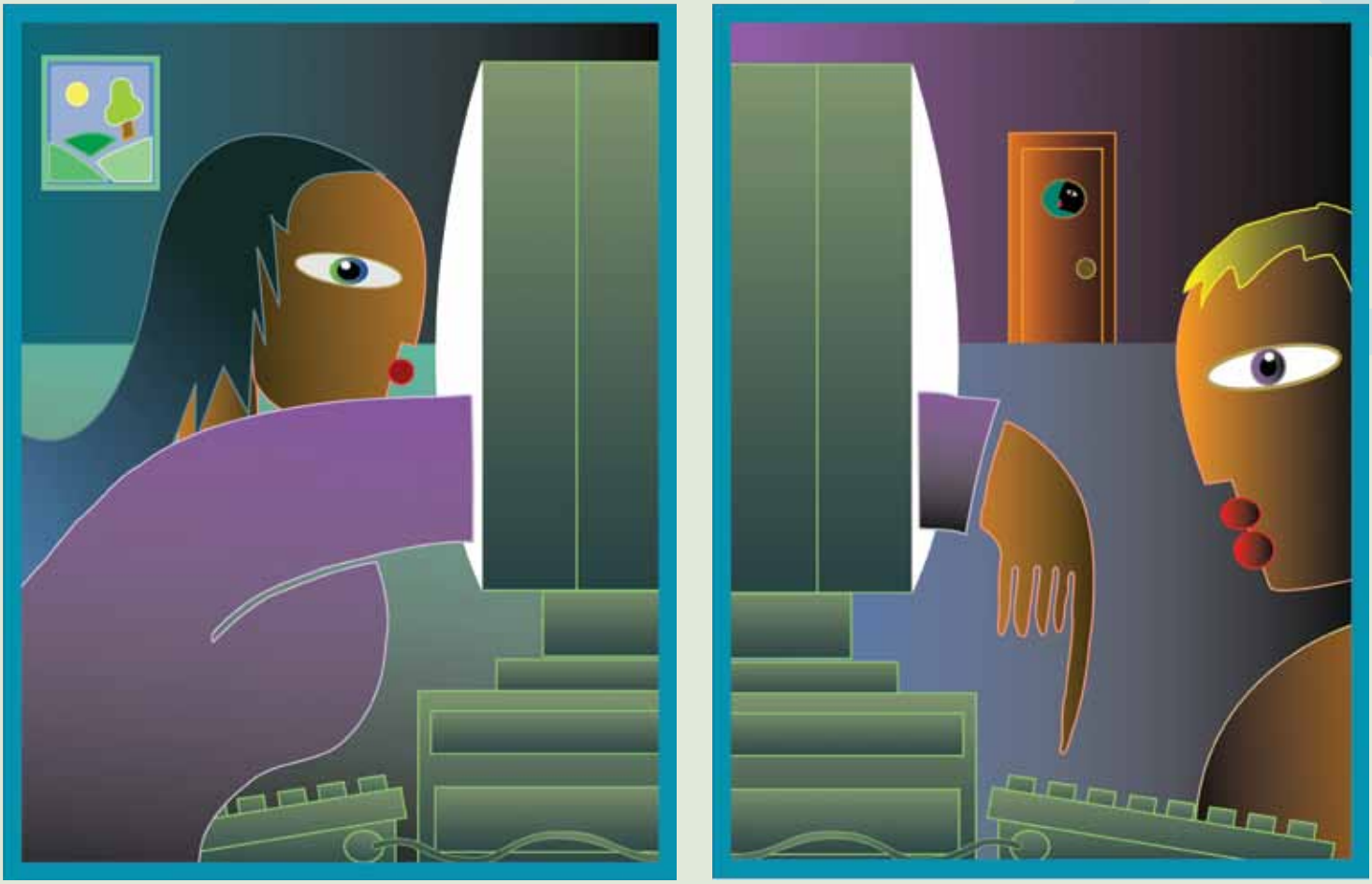
Dennis Small

Patience



In Washington State, technology integration relies on coaching and regional support, not equipment.

Partnership

Schools in Washington State had a smattering of computers that were used for instruction and were mostly disconnected from any network when I joined the state's K–12 public education agency in 1989. It was clear that state educators needed to see beyond the dazzle of slide decks produced by seven-year-olds and reconceptualize the use of educational technology as a dynamic partner for teachers and learners. Today, 99.7% of public school classrooms in Washington State have networked Internet connectivity; the ratio of students to computers with Internet connectivity is four to one; and in 133 of 295 districts, academic standards for educational technology are mandatory.

