The Intel® Innovator

Tools and Resources for Educators Spring 2006

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Assessments for the 21st Century

New Online Resource Helps Teachers Measure Student Performance in Higher-Order Thinking Skills

In recent years, through professional development programs such as Intel® Teach to the Future, teachers around the world have been learning to incorporate more student-centered approaches into instruction. They have integrated more project-based learning. They have employed technology as an educational tool within the scope of these projects and other learning. They have worked more diligently to develop lessons that encourage students to develop higher-order thinking skills, including critical thinking, problem solving, and creativity.

But feedback from instructors on every continent indicates that there is still a divide between these instructional approaches and assessments, primarily due to the difficulty of testing or measuring skills that extend beyond the mere memorization of facts.

To address this problem and meet the needs of educators, Intel has developed a new online resource to help teachers better assess complex skills.

"Teachers are expected to teach 21st century skills," said Jim Pollard, Intel's Interactive Content Manager, "but they're always very difficult to measure. So we wanted to give them great examples to measure things like creativity or problem solving. We decided to bring together a database of all those assessments and build a tool around the database so that teachers could modify and make the assessments their own."

Thus, Intel's new *Assessing Projects* resource was born.

Aligned with Learning Goals

"The *Assessing Projects* resource of the Intel® Innovation in Education Web site will aid teachers in the development of more effective assessments that align with the learning goals in their technology-enhanced units," Pollard describes in a summary of the project. "The resource will support teachers in implementing student-centered assessment practices, and creating rubrics and scoring guides to assess the difficult-to-measure skills and behaviors that are expressed in higher-order thinking. Teachers will have access to assessment items that have been developed by experts, and they will have the ability to modify those items to

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meet the needs of a particular project and to add their own content."

International Pilot

To develop the resource, Anne Batey, Intel Innovation in Education K-12 Curriculum Manager responsible for the resource content, gathered a group of education specialists from around the globe to conduct multi country pilots of an *Assessing Projects* prototype. Heather Harley from Australia, Agnes Nathan from India, Ratan Salem from Pakistan, and Gerald Roos from South Africa joined a team of U.S. teachers for training on the prototype in October 2005. They returned to set up local pilots with teachers in their countries, gathering feedback and classroom-tested strategies to be integrated into the final product. "This global development approach has worked very well, and ensures that *Assessing Projects* will be relevant for the 35+ countries involved in Intel® Teach to the Future," Bailey reports.

To build a prototype of the resource, Intel Innovation in Education staff enlisted the help of the Advanced Learning Technologies in Education Consortia at the University of Kansas Center for Research on Learning (ALTEC) and High Plains Regional Technology Education Center (RTEC) to act as co-designer on the project.

The prototype was loosely based on an existing assessment tool called RubiStar, previously developed by ALTEC. "*Assessing Projects* uses some of the aspects of RubiStar," said Pollard, "but adds other assessment types, a library of exemplary assessments, and other features that our team and ALTEC thought would significantly improve the tool."

The result is an extensive database of assessment material, including an array of rubrics for measuring 21st century skills, tools for creating and storing additional rubrics or scoring guides, and information and support to assist teachers in developing useful assessments and integrating them into their practice.

Detailed rubrics, prepared by assessment specialists on the development team, are catalogued by grade level (K-12) and subject (Arts, Language Arts, Visual and Performing Arts, Math, Science, Health and PE, Music, Social Studies, and Foreign Language). Additionally, the rubrics are further broken down by categories of Thinking Skills, Processes, and Products/Performances.

Thinking Skills include critical thinking, problem solving, and creativity. Processes include collaboration, teamwork, self-direction/self-management, self-evaluation, communication, peer review, writing, reading, and research. Products/ Performances include brochures, newsletters, multimedia presentations, videos, Web pages, timelines, reports, constructions, essays, persuasive speaking, oral presentations, lab processes, skills demonstrations, artistic or creative performances, and simulations.

Detailed Rubrics

So, for example, a middle-school social studies teacher who assigns students the task of preparing a multimedia presentation can go to the *Assessing Projects* site, input grade level, subject, and general assignment (multimedia presentation), and pull up a detailed rubric on how to assess student work. The

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rubric developed for such an assignment identifies topics for assessment, including knowledge of the subject matter, the style and quality of the writing, graphics, slide design (or effective use of slides in the scope of the presentation), use of a planning scaffold or storyboard (in the preparation stage), appropriate use of text in the presentation, and quality of the content. In each of these assessment topics, four available numeric scores are clearly defined by skill level so that the teacher can easily determine at which point along the spectrum the student work falls, and assign the appropriate score.

