New Technologies in the Classroom

By Marinel D. McGrath, MASCD President
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At a recent Miles River Middle School (Hamilton, MA) Friends’ (PTO) meeting, I listened attentively as our technology resource teacher, Judy Naylor, briefed parents and educators on the current research and the implications for how we, as PK-16 educators, design our curriculum. She described the learning needs of our students (aka “digital natives”1) and how teachers (aka “digital immigrants”2) are integrating technology to meet those needs through a demonstration of iPod ™, Palm Pilot™, and Smartboard™ technologies that are being integrated into the curriculum. She informed us that those born since 1984 have always had technology in their lives — in fact, they have spent their entire lives “surrounded by and using computers, video games, digital music players, videocams, cell phones, and all of the other toys and tools of the digital age.” (Prensky 1) She also talked to us about the paradigm shift needed in how we think about the integration of technology in our educational model as she deftly demonstrated the technologies being implemented in the classroom through the fundraising efforts of parents. We learned and witnessed for ourselves how the integration of the technology inspires students to become fully engaged in real world learning because it matches how they think and how they process information.

A growing body of research indicates that technology has had a positive impact on student learning across all areas of the curriculum. As I read the articles for this edition of Perspectives, I could not help but think how there is a paradigm shift occurring, albeit slowly, in which our PK-16 students and educators are learning and teaching in a “blended” learning environment. This classroom environment combines traditional face-to-face instruction with online, computer/digital assisted learning which provides for greater student engagement and encouragement. The initiatives described in this issue: wikis, blogs, online learning, computer assisted learning, and virtual classrooms illustrate how the integration of technology increases an educator’s ability to meet the needs of a range of students, including those who need extra help, those who want to take more advanced courses and those whose districts do not have the resources to provide.

1 Our students today are “native speakers” of the digital language of computers, video games and the Internet” (Prensky, 1)

2 Those of us who were not born into the digital world but have, at some point in our lives, become fascinated by or adopted many or most aspects of the new technology are, and always will be compared to them [digital natives], Digital Immigrants (Prensky 1)
Chris Dede Joins DuFours, Schmoker, Reeves and Others at Boston Conference

Technology expert Chris Dede will present an author luncheon and break-out session at the Northeast ASCD Affiliate Conference on Friday afternoon, November 30. The noted Harvard educator will describe key 21st century skills that education must foster, as well as strategies by which students, schools, and colleges can implement these skills.

Featured speakers at the conference, Leading and Learning: Sustaining Learning Communities, include Mike Schmoker, Rick and Becky DuFour, Bill Daggett, Doug Reeves, Pam Robbins, Susan Mundry and Nancy Love, Andy Platt and Caroline Tripp. The conference begins with pre-conference workshops on November 29 and concludes at noon on December 1. Early registration is encouraged, since the 2006 conference sold out. Registration is open now at www.neascd.org, which also includes all conference details.

There is no question that technology can have a profound impact in improving the quality of teaching and learning in our schools. There is a widespread understanding regarding the importance of school technology in preparing our students for the 21st century challenges of an economy based upon knowledge and technology rather than the manufacturing and agricultural economy of the last 50 years. In the face of a host of another set of challenges, from constricted budgets to unfunded state and federal mandates, we must articulate technology’s role in education, provide leadership in supporting the integration of technology into the curriculum, ensure equitable distribution of technology resources among students and staff, and most importantly, demonstrate curiosity and open mindedness in pioneering new and emerging technologies and projects for the benefit of our students, our communities, and the future of our nation.

References

MassCUE’s Call to Action: Taking Charge of the Paradigm Shift

By Walter McKenzie
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As the Information Age unfolds before us, the implications for our schools, our nation and our world are astounding. Economic globalization is creating incredible opportunities and impacts the way we do business individually and collectively. Digital data continues to grow exponentially, requiring us to develop the skills and strategies necessary to manage this influx of information. Students compete not only with one another locally, but against the best and the brightest from around the world. This requires us to provide a rigorous, world class education that delivers the content, concepts and skills sets necessary to compete globally.

Twenty-first century workers handle quickly-changing data, collaborating with partners in geographically disparate locations to solve problems and create products of value to consumers. Data is the coin of the realm, and American workers need to be able to access that data, evaluate it critically and utilize it productively. Content area mastery, information literacy, critical thinking, group collaboration and the expertise to get the job done are all essential for our students preparing to enter the workplace.

Students readily embrace digital tools, but left to their own devices they make use of these tools for entertainment. We have an obligation as educators to help students and their families extend their use of these tools for learning and productivity. This requires us to welcome these new digital tools into our schools and utilize them in purposeful, meaningful, authentic, real-world learning experiences. MassCUE supports the use of school networks, pedagogy and instructional practices that open up our educational environments to portable, ubiquitous use of technology.

With the onset of the Information Age, education must continue to divest itself of practices and assumptions that are held over from the Industrial Age in which many of us were raised. We have made good progress, but we have much left to do. Because our world continues to change and evolve so quickly, we must act quickly in order to meet these challenges.

As we celebrate our twenty-fifth anniversary, MassCUE honors the accomplishments of the past and welcomes the promise of the future. We are working to advance education in all aspects, with a particular emphasis on increased academic rigor and skills that allow our nation to be competitive. We invite you to join us as partners in realizing this paradigm shift, both in the classroom and in the larger global workplace.