It's been a long haul, helped tremendously by a surfeit of talent and expertise here at the Office of Superintendent of Public Instruction and in the field at the state's Educational Technology Support Centers (ETSCs). This year, we were thrilled to see the hard work pay off as the state legislature added a key provision that embeds educational technology as a line item in the state's basic education funding formula. Technology for students and staffing for IT support—as well as instructional materials, maintenance, and insurance—are called out for funding.

This giant leap forward is due in large part to the steady, behind-the-scenes advocacy of the directors of nine regional offices in the ETSC program. These men and woman lead the charge for highly effective instruction that is supported by the technologies educators use every day. All of the directors are ahead of their time, eager to innovate, and wholeheartedly committed to education.

View From the Field

I had the chance to catch up with one of our ETSC directors recently and get his perspectives on technology integration. Pete Phillips oversees the ETSC at North Central Educational Service District. He sits on the executive team for the district, which sets direction and handles day-to-day operations. Pete is an educator by training and has seven years of teaching experience at the high school level.

Dennis Small: What technology would you like to see in every classroom?

Pete Phillips: We need to make sure that basic classroom technologies—the document camera, computer, ceiling mounted projector, and audio equipment—are connected and work seamlessly. Sounds basic, but it has to be easy for teachers to use the technology as a natural extension of teaching and learning. If teachers have to stop, hook everything up, and hope that it works, tech integration won't get off the ground.

Finding Funding

This year, the federal government eliminated funding for Title IID, Enhancing Education Through Technology, which launched and sustained the successful professional development programs discussed in this article. Washington State, through its state-funded ETSC centers, has been able to keep the programs running by moving to a fee structure.

For more information about the Enhanced Peer Coaching grants, visit www.k12.wa.us/EdTech/Grants/Competitive/PeerCoaching/default.aspx.

For more information about the Teaching and Learning in the 21st Century grants, visit www.k12.wa.us/EdTech/Grants/Competitive/TL21/default.aspx.

Dennis: How do you help schools plan their technology acquisition?

Pete: We work closely with administrators and teachers, looking first at what's installed at the classroom level. Then we couple the curriculum elements that could make effective use of digital technologies to a list of equipment. We rank the list based on getting the most impact for the dollar.

Let's say that a teacher wants to add computers or software to the classroom. We go to work on the request, working closely with the teacher, to figure what optimal combination of technologies will deliver the greatest impact on the teaching and learning side. Everything gets factored in: How many students will need access at what grade level? Could we reach students at remote locations with this technology? What is the cost of a single license versus a site license? And can the current network infrastructure support this new gear?

Dennis: What's the greatest challenge in tech planning? And how do you overcome it?

Pete: There are two: fascination with technology and professional development. I tell teachers and administrators, "Don't focus on the equipment! Zero in on learning. Ask first, What is it my kids need to learn? And how will I know if they've learned it? Always, always wrap the lesson around the learning, not the technology."

The other big problem is professional development. It takes time and money—two commodities in short supply across K–12 school districts. I would say that sustaining a program that offers progressive, research-based professional development is the biggest challenge we face.

Dennis: What kind of tech integration training works best for teachers?

Pete: In the past, drive-by training was the norm—lecture-style courses that assumed what new proficiencies teachers needed to integrate technology. Not too effective. However, in 2007, when the state used Title IID funding to bring peer coaching online, the game changed. And what we've learned, and what shows up in the evaluations, is that teachers learn best when two conditions are in play: colleague-to-colleague instruction and direct classroom practice in a low-risk, peer-supported situation. Embedding the training into the job is critical. Often our peer coaches and their collaborating teachers instruct as a team, working through the newness of learner-centered instructional practices and technology integration.

And so it goes viral. We train a peer coach, who trains a colleague or two, who become peer coaches, who train a colleague or two. It doesn't take long for new instructional practices to take hold and technology integration to become part of the learning environment. Now we are seeing partners and groups of teachers in their own buildings or in another school district coaching one another. Once members of a core group become peer coaches, their expertise acts like a magnet to other interested colleagues, and the new knowledge ripples out across the district. Peer coaching is realistic professional development for busy educators.