A middle-school language arts instructor can pull up a similarly detailed rubric for an oral presentation, or a variety of checklists for different genres of writing. For instance, the Narrative Writing Checklist includes a page-and-a-half of elements necessary in good narrative writing, from "My story has a theme that appears throughout the story," to "If I do break conventions, I do it for good reason to add meaning and realism to the story."

Clearly defined rubrics such as these not only make the job of student assessment easier and more accurate for teachers, but they also set clear expectations for students.

Additional information on the *Assessing Projects* site addresses topics such as how teachers can most effectively use assessment to improve students' acquisition of 21st century skills, when and how to use different types of assessment, how to involve students in the assessment process, and how technology can be used to support assessment practices.

Approximately 20 teachers from countries participating in the development of the new assessment resource tested the prototype this past fall.

Teacher feedback has been "very positive," reports Pollard. "They like the assessments. They find the 21st century skill rubrics really helpful." Additionally, teacher feedback helped developers work out some of the initial bugs when navigating the site.

The new resource will be included in existing and future Intel® Teach to the Future training. Additionally, the resource is available online to any teacher who uses student-centered approaches and wants to assess students based on open-ended products, performances, or behaviors instead of, or in addition to, retention of facts and procedures.

Although, for development purposes, the prototype was tested only in English-speaking countries, the resource will eventually be translated and adapted as necessary for global use.

The new *Assessing Projects* resource will be officially introduced at the National Educational Computing Conference (NECC) in July.

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Celebrating Four Years of Innovation

An Educational Odyssey

When *An Innovation Odyssey* launched in 2002 on the Intel® Innovation in Education Web site, it was with grand vision: create an online collection of stories showcasing teachers who use technology effectively to enhance student learning. The idea was to illustrate what effective technology integration looks like, and to provide a database of project ideas other teachers could adopt or adapt for use in their own classrooms.

The concept was the brainchild of former Intel employee Amy Pearl, who was inspired by the publication of *One Digital Day: How the Microchip Is Changing Our World*. This coffee-table book, part of Rick Smolan's popular "Day in the Life" series and a publication sponsored by Intel, featured photographs taken around the globe in a 24-hour period, documenting the myriad of ways the microchip has pervaded and transformed human culture.

After perusing the book, Pearl thought it would be interesting to take a look at "one digital school year," reports Anne Batey, Intel Innovation in Education K-12 Curriculum Manager. "The idea was: wouldn't it be great if we could get teachers to submit stories of what they were doing, and we'd publish a new one on the Web each day?" The name for the series, *Odyssey*, came from pulling letters from the phrase "one digital school year."

Lured by the opportunity to share their stories and receive recognition in the form of a bit of online fame, teachers flocked to the Intel Web site to submit brief descriptions of projects in which they incorporated technology. Batey reviewed the submissions and sifted out the keepers (student-centered or project-based learning where technology was used as a tool for learning). Then a small bank of education writers contacted the teachers for further information to flesh out the project descriptions and document the work.

"That first year was insane," Batey said, noting the difficulty of producing such a large volume of stories so quickly, including obtaining accompanying photographs and signed permission forms for students appearing in the images in a timely fashion. The sheer volume forced Batey and colleagues to reexamine the original plan for a "story a day" to "a story for every school day." Ultimately, in that first year, the team turned out more than 20 stories per month.

It is important to note that while some of the technology uses were

groundbreaking—including some of the first uses of blogging in classrooms, for instance—many were not. In numerous examples, teachers found ways to use technology in simple ways to augment student learning, such as taking digital photographs to illustrate progress on a science project, or by conducting online research for a social studies unit.

Stefanie Hausman, project lead on *Odyssey* early in the effort, said teachers have been "wowed" at education conferences where she has presented the series. "Teachers are really excited by it," she said. "It's such a rich collection with so many different uses of technology in the classroom. So it's a place that they found they could go and just glean some ideas and incorporate them in their own classrooms."

Additionally, she said the fact that the series is international enriches the value of the collection and increases the appeal for teachers who can look through "windows into classrooms not just outside their building, but around the world. It gives them ideas for using different technologies in ways they may not have considered."