 Originally published as a letter to the MassCUE community in on Cue, MassCUE’s journal.

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MASCD Mentor Award Winners Selected

Three outstanding educators have been selected as recipients of the 2007 MASCD Mentor Award:

Pamela Eaton, Burlington High School
Catherine Giles, Barrows Elementary School, Reading
Michelle Reardon, Tri-County Regional Vocational Technical High School, Franklin

The awards will be presented at school committee or faculty meetings in the recipients’ districts. Each winner will be profiled in an upcoming issue of Perspectives. Recipients and the new teachers they mentor receive complimentary MASCD membership, books and attendance at a MASCD institute.
The promised technological transformation of society is upon us. “Web 2.0” is the term used for those technologies that invite the active creation and publication of content by end users. It provides the fulfillment of the World Wide Web’s promise to education as a way to make available a real-world interactive audience to our students. Technology Users are Time Magazine’s vaunted “Person of the Year” because individuals are in control of their destiny due to the new collaborative technologies now available. Applications of Web 2.0 technologies such as MySpace, Flickr, Second Life, YouTube, and Wikipedia allow for mass collaboration and, as such, are deemed “participatory social media” (Rheingold) that will “change everything” according to a new book identifying this phenomenon as “Wikinomics.” Wikinomics, “the new art and science of collaboration,” reflects “deep changes in the structure and modus operandi of the corporation and our economy, based on new competitive principles such as openness, peering, sharing, and acting globally” (Tapscott & Williams 3).

Globalization 3.0

In Thomas Friedman’s The World is Flat: A Brief History of the 21st Century, the emergence of such collaborative tools, in conjunction with transformative historical moments like the fall of the Berlin Wall and eight other “flatteners,” contributed to a leveled playing field onto which over two billion individuals from China and India have walked. According to Friedman, Web 2.0 brings us to Globalization 3.0 where, “every person, just as every corporation, must tend to his or her own economic destiny” (21):

In Globalization 1.0 [from 1492 to 1800, when the key agent of change was how much brawn your country had], countries had to think globally to thrive, or at least survive. In Globalization 2.0 [from 1800 to 2000, when the key agent of change was multinational companies], companies had to think globally to thrive, or at least survive. In Globalization 3.0, individuals have to think globally to thrive, or at least survive. This requires not only a new level of technical skills but also a certain mental flexibility, self-motivation, and psychological mobility. (Friedman 276)

As educators in a world that is flattening and where individuals can make a difference in a fast paced information economy, the question we must face is: How best to educate students for such an environment?

In this “flat” world, outsourcing of manufacturing and skilled work such as radiology and law has become the norm. (Dobbs 92, 95). U.S. citizens will need to acquire a different level of workforce preparation, and these realities – the economic realities of globalization and the apparent waning of the American empire – are behind the push for education reform and a paradigm shift in how we think about education.

A Clarion Call for Change

Fast emerging Web 2.0 technologies provide pressure for our educational institutions to implement the kinds of progressive educational solutions that have been bandied about for decades: constructivism, multiple intelligences, authentic assessment and collaborative learning. In the words of Lego-Logo creator Seymour Papert, “Computers serve best when they allow everything to change” (149). Web 2.0 and the participatory culture that these new applications herald will require a paradigm shift in education that enables all of us to become learners and look beyond the school’s walls to discover ways that school communities can connect to the broader world.

This paradigm shift does not require new theories. The model is simple: students working collaboratively on projects that incorporate the use of communicative technologies (e.g. digital video, podcasts, wikis, blogs) in order to create and problem-solve in a real-world setting. This model incorporates engagement and construc-
tion: engagement in real-world issues and construction of a product for consumption by a real-world audience (Shneiderman 18, 20) Such project-based learning opportunities cover numerous educational standards both in the content area itself as well as the technology and information literacy strands. The goal is to inspire students to become fully engaged in real world learning that helps make change it for the better.

Much of it comes down to citizenship training: we must prepare students to be citizens in a 21st century democracy. Technology commentator Howard Rheingold recognizes this when he points out that, while young people today may be facile in adopting and learning new technologies, they require guidance in aspiring to use these technologies for more than entertainment. Although a willingness to learn new media by point and click exploration might come naturally to today’s student cohort, there’s nothing innate about knowing how to apply their skills to the processes of democracy. (Rheingold)

The writers of Confronting the Challenges of Participatory Culture: Media Education for the 21st Century also recognize the different skill-set that the “new media literacy” requires. They state that “participatory culture shifts the focus of literacy training from one of individual expression onto community involvement. The new literacies involve social skills which have to do with collaboration and networking” (Jenkins et al. 4). Three (out of eleven) skills they listed as new cultural competencies are:

1. **play**—“the capacity to experiment with one’s surroundings as a form of problem-solving.”
2. **negotiation**—“the ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative norms,”
3. **collective intelligence**—“the ability to pool knowledge and compare notes with others toward a common goal.”