The same is true for administrators. Peer reinforcement means a great deal. Administrators don't have much time for training, so what we've developed is a professional learning community built out with online courses. The payoff is flexibility. There's a wide range of web-enabled training courses—designed for school leaders—that work with any schedule. What we're looking for is meaningful professional development we can sustain over the long haul.

Dennis: Tell me about an *aha* moment during a peer coaching session.

Pete: For the teachers in our first cadre, who had limited exposure to technology, we often heard an amazed, "Aha!" when we showed them free web 2.0 tools on the Internet. They were really jazzed to see what's out there and find out how to use these technologies to engage kids. In training, once we move through the novelty of web 2.0 technology, we focus on how these resources can deepen and extend the learning experience. Then we move on to the next step: how to share these new instructional practices and technology-rich learning projects with peers.

Dennis: Why integrate digital technologies into teaching and learning?

Pete: The Millenials who fill our classrooms today

have an ability to internalize new knowledge through their interaction with digital media. They are fluent communicators and collaborators. They thrive on simulation and problem solving. And they look for meaning and relevance. What they learn has got to relate to, and communicate with, the real world. That's why digital cameras, iPods, iPads, cell phones, interactive applications, simulation and modeling, e-mail, and web content creation make sense to them.

That said, we have a regional demographic that pressures this reality. *Rural* and *low-income* define the majority of our population. In fact, wage earners in north central Washington earn an average of $15,000 less a year than the rest of the state. The percentage of kids in our free and reduced-price lunch program pencils out 14% higher than the state average. So equity and participation are big issues.

Bottom line, I think that one of the most important tools we can give these students is the connected classroom—videoconferencing; educational software; hardware; and the bandwidth to interact, research, and learn from others far beyond their location. At the high school level, it doesn't matter how rural you are, you can build a network of contacts, learn more, and take a close look at employers and higher education on the web. Without equitable access to these resources in the school building, our students are miles behind their affluent, urban counterparts.

Dennis: How can K–12 decisionmakers help you close the access and participation gap?

Pete: I have several ideas here. One, develop more grant programs, such as peer coach training, that promote tech integration through professional development. And two, build programs that support teachers in rural school districts where the money for classroom-based technology is severely limited.

But for me, the big idea is this: make sure the professional development courses that bring educators into tech integration are available through the ESDs [educational service districts]. Keep training regional. Teachers and administrators rely on their ESDs as the source of knowledge, resources, and professional development expertise in areas where there are few urban centers and affluent school districts.

This is markedly true for tech integration because our ESD-based trainers sustain and advance what teachers learn through online communities of learning and practice. These networks overcome geography, cost, and working hours, and connect experienced tech integrators with novices within a supportive, web-based environment. This is how we keep the learning curve in motion.

Dennis: Can you integrate technology without professional development? If not, why not?

Pete: Yes and no. If all you want is technology in the classroom, save the the professional development money and give classroom-based technology directly to the students, who will figure out how to use it for their assignments—technology for technology's sake.

However, if you want to use tech integration to improve teaching and learning, professional development is critical. Novice tech integrators need to know first how to operate the technology and then how to use it to build a powerful learning environment where kids are engaged and everyone has a way to show what they know and can do. The only way to get there is comprehensive, ongoing professional development and just-in-time support for teachers.

Dennis: Have Washington State's grant programs—Enhanced Peer Coaching and Teaching and Learning in the 21st Century—helped teachers strengthen their practice?

Pete: Absolutely. Both professional development programs have created situations where teachers share and learn from one another. And both programs were designed to leverage modeling and communities of practice to keep teachers engaged, sharing, coaching, and learning online.

Dennis: Can you give me an example of how these grant programs have supported teaching and learning?

Pete: Not long into the training of our first cadre, one of the peer coaches established an after-school weekly session to work with her participating teacher. During these sessions, the peer coach would take a tech integration lesson directly from peer coach training and work one-on-one with her colleague to bring the new teaching technique into the classroom.

This one-on-one morphed into a series of informal open sessions every Monday during the school year so that everyone could get into a conversation about instructional practice and tech integration. The Monday session became a kind of forum for new ideas and remains a very popular gathering. Early on, the peer coach trainer demonstrated a couple of web 2.0 tools to this expanding community, which prompted another huge wave of interest. Didn't take long before the concepts coming out of these sessions began to spread colleague-to-colleague throughout the building. Today, the group is super dynamic, very collegial, and really engaged with improving practice. PL

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