Positive Feedback

That the series has succeeded in its goal is evidenced by the vast number of educators still accessing the database some four years later, as well as positive feedback from the education community.

Jill Brown, director of Educational Technology at Albuquerque Academy, a prestigious, independent college-preparatory school in New Mexico, says, "In my position, one of my main priorities is to share current technology integration strategies with our faculty. I find myself forwarding stories from the *Odyssey* collection frequently. These real classroom experiences, in the specific disciplines that our faculty teach, are excellent sources for spurring ideas and giving faculty a sense of what is going on in other classrooms around the world. Because technology changes in the classroom are so dynamic, the ability to learn about other teachers' successes is one of the most effective professional development resources I can provide. *An Innovation Odyssey* is an excellent resource that helps me do this."

Not only do teachers use the site for new implementation ideas, Batey observes, but they also find "validation" in discovering projects similar to those they've conducted in their own classrooms. Batey said she has observed teachers participating in professional development training "looking for things they already did. And then they'd compare approaches. They used it for validation and extension of what they were already doing."

Expanded Unit Plans

Several *Odyssey* projects have been further developed by education specialists to create full-blown unit plans, reports Hausman. "Teachers expressed interest in getting more of the story and details about *Odyssey* stories so that they could implement them in their classrooms." Such expanded stories include "Tin Whistles Go Worldwide," where elementary students learn language arts skills and more through the Flat Stanley project, "Choreographing Math," where middle school math students create dance routines incorporating depictions of linear

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equations, and "Watching Them Blossom," where students attending an alternative high school learn social studies and technology through visual art.

Professional Development Resource

The *Odyssey* story database and the extended unit plans have been frequently used in professional development training, including Intel® Teach to the Future and the Intel® Teach to the Future Leadership Forum, training for teachers and administrators, respectively, to learn how to effectively integrate technology into instruction. Batey said, "Often *Odyssey* is used in professional development to get a sense of the breadth of possibilities with technology integration. It's also a great starting point for discussion."

Teachers who have been featured in the project are thrilled to be part of the series. "It's a big deal to them," notes Hausman. "It's something they share with their administrator and parents. In a lot of cases, they are recognized in their school for it."

Darren Carollo and Shirley Pickton, teachers at a public high school in Dallas whose work is so inspiring, the duo has been covered twice in the Intel series, said *Odyssey* coverage has been valuable to their extended learning program. Each year, through their World Classroom program, Carollo and Pickton select a group of inner-city minority students to take part in an educational expedition elsewhere in the world. The latest adventure took the group to China, where the Texas students gave Beijing students lessons in using online technology tools, as well as American culture. For the American students, most of whom had never been out of Dallas, the experience was transforming. But to attract the necessary funding for such an ambitious endeavor, it is important that people understand the value of such an experience. Carollo said the *Odyssey* story "Riding the Orient Express" helps achieve that goal. "It gives the program a great deal of credibility and allows those who want to know more about us to read in depth and understand what we do," he says.

Batey said the series has even been used to lobby for additional education dollars in some communities. "When people are voting on technology," she said, "it helps to have a real picture of what's going on with it in the classroom."

To make the collection even more accessible to educators, the series is syndicated so that schools and school districts can arrange to have the collection, along with the featured story of the day, appear on their own Web sites. There is no charge for syndication, and many schools take advantage of the opportunity to share these exemplary stories with staff, parents, and the community as a whole.

"People who are in leadership roles get excited about it because of the accessibility," adds Batey. "A parent can read a story and understand it. A site committee can read one and get the gist of what's going on, or read more and get an idea of the possibilities."

When *An Innovation Odyssey* celebrates its fourth anniversary this year, the collection will have grown to over 400 stories from nearly 30 countries on six continents.

Recent stories in the series include "Discovering the Forbidden City," where middle-school students in China learn about one of their country's national treasures through inquiry-based learning , "Teen Connections," where Russian high school students in remote Siberia are able to use technology to connect with other students around the world and build language arts skills in the process, and "Tackling Real-World Problems," where California students from grades 3 through 12 compete in a local academic competition called CyberQuest and present proposed solutions in a problem-based learning activity through public multimedia presentations.