How can schools encourage the kind of experimentation required to allow teachers to begin incorporating such media into their teaching? How can they overcome the institutional inertia that helps to maintain the status quo? Here are a few ways to facilitate such change:

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**Announcing the 11th Northeast ASCD Affiliate Conference**

**Leading and Learning: Sustaining Learning Communities**

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**Pre-Conference Speakers**
Bill Daggett
Rick & Becky DuFour
Nancy Love & Susan Mundry
Andy Platt & Caroline Tripp
Mike Schmoker

**Keynote Speakers**
Rick DuFour
Doug Reeves

**Featured Speakers**
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• Reward teachers who pursue professional learning opportunities directly related to technology integration. This applies a basic and known motivational factor to a population that is often looking to increase its income. Along the same lines, pay a stipend to teachers who can act as technology mentors to other faculty members.

• Reward teachers who incorporate experimentation into their courses. Provide the latest educational technologies for experimentation and play such as laptops, digital video cameras, and mp3 recorders that teachers can check out and take home.

• Foster a technology learning community among faculty. Give teachers summer reading to provide a point of focus for meetings and discussions during the following school year.

Final Thoughts

Because most of us are “digital immigrants” rather than “digital natives” (Prensky 1-2), it will take courage and effort to move our institutions forward into the 21st century. If we are to prepare our students for a changing world and workplace that requires knowledge workers who possess the skills to collaborate, participate, innovate, network, and problem-solve, then we must apply ourselves with the same conviction that our ancestors did in coming to America. Thomas Friedman warns, “The flattening of the world is going to be hugely disruptive to both traditional and developed societies. The weak will fall further behind. Dealing with flatism is going to be a challenge of a whole new dimension, even if your country has a strategy. But if you don’t have a strategy at all . . . well, again, you’ve been warned. This is not a test” (364).

Notes

1 The other flatteners include the day Netscape went public, the advent of Windows 95, standardized web protocols, outsourcing, offshoring, supply-chaining, “insourcing,” in-forming, and communicative breakthroughs in wireless and Internet telephony as well as video conferencing, each of which Friedman treats at length in the early part of his book.

2 The authors of Confronting the Challenges of Participatory Culture: Media Education for the 21st Century write that “we do not want to see media literacy treated as an add-on subject. Rather, we should view its introduction as a paradigm shift, one that, like multiculturalism or globalization, reshapes how we teach every existing subject. Media change is affecting every aspect of our contemporary experience, and as a consequence, every school discipline needs to take responsibility for helping students to master the skills and knowledge they need to function in a hypermediated environment” (Jenkins et al. 57).

References


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One to One Learning for All

By Dr. Isa Kaftal Zimmerman
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During the week of January 7, 2007, the big news in the media was about technology: the Consumer Electronics show in Las Vegas and the big auto show in Detroit. Exhibitors and visitors reveled in the latest devices: bloggable cell phones, in dash navigation systems that are removable, self-publication on the web, cars in which emails can be read out loud, and finally – the new Apple iPhone. One third of the world’s population now uses cell phones.¹

Reality Check

As one CEO said, “Technology is not in the office on the desk or at home. . . it is on you.” And another proclaimed, “It is not the future, it is now.”

Given that MIT and Intel are producing mobile computing devices costing from $100 - $500, how can American schools not understand that every child needs a portable digital device to be prepared for the world in which he or she will work, indeed the world in which she or he already lives? This is not only a reality; it is a moral, economic, and social imperative.

This is exacerbated by the condition of technology in the schools of Massachusetts. It is deplorable, according to page one of the Boston Globe (March 29, 2007, “Slow to Boor”). The computers are old and slow or obsolete and cannot run the latest software; the technology integration specialist position has been eliminated in many districts.

According to Rosabeth Moss Kanter of the Harvard University Business School, “A state losing population [such as Massachusetts] must tap every talent source. Investments in public education must remain high on the agenda — especially math and science excellence. In addition, Massachusetts schools and health centers should become beta sites for homegrown technologies, showcasing ideas for the world right here at home. To motivate girls and boys of every background to develop talents in discovery and invention, let’s give them a white lab coat in middle school and help them grow into it.²

One way to overcome the current dearth of suitable technology in the schools is to give every student and every educator a computing device (one to one computing).³ Certainly in the “soft skills”: attendance (it is way up), homework (students do more), teamwork (students work together to solve problems), writing⁴ (students engage in more, and they revise), motivation (students want to learn)... and even in student achievement!

It is clear today that danger abounds on the World Wide Web. But those dangers are not going to go away, and parents and teachers will not always be there to supervise children online. One to one computing can help students practice appropriate and productive uses of technology while learning how to protect themselves in a safe environment.

On the other side of the equation, there are also the persistent critics: Larry Cuban⁵ is the loudest voice and he does make one very important point: university faculty are not using technology for teaching purposes in the way advocates believe to be necessary and productive. He argues that if higher education faculty is not engaged, why should we expect K-12 teachers to be? The answer is that K-12 teachers are teaching young people who have grown up with these devices.

It is true that no strategy or approach is perfect or suitable for every child, but with Universal Design, technology in schools can reach every child.

¹ ABC television, Good Morning, America, Jan 10, 2007.
² Rosabeth Moss Kanter is a professor at Harvard Business School. This article is excerpted from the 10th anniversary issue of CommonWealth magazine. 2006 Globe Newspaper Company.
³ Yong Zhao, Michigan State University’s Center for Teaching, Lansing. MI is undertaking a review of all extant studies. Michigan’s Freedom to Learn project has shown increases in test scores in all subjects and grades 5-8.
⁴ Mike Russell of Boston College has done several studies locally which indicate “students using these electronic tools wrote significantly more, received earlier interventions by teachers, and wrote higher quality work than students in comparison groups.”
⁵ October 18, 2006, Commentary, Education Week, “The Laptop Revolution Has No Clothes” is the latest.
Practical Steps

What will it take to make one to one computing in schools as common as paper and pencil, as graphic as slide projectors, as resourceful as books, etc?

