are aligned to the Common Core is a big bonus, says Gardner, as teachers across Colorado are in the process of alignment.

For tech newbies, Gardner has been trained to “hold hands” until those participants are up and running. “We do a survey beforehand so we know who is adept online and who is brand new. If they are brand new, we reach out more via e-mail or phone calls—whatever it takes to make them feel comfortable where they are and to help them access content, engage in online activities, and participate in discussions. We want them to know that we are always there for them. Most find it easier than they expected and get really excited about the learning. There are so many outstanding resources, so many creative and beneficial apps to enhance learning. I toss ideas out there and see what they think. Often, they grab a tool and start using it right away. For example, there’s a polling app that they can use as a quick way to assess student understanding. There’s a small, low-cost, mobile telescope that can be mounted on a cell phone; I ask them, ‘How could this tool enhance science instruction?’

The students may know these tools are out there, but often the teachers don’t, and they get very excited when they learn about them.”

In her facilitation of the Intel Teach Elements courses, Amy Wichman, Director of Innovation and Instruction for Central CSD in Bettendorf, Iowa, reports that her “tech-y students soared,” while her “reluctant learners were transformed.” Further, she says the courses helped teachers learn to plan units versus lessons. Despite being trained to plan units in preservice, many just weren’t thinking conceptually until the Intel content helped something “click” for them.

As a teacher of multiple grade levels in a small school, “where teachers wear many hats,” Sue Snyder, a teacher in the Big Sandy School District in Colorado, appreciated the flexibility of working online, when she had the time. “The course content was packed with standards-based material and helpful solutions. I became better acquainted with many different kinds of rubrics and assessments. I liked developing lesson plans, and then sharing those plans with other people. I loved the fact that we could have discussions that offered immediate feedback and additional input. The experience was very valuable.”

Authentic 21st Century Learning

Perhaps one of most impactful things about the Intel Teach Elements experience is that teachers are guided through the process of learning in an authentic, 21st century environment. They are, therefore, doing the very thing they need to help their students do in the classroom.

“One of the side effects of online learning,” says New Hampshire’s Freeda, “is that teachers get better at tech skills whether or not the course is about tech skills. The process of learning online increases teachers’ technology skills and makes them more comfortable using technology. And that translates to them being more comfortable using technology in instruction.”

“Then there’s the fact that Elements is simply about great teaching,” says Arizona’s Wright. “It doesn’t matter what you teach, what grade you teach. It works anywhere, everywhere. It allows teachers to be in the know about standards-based instruction, project-based learning, best practices and technology trends. It allows teachers to design projects that integrate the standards, the technology, and the student participation in one nice little package so they don’t have to piecemeal things together. It shows the interconnectedness of learning.”

Angie Hillman, an eighth-grade language arts teacher at Cottonwood Middle School in Cottonwood, Arizona, who has participated in Intel Teach professional development through its evolution of delivery, says she really appreciates the new online format. “Being able to take part in the class from the privacy of my own home has
been wonderful, allowing me to multi-task and complete the course at my leisure.”

Further, she says, the course has helped her take her instruction to “the next level,” in terms of both technology and hands-on activities, through a strong, project-based unit approach. The result is perhaps most evident in Hillman’s students, who—as part of her Holocaust unit—host an annual “Days of Remembrance” community event which transitions from downright mournful to hopeful, with a sunny day forecast for the future. As students share multimedia presentations about their learning, including interviews with Holocaust survivors, a visit to the Museum of Tolerance in Los Angeles, and their formation of a Genocide Prevention Squad, it is easy to see that their learning experience has been truly enriched by a teacher who’s learned along the way. Says Hillman, “I am constantly in awe of how Intel has changed my life and has made me the best teacher that I can be.”

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Intel® Teach

The Intel Teach Program is a proven, worldwide professional development program that helps educators to improve instruction through 21st century approaches. The most successful educator professional development program of its kind, the program has been driving systemic change in teaching and learning since 2000, reaching over 10 million teachers in 70 countries.

Intel® Teach Elements courses include Project-based Approaches, Assessment in 21st Century Classrooms, Educational Leadership in the 21st Century, Thinking Critically with Data, Collaboration in the Digital Classroom, and Inquiry in the Science Classroom. Intel Elements courses support the transition of instruction for Common Core State Standards.

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