While the uses of technology have expanded over the years, teachers' passion and creativity remain a constant, as do projects that seamlessly integrate technology to improve student learning.

To access *An Innovation Odyssey* database, or to submit a story idea of your own, visit www.intel.com/education/odyssey

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Bridging the Pacific

Online Learning from Rural Oregon to Modern China

In many developing countries, students who have completed study-abroad programs to the United States are coming more and more interested in becoming teachers like those they studied with in America. In countries such as the People's Republic of China, however, the current practices for teaching teachers remain very different than what learners experience during their study abroad. To help bridge this pedagogical gulf, a number of U.S.-based institutions are beginning to take advantage of low-cost hardware, easy access to technology, and tools provided by Intel® Innovation in Education to help meet these needs.

Jeffrey Barlow, head of the Berglund Center for Internet Studies at Pacific University in Forest Grove, Oregon, has been working for the past year to help foster connections between students at Wenzhou Medical College in Zhejiang, China, and instructors at Pacific University. "We've tried to use off-the-shelf technologies both here in Forest Grove and at Wenzhou to create an environment where students in China can be taught by professors at Pacific and earn credit from both institutions," said Barlow.

The path to get this program established has not been as difficult as one would expect, claims Barlow. "One of the most important aspects of the Berglund Center is to create scalable best practices such as this one, so that we can help to foster expansion to other schools for other learners." To get this distance-learning class off the ground, Barlow had to pull together a number of interested parties and components to make it work.

Barlow began with finding an institution in China and a contact person who would be willing to help facilitate all the technological and logistics interests. One of the associate professors in the English program at Wenzhou College, Yang Deshang, was a perfect fit. "Yang has both the technical savvy and the interest in American teaching and learning to help make all this happen. His help has been invaluable," said Barlow. "I became interested myself in earning a master's degree in teaching so that I could help make these changes occur. It has been great!" said Yang.

After making contact with Yang, Barlow then had to find a professor willing to teach in this unconventional style. He found a willing instructor in American Literature professor Tim Thompson from Pacific University. "Once you get past the idea that the students aren't sitting in front of you directly, but are virtually

there, the class pretty much functions the same as any other. Granted, my Chinese students aren't as proficient as my Pacific students, but it has been an interesting and very rewarding process."

Online Connections

The next step in the process was to set up the technology—both hardware and software— to make all this happen. "Like anyone, we're operating on a limited budget, so our goal was to do this with the most affordable and available equipment," said Barlow. They began be using online conferencing software that is freely available (like Skype and iChat) to connect the two classrooms together.

The set up is pretty simple: microphone, camera, and speakers connected to a computer with a high-speed connection. From there, the Chinese students have a similar setup, and the two classrooms connect entirely via the Web. "Once in a while we encounter some technical glitches, but generally we make it through the entire class where we all can see and talk to each other. It is very exciting and very easy," said Barlow.

In order to archive the classes, Barlow also has the classes videotaped. "We're hoping to be able to archive these classes so that students, instructors, and other folks can take a look at what we've done. Or even use the videos as a way to study or review material if they've missed a class," Barlow pointed out. Since they have begun videotaping the courses, they also decided to bring a digital projector into the classroom that Thompson uses. This way it can feel more like a traditional classroom where the instructor is looking out on a large group of students instead of looking at a small picture on a computer monitor.

Collaborative Tools

The next element in the process is for the students and instructors to extend their classroom beyond the time they meet to include online tools to help support student learning. Using collaborative thinking tools like Seeing Reason on the Intel® Innovation in Education Web site, students can work synchronously with the instructor and then return later to continue the work they have begun. "The Chinese students are really taking advantage of all the opportunities given to them," said Thompson. "They use the online tools and collaborative spaces to help support each other's work and continue the classroom discussion well outside the confines of our 90-minute meetings."

Class sizes in China are typically much larger than ones instructors are used to dealing with in the United States It is typical for Thompson to have a minimum of 60 students who all want to engage with him and use the technologies to participate in the class. "It can be quite difficult, but I think the students are happy, and I'm thrilled with the results," said Thompson.

Looking to the Future

Barlow is hoping to expand this program over the coming years to help demonstrate to other educators and institutions how such programs are both cost-effective and significantly contribute to the life of the students and teachers. "We're hoping to help bridge part of the pedagogical divide that can only be changed by employing classroom-to-classroom communication," continued Barlow. "In the future I'm convinced that instructors and students will be able to enroll in classes and learn using these sorts of tools in ways that we haven't

even begun to imagine."