The first is funding. Although prices for devices are falling, technology is still a non-renewable resource, and annual expenditures need to be planned and guaranteed.

The second is support, both technical and instructional. It is clear that simply giving students and educators their own computing devices is insufficient. Any such movement requires preparation for the teachers and for the learning environment. Teachers need assistance in determining how best to use one to one devices in their classes, although many examples of good practice are available. This wheel does not need to be reinvented one teacher or school at a time. The learning environment needs to be reliable. If a teacher plans to use the devices, there cannot be a major system failure.

A study conducted recently by the University of Massachusetts STEM Initiative on what is considered by some to be the “next inevitable challenge to schools,” allowing students and educators to bring their own portable computing devices to school for learning and teaching purposes (and not to duplicate what already exists), concluded that only 30% of those responding (75 out of a potential 360) allow that to happen now. When asked about the issues involved, they responded that they need to protect the network and the students.

The third requirement is a movement, a demand from teachers, parents, and students to key decision and policy makers, both locally and statewide. It will take a movement to get one to one computing into the hands of every student and educator.

For more than a decade, a volunteer organization known as BEST (Business and Education for Schools and Technology) has been educating legislators about the need to provide funding for all the elements required for the successful integration of technology in schools (see http://www.best-edtech.org). Recently the group developed a “campaign kit” to help educators make the case for one to one computing in their schools (http://www.convergemag.com/story.php?id=100758) But, as these champions have been told over and over again by legislators who think one to one computing is a good idea, they need to hear from the grass roots, from the cities and towns, from educators themselves, and from parents and community members. They also need to hear from known voices to which many people listen.

In Boston, Mayor Thomas Menino, who has been a loyal supporter of technology in schools, created a task force to make the entire city WiFi accessible like Philadelphia. Such access is all the more reason to teach children to use one to one devices responsibly and productively and to do so in school.

In Conclusion

All of these elements imply planning ahead, planning for action, having a plan for the school district. The Department of Education requires a plan for districts to get any federal or state funding. But for real results, these plans need to be updated constantly at all levels. And educators and policy makers need to work together, not just occasionally — but constantly.

If all these elements are in place and there continue to be advocates for effective and empowered learning in schools, “One to One for All for Learning” should simply be — and it can be — another strategy in an educator’s toolkit.

Selected Resources

There are eight schools and districts implementing one to one supported in part by the Commonwealth:

Outside of Massachusetts

Henrico County, VA

Maine Learning Technology Initiative Project web site:
http://www.mainelearns.org
State web site:
http://www.state.me.us/mlte/

Missouri’s eMINTS which is also used in other states
http://www.emints.org/

Michigan Freedom to Learn
http://www.filtwireless.org/

Texas Technology Immersion Pilot – 22 middle schools

CoSN Consortium for School Networking
http://www.classroomtco.org/gartner_intro.html#case
MasCD received the ASCD Affiliate Overall Excellence Award for its outstanding accomplishments in 2006. The affiliate was honored during the second general session of ASCD’s 2007 Annual Conference in Anaheim. MasCD has dedicated itself to promoting quality learning and teaching in the commonwealth by fostering instructional and curriculum leadership. The Massachusetts affiliate’s story reflects local flavor: historic connections convey context and a sense of continuity. The affiliate clearly has a strong strategic plan and works to that plan with its actions.

- The affiliate’s communication and publications for members are of high quality and provide a substantial resource for members and other constituents.
- Programs, products, and services are clearly differentiated to serve various constituencies (e.g., licensure program, mentoring, English language learner-specific programs, offering college credit, and dine-in discussions). This demonstrates good knowledge of the affiliate’s audiences, an effort to meet the audiences’ needs, and a sustainable approach to program offerings. A new healthy schools program is a natural extension of the mission and creates an opportunity to involve a new audience in ASCD’s work.
- Leadership and governance plans that demonstrate growing professional attention to key affiliate areas of activity and the use of rubrics for regular evaluation of the executive director’s performance reflect wise oversight and good use of resources. This is further enhanced by the existence of a financial endowment.
- Massachusetts ASCD has clearly served as a leader for all of the ASCD affiliates in the New England area, as demonstrated by regional outreach.
Using Blogs to Create a Virtual Classroom

By Jennifer Clapp and Ryan Gallagher
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All teachers hope that a student they have taught might end up to be Time’s Person of the Year. This year, our entire roster of students made the cut. We have embraced the academic possibilities of blogging to help our students become better readers, writers, and thinkers and as a way to extend the classroom community beyond the mortar and bricks of the school.

Blogging Defined

A “blog” (the word is derived from the longer “weblog”) is an interactive, easily-modified web site to which many people can contribute. Unlike a traditional web site, which is updated by a webmaster and which must be “built,” blogs are available pre-constructed from one of many free sites on the web and require very little technical knowledge to set up, use, and maintain. Blogging sites are designed to allow for almost instantaneous publishing of information; they are also very easy to monitor and edit. Many of the millions of blogs currently on the web serve people as journals or places to reflect on their passions. We use them to create an online classroom, as a place where students can discuss literature, comment on each other’s writing, and access and/or post web-based resources.

