

## TECHNOLOGY TIPS TECHNOLOGY TIPS TECHNOLOGY TIPS

# Nevada Pathway Project: Preparing 21st Century Principals

*Teachers and administrators in Nevada began using a collaborative, online professional development system to facilitate their own 21st century learning.*

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**H**ow would you react if you walked into a middle school classroom and found students bent over iPods, listening through their ear buds? Across Nevada, the administrators working with teachers in the Pathway to Nevada’s Future project see that daily.

The Pathway project is a state-wide, collaborative, online professional development network created to help administrators and teachers offer 21st century learning experiences to their students. The project has two goals: to change classroom experiences for students through the use of technology and to create professional development resources that administrators and teachers will be able to use after the project ends.

To accomplish those goals, pairs of middle school teachers—and elementary or high school teachers in some districts—are participating in a two-year professional development program. That professional development is mirrored and adapted for their administrators, who are key to helping teachers change classroom practices. The professional development for both groups is grounded in a framework for 21st century learning and student outcomes, national technology standards, digital citizenship issues, pedagogy, and technology skills training.

Funded for two years through Title II, Part D of the American Recovery and Reinvestment Act, the project began in fall 2009 and involves 124 teachers, 45 administrators, school district professional development personnel and technology coordinators, the state educational technology coordinator, and university professors. “The lines between school, district, state, and university are blurred in

this project because the teamwork, collaboration, and passion among all who are involved make those divisions seamless,” said Carol Crothers, the director of assessment, program accountability, and curriculum at the Nevada Department of Education. The driving philosophy of this program is collaboration. Each participant is expected to play an active role in the group learning and to contribute to the overall process, rather than simply receive information.

### Technology, Pedagogy, and Content

Classroom sets of technology tools, including iPod Touches, laptop carts, and interactive slates are key to the Pathway project. Principals each receive an iPod Touch and learn strategies for using it in the classroom as well as how it can be optimized for their own job responsibilities, such as classroom monitoring.

The focus of this project is not on the tools, however: the project uses a framework for technology integration that builds on the convergence of teachers’ technological, pedagogical, and content knowledge (Mishra & Koehler, 2006). Technology tools are chosen only *after* curricular objectives and possible learning experiences are identified. In this way, the tools support learning but do not drive it. Professional development provides additional resources that enable teachers and administrators to use the tools effectively.

### Statewide Collaboration

The power of the project comes from the statewide collaboration and the bonds it builds among educators across an otherwise immense landscape. Nevada has 17 school districts

that have student populations ranging from fewer than 75 to more than 310,000 students; schools may be located in urban areas or in remote reaches of the state. The Pathway project draws its participants from 16 of these districts, thereby bridging the vast Nevada landscape. Online collaboration ties all of the participants together in a Moodle environment maintained by one of the districts. Activities involve webinars, research, sharing ideas and practices, goal-setting, and self-reflection. Because teachers work in school pairs with an administrator, they also have face-to-face collaboration.

Although it is early in the implementation, four specific benefits have emerged.

**Administrators are discovering that their challenges are similar, although their environments may be different.** Urban and rural administrators alike experience the frustrations of installing new infrastructure and technology while developing systems and solutions for management of technology-rich classrooms in a variety of school environments. They agree that the professional development is essential to the success of the program, and some have reported making sacrifices to persevere. Amy Wagner, an administrator at K.O. Knudson Middle School in Las Vegas, commented that some of her busiest teachers are keeping even later hours than usual after school as they plan lessons and look for new applications for students to work with the next day. She knows that the project is taking up a lot of time, but when she sees the success of her teachers and increased student engagement, it is worth it.

Across the state, teachers are developing meaningful lesson plans

while embracing the risk of inviting administrators to observe their untested technology integration efforts, and wary administrators are suspending their ingrained reactions to see the lesson to the end. Stacy Colwell, head of lower and middle school at the Adelson Campus in Las Vegas, states that for right now, she is “just getting out of the way” as her participating teacher “does exciting things in the classroom.”

**Online collaboration gives busy educators and administrators statewide an opportunity to share ideas that they wouldn't otherwise have shared.** Educational leaders are under the pressures of meeting state accountability measures and addressing budget cuts; nonetheless, they acknowledge their responsibilities to prepare students as learners and workers in the 21st century and view this project as an opportunity to help them accomplish that. The professional development is designed in flexible modules by professional developers who are on the project staff so that participants can keep up with personal and professional obligations, and tech support is available for administrators who need it. Meaningful professional development challenges traditional thinking and provides administrators with the same theoretical frame that their teachers are implementing in the classroom.

In addition, administrators from all technology backgrounds and levels are able to contribute and receive from one another. For example, when administrator Bob Mars of Silvertri Middle School in Clark County School District shared his concerns about his teachers' ideas of using Twitter to post homework assignments, Bob Been, the principal of Carson



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Valley Middle School in Douglas County School District suggested using Ning to bypass some of the issues that can arise in Twitter and other open environments.

**The Pathway project is building a community of stakeholders who value technology as a learning tool.** John Moddrell, the principal of Battle Mountain (NV) Junior High School, finds the prospect of engaging

students with these new technologies so exciting that he “would almost like to go back into the classroom!” Further, administrators are developing their own personal philosophies about technology use and its place in the classroom. Leslie Lotspeich, the principal of Wells (NV) Elementary School, acknowledged early on that “the bigger challenge is to become brave enough to let students engage

us in the technology.” These administrators are sharing ideas across school boundaries, and they are learning how to give teachers the support they need to effectively integrate technology into classrooms.

**The Pathway project is helping propel technology in unintended and unanticipated ways.** Creative teachers are adapting Pathway project technologies for student use. Lotspeich commented in an online post that one of her participating teachers regularly engages her students through blogs and Moodle:

[Using a blog, she had] her class respond to a question about what they learned about earthquakes. While [students were] able to springboard off each other, Mrs. Barger made the learning more individual through the use of Moodle. She downloaded the results of the blogs into Moodle, [then gave] specific feedback to her students. She told them that they [had] not demonstrated learning because they did not utilize the vocabulary in the unit within their discussions. This prompted students to become more focused on the appropriate responses to learning. Moodle helped both student

and teacher to become more focused. (personal communication, May 12, 2010)

In addition, administrators are eager to become more-effective technology leaders. Two of the project's administrators have applied for stipends to attend the International Society for Technology in Education 2010 conference, where they plan to learn more about what it takes to set and meet technology integration goals as well as collaborate with technology leaders from around the world.

### Looking Ahead

The Pathway project hit the ground running in August 2009, and although the project is less than a year old, it's gaining momentum and the Nevada education community is beginning to recognize the project's ability to promote state educational goals across disciplines, grades, and geographic obstacles. Several districts and the state have included it in state and federal grants for expansion, and the Nevada Commission on Educational Technology is considering it as an official model for Nevada's 21st century

classroom. Clearly, there is a future for this project that extends beyond its current form. Nevada is truly on the pathway to a bright future! **PL**

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### REFERENCE

■ Mishra, P. & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017–1054.

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**Authors' note:** More information about the Nevada's Pathway to the Future Project can be found at <http://cpdmoodle.ccsd.net/pathway>.