These practices are helping to make technology more transparent in the classroom and deliver a wealth of new experiences and services to students and educators. By blending online technologies and human interactions, students in China are well on their way to becoming licensed U.S. educators. "Though we haven't finalized all the details," said Barlow, "in the near future we're hoping to offer a dual-degree program where Chinese students can complete their general requirements in two years in China and then spend their final two years in America and graduate as a licensed teacher. These sorts of technologies are essential to making that future a reality."

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Intel® Learn Around the World

Community Education Program Teaches Technology Skills and More

For children growing up in developing countries, access to technology is often a distant dream. In their day-to-day lives, many may never even come across a computer. So how can they develop the kind of skills that could pave the way to a better future?

Through the Intel® Learn Program, thousands of young people are getting just such an opportunity. Implemented in a growing number of developing countries, the Intel Learn Program aids learners ages 8-16 in acquiring valuable technical skills through hands-on learning in local community technology centers. Depending on the country involved, these computer technology centers could be school computer labs that the government arranges to be open for access and training after school hours and on weekends, or independent computer centers (much like Internet cafés) that entrepreneurs have been able to open to the public with government support. But regardless of geographic borders or "classroom" setting, the Intel Learn Program is designed to help young learners develop key 21st century skills, with an emphasis on technology literacy, critical thinking, and collaboration.

Student-Centered Learning

Created in collaboration with a variety of government, educational, and nonprofit agencies, the program trains local staff in each country to guide learners through a structured curriculum that engages youth in student-centered, project-based learning, explains Peter Broffman, program manager for Intel Learn.

The curriculum is divided into two, 30-hour thematic units entitled "Technology and Community" and "Technology at Work," and lessons for both are delivered in 15, two-hour increments over a period of a few weeks. Each lesson is divided into sections entitled Plan It, Do It, Review It, and Share It.

The "Technology and Community" curriculum includes a series of hands-on activities to help students learn basic computer skills, including how to employ word processing, graphics, spreadsheets, multimedia, and Internet search skills. The course also includes a culminating final project that helps learners combine their newfound skills. All the activities and projects demonstrate ways in which technology can improve their communities.

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Throughout the course, "learners work in teams of two or three, which helps promote collaboration and teamwork," explains Broffman. "The teams of learners work through a series of activities that teach them a variety of technology skills. But through the structure of those activities, they also have to think about what they're doing, why they're doing it, and they have to make some decisions as a group about what they're going to produce, how they're going to produce it, what the content will be, what the format will be."

Thus, at the same time they are learning technical skills, youth are also developing other critical skills as they collaborate to collect information, analyze that information, and ultimately present it to their fellow learners, families, and community members. "An important feature of giving young people skills that they need for the future is being able to present their work to others and get feedback," notes Broffman. "So the sharing becomes an integral part of the learning process. It also helps build confidence."

Career Focus

Like "Technology and Community," the "Technology at Work" curriculum also helps learners develop critical skills by connecting activities to real-world applications. The activities and final project in this unit help learners see how computers are used in a variety of jobs and careers.

In "Technology at Work," students conduct research on a variety of careers they might find in their own community. As the curriculum progresses, students are exposed to increasingly sophisticated technology tools in the way they might be used in real-world jobs. For example, in one exercise, technology tools are used to design a survey that a healthcare worker might use to assess medical needs. In another, students develop a project management plan that an engineer might follow in the course of a building project.

Community Benefits

Final projects focus on the subject of each curriculum unit. For instance, in the first thematic unit, "projects focus on how they can benefit their community in some way," says Broffman. "One example of a final project they can choose is to assume that community leaders are looking to design a new park for the community. In the scenario, the learners also assume that community leaders have come to their team and asked them to help make recommendations about where the park should be located, what kinds of services and amenities it should have, how it should be designed, and what the cost of constructing it might be. Using both technology and non-technology tools, the learners do their research and planning, then develop a presentation and deliver it to the community. In that way, they've worked as a team to learn and demonstrate new technology skills, done planning and decision making, and developed and articulated a rationale for the decisions they've made. And they've not only demonstrated what they've learned to themselves and their peers, but also to their parents and other adults in the community. Equally important, they've demonstrated how what they've learned could be of benefit to the community at large."