While the site’s instructions will take you through the creation process, here are a few policies that we have found very helpful:

- We insist that students do not use their last names anywhere on the blog (they often choose pseudonyms – the names of literary characters are popular) and we do not give the name or location of our school anywhere on the site. While we may joke with the students that we’re trying to protect them from acquiring a literary stalker, we are also reminding them about what is appropriate information for an online environment, in the hope that they will apply the same reticence to their MySpace pages or chatroom participation.
- In general, we retain for ourselves the status of blog administrator, i.e., we and only we have the right to edit or remove posts. In some cases, students are full contributors to the blog, meaning they can create original posts; most often, students can make comments in areas that we post.
- We constantly remind students that this is a public forum and that you should never write anything that you wouldn’t want your teacher, your mom, a college admissions officer, or a future employer to read. Neither of us have had any trouble with students being inappropriate (thus far, anyway!), but there have been cases at other schools of students posting inflammatory comments, so this needs to be regularly emphasized, and teachers need to monitor the blogs consistently.
- We never allow our blogs to accept anonymous comments. You can also set your blog to accept only comments from authorized users.
- As far as access goes, we have found that virtually all of our students, even in an urban school with a wide range of socioeconomic backgrounds, have easy access to the Internet. However, we generally give the kids more than one day to complete a blog-based assignment, ensuring that the student who doesn’t have a computer at home can make it to the library, computer lab, or local Internet café to complete his work.

Like all instructional techniques, you have to figure out how this will work best for your own individual

Benefits for Teachers

- Teachers get to know their students as learners much more quickly, sometimes even before school starts, since kids can do blog work over the summer. All of the students’ work is available to the teacher before class begins, giving the teacher the necessary data to adjust plans to better meet students’ needs. No more waiting until the kids sit down to find out that last night’s reading utterly confused them!
- All of the students’ work is documented and available, but there’s less paper, and things can’t get lost. It’s also a great resource for parents to be able to compare their child’s work to others in his/her class.

Setting up a class blog is a very easy process. We use one of the most popular sites, http://www.blogger.com. This site is free and very user friendly; once you have registered for an account, you can create multiple blogs and comment on other people’s pages. You can have a central class blog, as well as separate linked blogs for discussion of a particular topic or book.
students and teaching style, but these are important ideas to keep in mind when beginning blogging.

**Instructional Advantages and Practices**

We both began blogging with two primary goals in mind: we wanted to have the students take the collaborative atmosphere of the classroom home with them and we wanted to use a medium for their work that belongs to their generation. Once we got going with it, however, we discovered that blogging offers many additional benefits for the students and teachers.

As we’ve each taken this resource and adapted it to our own classrooms, we’ve gone in slightly different directions. So we’re going to drop the collective voice for a bit and each discuss our own practice.

**Jen’s Focus: Literature and Discussion**

In my tenth grade class last year, I began using blogs to support literature circle groups that were meeting about once every seven days or so in class. We set up a blog for each group, with me as administrator, and the students were asked to log on after they finished each third of the book and post some comments, questions (both clarifying and open-ended), connections and/or passages or quotations they felt to be important, and then to comment on each other’s posts. While some of the work was perfunctory, one particular group, working on Gabriel Garcia Marquez’s *Love in the Time of Cholera*, consisting of students of a range of abilities, did exemplary work that I now use to help students new to blogging to understand to what they are aspiring. These literature circle blogs are run entirely by students, who set their own reading assignments and topics for discussion, and they have contributed to terrific conversations about the books, engaging presentations about the books, and some very strong writing.

I was so pleased by the discussions created during the school year that I decided to revise my summer work for the AP students to include significant blogging about their summer reading. All summer long, the students and I conversed online about the texts they were reading. I tried to keep my participation to a minimum (just enough so that they would know I was checking), and I was fascinated to watch their ideas and their personalities unfold. By the first day of school, I was already very familiar

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**Benefits for Students**

- Like good class discussions, blogs are interactive. Students can ask questions of each other, test their own ideas against the ideas of others, and generally build understanding of a text or an idea together. No longer are the students going home to read in isolation; they read and then they connect with other students about that reading. Blogs fit in nicely with most active reading practices (reader’s journals, etc.).
- Blogs give a voice for participation for even the shyest student, offering almost unlimited “wait time” in a low-pressure atmosphere.
- Submitting homework and papers online by clicking the “Login and Publish” icon turns what was always an isolating experience, producing written work for the class, into a public discourse. Besides the transparency it demands in the writing process, written homework becomes meaningful simply because it is public. Papers are not written and received in a vacuum, but become a continuation of the intellectual dialogue of the classroom community. There is no question that the work a student does when he or she sits down to write will be read.
- When used for peer editing or critique, comments are much more effective online, since students can carefully consider what they want to say and “cut-and-paste” the writing they wish to address. It’s also much easier to receive this type of criticism with its specificity and depth and to consider the value of what is being pointed out: There aren’t twenty or thirty other students staring at you as you accept critique!
- A well-developed blog provides the class with a number of models of student work. If a teacher uses a blog year after year, all of the previous work is archived, so teachers can direct students to look at last year’s classwork or post a model from a prior class. Students can compare their work to the work of others and gain a stronger understanding of what good work is.
- Blogs help build a community of learners. They require students to interact with each other and get to know one another’s thinking. Students also develop more intellectual independence, since this kind of work is very student-centered, as opposed to teacher directed.
- All relevant class and web resources can be gathered in one place. Teachers can post assignments, grading criteria, and due dates; students and teachers can post links to relevant web resources.
with every student’s thinking, writing, and approach, as were they! As one student commented at the beginning of the year, “I feel like I know everybody in class already.” To build this level of community in a class of twenty-six students would have taken months without the blog.

