

## Intel® Teach Program

#### Empowering 21st Century Teaching in Arizona

Intel® Teach is a research-proven professional development program that helps teachers to enhance learning through the effective use of technology and student-centered approaches. Teachers learn from other teachers how, when, and where to incorporate technology and ongoing assessment into lesson plans, with a focus on developing 21st century skills.

#### National Governors Association Recognizes Intel for Outstanding Collaboration

Intel was nominated by Arizona Gov. Jan Brewer for its overall commitment to education in the state and the Intel Teach professional development program – a partnership with Arizona that helps teachers incorporate technology into their classrooms to ensure students develop the skills they need and helps prepare teachers for 21st century careers.

"Intel has a strong presence in Arizona and a culture of community outreach and giving that benefits education. Since the beginning of the Intel Teach program almost 10 years ago, more than 17,500 Arizona educators have participated in professional development. This effective program has been designated as one of the state's key initiatives for increasing the use of educational technology in Arizona classrooms."

- Jan Brewer, Arizona Governor

#### Preparing Students for the Future

At Sunset Hills Elementary School in Surprise Arizona, Joni Maville integrates technology into instruction before the school year even begins. Meeting new peers via her classroom blog helps her second-graders to calm first-day jitters.

From there, Maville hooks her students by using fun, educational software for comparing literary characters or practicing math facts, and engaging her students in technology-rich projects.

Two popular units on entomology and zoology have students conduct research on their favorite insect or animal using the Internet, books, and periodicals. Working individually or in groups, students create computergenerated presentations to share their learning. Using essential questions and clear rubrics to guide them, students create videos on everything from the life cycle of butterflies to the dietary habits of crocodiles.

"The students are always engaged when technology is integrated into the lesson or assignment."

"Also, the sense of independence it creates for the students is obvious. Once I get them started, they are very self-directed and remain on task 100%.

As a teacher, it is wonderful. I am simply the observer and make myself present for the occasional question or positive feedback."

Maville credits her project-driven, technology-infused approach to training she received through the Intel Teach Program.



"It has opened a whole new world of teaching for me. I feel like I am truly preparing my students for the future."

#### Thinking Globally with Thinking Tools

Veteran Phoenix, AZ sixth-grade science teacher Julia Fischer was always looking for new ways "to make learning come alive" for her students.



When Fischer participated in the Intel® Teach *Thinking with Technology Course*, she was excited about the free online tools and their ability to support the development and assessment of her students' higher-order thinking skills. During the course, she had time to plan a standards-based unit for her classroom using the thinking tools.

Using the *Seeing Reason Tool,* Fischer organized a technology-rich project to help her students think more deeply about environmental issues, such as how human activities affect the survival of other organisms."

Fischer heard richer discussions unfolding in the classroom as a result of the project. "Seeing Reason maps empower students to explain how their understanding is changing and evolving. They took the information they had gathered and now had to apply it. This really pushed kids to take the knowledge they had acquired, synthesize it, and apply it to real-life activities," Fischer explains.

"By the end of the project, students were thinking globally about environmental issues and looking for ways they could make a difference in the world."

Julia is currently training Arizona Pre-Service teachers and developing professional developement curriculum.

#### Life Skills for Special Ed Students

In the high desert of Yavapai County, special ed students at Cottonwood Middle School are engaged in the study of history, language arts, and social issues through a project-based, technology-rich unit on the Holocaust.

The unit, developed by language arts teacher Angie Hillman during her participation in the Intel Teach Program, addresses state standards. It incorporates online research, an interview with a Holocaust survivor, a visit to California's Museum of Tolerance, community service, and the development of thought-provoking computer presentations on real-world issues.

As a result of their participation in this project, students learn required material and also gain confidence with their general ed peers, empathy for others, and skills – such as critical thinking, collaboration, and perseverance – that will serve them well in life.

Across Yavapai County, student engagement and performance is on the rise as a result of

authentic, technology-rich projects such as this one, inspired by teachers' involvement in the Intel Teach Program, reports Neil Manzenberger. He is the Technology Integration Specialist for the Yavapai County Education Service Agency.

As an Intel Teach Senior Instructor, Manzenberger has seen firsthand how Intel helps educators improve their practice.



"Intel Teach is not just about 'curriculum,' but is a way for teachers to really engage their students. The trainings are a great road map to help teachers help their students." In short, he says, "Intel Teach works."

### Students Drive their own Learning

"Today's students are a true technological generation," says Lillian Cisneros, a fourth-grade teacher at Kingswood Elementary School, "and, as teachers, we have to ride that wave with them and try to stay ahead.

We have to harness that power to provide our students with not only the information and knowledge covered in our daily curriculum, but the ability to apply technological skills and tools for enhanced learning, engagement and motivation."

Through the Intel Teach Program, Cisneros says she has found a multitude of ways to enhance student learning and engagement through the use of technology. She also discovered ways to make learning more authentic by integrating technology into project-based instruction.

One example is a career unit where students get a peek at different professions by using Skype\* to see and talk with professionals in their work settings. So far, this year's interviews include a local dentist, military personnel from Luke Air Force Base, and a heart surgeon from Kentucky.

To prepare, students use their laptops to conduct background research on each virtual visitor's area of expertise and compose interview questions based on guiding questions from their instructor. They follow through by conducting the interviews, synthesizing information gathered, and sharing their learning.

As a result of real-world learning experiences like this, Cisneros reports, students' motivation and engagement increase. "They become drivers in their own learning."



Intel's sustained philanthropic commitment delivers programs that improve teaching and learning through the effective use of technology; advance math, science, and engineering education; and enable cutting-edge research:

- Intel helps education leaders build a more competitive future by using technology to support new teaching and learning methods. Technologybased 21st century education represents a transformation of the education experience that will in turn transform lives
- Intel aims to better equip teachers to help students to develop the technology literacy, critical-thinking, problem-solving and collaboration skills needed for success

"...it's always heartening to know that there are people in business out there that, in their hearts and souls, know the value of education and see that business and education really are interdependent. ...with Intel, there really is an interest in trying to add value to the educational experience and to provide resources where there is need. For us, Intel has been a great partner and has helped us focus our efforts and train our teachers for the 21st century."

- Doug Price, Superintendent, Tanque Verde School District, Arizona

# To learn more about the Intel Teach Program, visit: www.intel.com/teachers