Sometimes, these presentations yield more than applause.

"In one small community in India, community leaders came to hear a presentation from a team of learners about their recommendations for such a

community park. The community leaders were so impressed that they decided to build a park the way the kids recommended it,"Broffman shares. "This was a unique situation, but victories like these are possible because of the program design."

Because the computer labs in these countries are often limited in the hardware and software available, the Intel Learn Program is designed to employ commonly used hardware and software tools. "Everything that the learners do in our program, they can do using Microsoft Office* Suite." These tasks include word processing and using presentation, graphics, and spreadsheet software, along with the Internet.

Started as a pilot in 2004, the program reached more than 54,000 learners the first year, and expanded to reach another 150,000 in 2005.

To date, the Intel Learn Program has been implemented in Brazil, China, Egypt, India, Israel, Mexico, Russia, and Turkey. Plans are underway to expand to additional countries this year.

Underserved Communities

"Within developing countries," Broffman notes, "we focus on underserved communities where kids are not likely to have computers in their homes, and have limited access in schools. So these community technology centers are often the only place that kids get to touch a computer."

The difference this program makes can be "huge," says Broffman. "It opens up a whole new world of career opportunities." In addition, it simply gets young people more interested in learning. "A lot of these kids are either not a part of a formal schooling process, or not being successful in school," he says, "and this may inspire them to be more interested in learning."

So far, the Intel Learn Program is getting rave reviews.

"Evaluations have been uniformly positive," reports Broffman. "In the past two years of program implementation, we've had a 93 percent learner completion rate. For a voluntary after-school program where kids essentially vote with their feet, this is very good, and we're very proud of that result. It shows that the kids are motivated and eagerly engaged in what they are doing."

Further, Broffman adds, "We have independent evaluation data from each country that's been consolidated by SRI International, that demonstrates that the program is very successful in meeting its objectives of providing learners with skills in technology literacy, critical thinking, and collaboration."

Broffman attributes the success of the program to the well-developed curriculum, but also to the trainers. "The key to being successful is the staff training," he says, "because to be successful, the staff has to facilitate this program in a way that is engaging and interesting for the kids."

The fact that many of the education systems in these other countries have vastly differing approaches to the education process makes this all the more evident.

Those employed by the local technology centers in each country to teach the Intel Learn Program vary from formally trained classroom teachers to community members with some computer skills, but no formal education training outside of the Intel Learn staff training. But even those who have been trained as teachers, Broffman notes, have usually done so in a very traditional educational structure where instructional approaches typically involve the teacher imparting information to students through lecture, students silently taking notes, and students then being tested on the knowledge they have acquired through the process.

"Intel Learn represents an entirely different pedagogical style, and that has not been an easy transition for staff in all cases," says Broffman. "In many of these countries, it's very unusual to have a student-centered, project-based approach to learning where the teacher becomes the facilitator and the kids take responsibility for choosing their projects and doing their activities. It's considered a very new approach. Training teachers and staff to adopt and feel comfortable with this methodology can be a real challenge."

"But," he adds, "it's also the thing that makes the Learn Program unique and interesting and innovative, and distinguishes it from other programs. It's been very exciting because, as the program has unfolded in places that have a very traditional educational system, the teachers and education administrators have found it to be a very successful and exciting model. They see how innovative teaching can excite kids, as well as make them successful."

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To Learn about Technology, Take the Journey Inside (SM)

How does a computer work? What is a microprocessor? How can the Internet provide access to so much information so quickly? When students use technology, they raise many questions. So where does a teacher turn to find factual, easy-to-understand answers to such questions? *The Journey Inside (SM)*, a free resource on the Intel® Innovation in Education Web site, provides a multimedia curriculum that explains how computers and the Internet work.

This collection of 35 interactive, online lessons for students covers such topics as "Introduction to Computers", "Circuits and Switches", "Digital Information", "Microprocessors", "The Internet", and "Technology and Society". Many of the lessons include interactive activities, virtual field trips, and videos depicting the concepts addresses in corresponding lessons.

Instructors who use *The Journey Inside* to teach the basics of technology to their students say the curriculum can be used individually or in group work, and because the curriculum is accessible online, students can even continue their research at home. The incorporated videos are especially helpful in helping students to grasp complex concepts more easily.

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