As the year has progressed, I’ve expanded the blog work to take advantage of some of the resources of the web through posting links to related sites. I can ask the students to listen to an archived edition of NPR’s *This American Life* on Hamlet as performed by prison inmates or show them all the different funny ways that Hamlet has worked itself into the culture. In our recent book club discussions, I asked the students to find links related to their books. In this way, students are encouraged to see their reading as part of something much bigger.

As far as assessment goes, I treat most blog assignments as I would participation: students receive credit based upon their completion of the assignment (which might be, say, to write a paragraph of comment and post one link) and their level of effort. Since the students like the blog, they often go beyond the requirements for completion.

I have also begun asking students to post some of their more formal work on the site and comment on it, but this is really Ryan’s area of expertise.

**Ryan’s Approach: The Value of “Publishing” Student Work**

I was made especially aware of the value of students’ work being available to each other during an assignment where students were critiquing four student papers that I posted. One student wrote that she thought her classmate’s paper was “important.” This seems to be an advantage worth noting. Can a paper, specifically analysis, be important if it is only read by one other human being, the teacher? It can certainly be exemplary, but not important. I was pleased to see that students were beginning to realize that written analysis is important, maybe even vital to our lives as human beings. Well-reasoned and thoughtful critique is essential to citizenship, an area all public schools include in their mission, and fundamental to mature dialogue.

Over the course of two class periods, students analyzed Ted Berrigan’s poem “Red Shift.” In the first class, I projected the poem on the whiteboard and played an audio clip of the author reading his poem. Without speaking, I wrote down every comment they had and by the end of class, we came up with an item for every student to look into that night for homework. The second class was a repeat of the first, with the exception of the specificity of their comments. They then turned in an explanation of the poem for homework and I posted what I believed were four of the stronger papers that addressed completely different ideas. I was also able to link to the poem and the audio clip online and include some pictures of Ted Berrigan.

A quick Internet search also clued the students into the fact that there is no writing online about this poem, so they were about to break new ground. I made sure they knew this.

With each paper, I posted the following directions:

Read the following papers and comment on each one:
1. What was successful about this paper that you could have done better?
2. What could have been improved? Keep Scoring Guide in mind.
3. Comment on any thoughts that you had because of the paper.

Essentially, this takes the place of a peer critique that would have been done in class. If I were successful enough to get the same level of depth from the student comments in a classroom, it would have easily taken a class period or two.

Here is a small example. I
left the typos, spelling, and grammatical errors for authenticity:

~Good job using parts from the poem and your own words to get your point across.
~The speakers use of adjectives aid him in achieving this tangible aura. For example, when he speaks of the air in February he adds the adjective “biting.” This form of personification brings the air alive.
~I love how you didn’t just talk about tone, but you also went into the choice to adjectives Berrigan chose to get his point across. Very clever!!
~The speaker then transitions. . . The speaker is reminiscing. . . The speaker depicts. . . The speaker introduces a woman. . .
~You used the same two words “The speaker” in four consecutive sentences. Maybe you could find another way to open these sentences. It is a little repetitive.

    Though I don’t accept written language that looks like IMing (instant messaging), I generally don’t keep the students to the same standards in language that I would expect from a formal paper. I am more concerned that their overall tone and use of language is intellectually appropriate. This can often result in some hidden gems of philosophical thought, again not always afforded in the constraints of class-time and lost if never publicly acknowledged.

In Conclusion

We hope that we have provided you with compelling reasons for incorporating blogging into your classroom practice, as well as some interesting strategies for instruction. We have also set up a metablog, a blog on blogging, for teachers to share experiences, ask questions, and discuss the use of blogs in the classroom. You may access this blog at http://bloggingperspectives.blogspot.com.

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1  http://clappsltc.blogspot.com
2  You can view some more recent discussions by my AP students at http://manyviews07.blogspot.com/, http://whitenoisepwns.blogspot.com/, and http://clappscatch.blogspot.com/ You can also see a short film created by the White Noise group as a part of a “book talk” they gave to the class to encourage other students to read the book at http://www.youtube.com/watch?v=V-SKiYaglOk
3  You can view the summer discussions at http://clappsap.blogspot.com/2006_07_02_clappsap_archive.html
4  http://www.thisamericanlife.org
5  http://clappsap.blogspot.com/2006_10_22_clappsap_archive.html
6  You can see a fine example of this at http://clappscatch.blogspot.com/2007_01_01_clappscatch_archive.html
7  PENN Sound. EXACT CHANGE Yearbook 1995 no. 1 ed. Peter Gizzi. 1.29.07 http://writing.upenn.edu/pennsound/x/Exact-Change.html
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Ryan Gallagher is the author of Plum Smash and Other Flashbulbs; poems, sketches, and letters published in 2005. Ryan has finished translating “The Complete Works of Gaius Valerius Catullus,” a project he began at the Kerouac School of Disembodied Poetics where he completed his MFA and where he was the recipient of the William Burroughs scholarship. He received his B.A. in Literature from Boston College. He also studied Thangka painting, traditional Tibetan Buddha paintings, for two years. He runs Bootstrap Productions, a 501c3 non-profit publishing company that publishes experimental literature and art, and has taught high school literature for five years.

Listen to this month’s authors discuss their ideas further on MASCD podcasts at http://www.mascd.org/publications/Perspectives/
In a secondary school, students use desktop computers and access databases to find relevant material on global pollution. They process the information through the conceptual lens of environmental sustainability as they think beyond the facts. They compare notes with students around the world and design PowerPoint programs to display their research and their deepening understanding of global pollution and sustainability. They scan in pictures to enhance the graphic appeal. These are the students of the computer age, and they produce a score of intellectual, artistic, and informative products (Erickson 5).

This approach is becoming more common as many schools are moving away from computer labs and toward wireless laptop programs. Wireless laptop programs have the potential to make general purpose computer labs a model of the past. Such programs enable students to be far more mobile, extending their capacity to engage subject matter well outside the physical limitations of schools. Descriptive studies show that use of laptops increases student engagement in learning and shifts instructional practice of teachers to collaborative, small group work that is student-centered and encourages problem solving, promoting higher order thinking skills (Cisco Systems Report 13).

**Going Mobile**

While laptops offer greater mobility, even more portable devices are now available, enabling students to listen to teacher-recorded information and even to watch video clips on a handheld MP3 player. Apple’s iPod (http://www.apple.com/ipod/ipod.html) and Microsoft’s Zune (http://www.zune.net/en-US/) are making computing more convenient than ever. While these devices have been utilized for downloading and enjoying music and video, they are not limited to the realm of entertainment. For example, Pearson Education and Audible, Inc. have teamed up to offer textbook chapter summaries in MP3 format (http://www.audible.com/vangonotes/) which can be downloaded and played on any machine that can play MP3 files.

Handheld devices such as Personal Digital Assistants (PDAs), tablet PCs, handheld computers, and data-logging devices are increasingly affordable and available. Benefits of these smaller devices include accessibility, flexibility, and portability; students can carry a handheld device with them throughout the school day and make use of it beyond school hours, as well. Although the screen size is small, experts suggest that these portable devices can increase organizational skills, motivation, and active, independent and self-directed learning. Student ownership of these devices has the potential to increase student writing and reading and digital research, as well.

A description of teaching and learning with technology is evolving, as intended by No Child Left Behind’s Enhancing Education through Technology (EETT) program: EETT’s goal is to improve academic achievement through technology via teacher training and curriculum development that promotes the effective integration of technology resources and systems into instruction. The program intends to establish research-based instructional methods and ensure that every student is technologically literate by the end of eighth grade. These efforts are consistent with the nationally acclaimed Science-Technology-Engineering-Mathematics (STEM) initiative with its Massachusetts component (http://www.massachusetts.edu/stem/) and the Commonwealth Information Technology Initiative (CITI) (http://www.citi.mass.edu/).

The Office of Educational Research and Improvement (OERI) (http://www.ed.gov/offices/OERI/index.html) has funded many studies documenting benefits technology can offer education. These studies offer feedback to technology-based programmers to meet the needs of diverse learners and to ensure alignment with academic standards. Such research also supports policy-makers, legislators, and educators who are making plans to integrate technology into schools.

All of these programs demonstrate that a student-centered approach to instruction with increased teacher communication is key. (Cradler and Bridgforth 1). Consider teacher David Freeman. For 6 years, Mr. Freeman has logged his worldwide adventures and provided lessons for students to view online in a program.
900 teachers use (SmartBrief 1). Teachers comment that Mr. Freeman’s “Wilderness Classrooms” incorporates interactive projects which have helped students become better communicators and analytical thinkers. Anecdotal evidence from children suggests that this approach to learning is fun.

How We Think About Learners

Research evidence is mounting that children can learn effectively from viewing and interacting with digital video. Students observe, interpret, and coordinate the information in a video to make their personal sense of what is being communicated (Cisco Systems Report 6). We can take this a step further by considering video games, a new generation of games that is imbedded with core academics and analytical problem solving skills. One such game entitled, “Cool Where Peace Rules” teaches conflict resolution and may be available to all schools by next fall. Students can use handheld devices to view videos and games, adding rich context to student learning while engaging them in higher order thinking skills. Data collected using a Vanderbilt University product called Jasper Woodbury has shown that middle school students may recall more information from the video than from reading the story. Jasper was originally created to connect math content to problem solving situations so that students could transfer their learning (Cisco Systems Report 6).

With global competitiveness now a major issue, strengthening math and science instruction has become a primary focal point of education reform. Critical to ensuring that American students are prepared to succeed in an ever-evolving global economy, reading fluency has also become an area of concern. Although the United States has a 95 percent literacy rate, the proficiency rate is only 34 percent (eSchoolnews 1). Technology can help children with their reading by using computers and other electronic devices to aid in the teaching of guided reading. Using speech recognition technology, a student wears a head set and reads aloud into the computer. The computer then understands every word the student says, no matter the accent, providing a guided reading experience. This is easily done with freeware named Audacity (http://audacity.sourceforge.net/download). Using this software and an inexpensive microphone, students can record themselves for immediate playback.

In a guided reading approach without computers, an adult listens to a child read, corrects the child, guides the child through the text and provides vocabulary necessary to understand the text. This one on one interaction is effective but time-consuming; it is difficult for a teacher to reach all readers. Digital devices can help students if they read incorrectly and provide them with vocabulary information as needed. Students can listen to themselves read and compare themselves to a modeled read.

Not only are these technology-based methods NCLB approved, they are cost effective and reach more students. In a guided reading approach without computers, an adult listens to a child read, corrects the child, guides the child through the text and provides vocabulary necessary to understand the text. This one on one interaction is effective but time-consuming; it is difficult for a teacher to reach all readers. Digital devices can help students if they read incorrectly and provide them with vocabulary information as needed. Students can listen to themselves read and compare themselves to a modeled read.

Lesson plans online. Teachers can use their own templates or borrow those created by other teachers. The plans can be saved online for use in the future and can be accessed from anywhere as everything is done online. Moreover, these plans can be reviewed by other teachers in other schools and can be enhanced and continually refined. This is an example of social networking. Technology relieves the isolation of teachers, enabling colleagues and students to become collaborative researchers. Moodle is a learning management system designed to promote social networking by allowing educators to create effective online communities. Moodle is a free download you can set up on any computer. It has a large and diverse user community, speaking over 75 languages in over 160 countries (http://moodle.org). Using Moodle, teachers and students can communicate and collaborate with others who are passionate about an idea or topic without regard to time or geography. Here are some statements from teachers using Moodle:

My students think it is fun and are already into their first discussion. It broadens the classroom. It makes a techie generation buy into their learning to a greater degree. I realize that my students will also be able to refine their research skills which I will incorporate into my Moodle course.

— Ann Marie Flynn, Amesbury (MA) High School

I think it’s important for kids to be exposed to this (online learning) in high school where so many universities are including online components in their face-to-face classrooms, never mind courses offered that are entirely online. Our job is to prepare these kids for post-secondary learning, whether that is in a formal university setting or in lifelong learning; Moodle provides an extra preparation for

How We Think About Teaching

eChalk (http://www.echalk.co.uk/) is another use of technology which aids in teaching and learning. Templates allow teachers to create lesson plans online. Teachers can use their own templates or borrow those created by other teachers. The plans can be saved online for use in the future and can be accessed from anywhere as everything is done online. Moreover, these plans can be reviewed by other teachers in other schools and can be enhanced and continually refined. This is an example of social networking. Technology relieves the isolation of teachers, enabling colleagues and students to become collaborative researchers. Moodle is a learning management system designed to promote social networking by allowing educators to create effective online communities. Moodle is a free download you can set up on any computer. It has a large and diverse user community, speaking over 75 languages in over 160 countries (http://moodle.org). Using Moodle, teachers and students can communicate and collaborate with others who are passionate about an idea or topic without regard to time or geography. Here are some statements from teachers using Moodle:

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these kids. In the age of 21st Century skills, learning how to work online in a formal manner is imperative and Moodle is an excellent tool for this learning.

This is helping my teaching – it’s given me the opportunity to truly explore a subject with my students that I would have superficially covered previously. In Massachusetts, we are constrained by the Curriculum Frameworks, especially in MCAS subjects. To cover these frameworks is a challenge in and of itself. Moodle is giving my students and me the opportunity to tackle subjects not on the frameworks but just as worthy and important.

— Jennifer Robinson, Waltham (MA) High School

I think for me and my use of Moodle for staff development, the power of online learning is the ability for all of the participants to take part in every discussion. That isn’t realistic in a traditional classroom setting. Using the Moodle discussion forums gives the participants time to read and think about the topic at hand, time to formulate what they want to say, and requires everyone to take part in the discussion. The discussion doesn’t get side-tracked or dominated by one or two people. The usual issue of ‘not enough time’ is eliminated because there are few time constraints in cyberspace, although I do still give the participants deadlines and due dates.

I think that content can be presented anytime/anywhere, but thoughtful discussion and reflection requires time. Using online teaching expands my time frames and lets me do more with a technology topic than simply teaching the skills and moving on. Through the use of the discussion forums I am able to have my students dig deeper and find connections that we probably wouldn’t discover sitting it the Tech Center learning how to use the software.

— Martha Wells, Needham (MA) Public Schools

This environment, of course, can then be adapted to elementary and secondary school students by teachers who have experienced it on as users themselves. The emerging learning environment is one that reaches far beyond the four walls of a classroom and the regularly scheduled bells that ring in schools that are still organized as teacher-centered environments. Even textbook publishers are beginning to “get it.” We will soon see the students listening to instructional resources while watching video clips instead of static pictures in a traditional textbook. Zunes and iPods can replace textbook-heavy backpacks if teachers and administrators learn to think differently about the instructional tools they have at hand.

In Conclusion

A growing body of research indicates technology has had a positive impact on student learning across all areas of the curriculum (Cisco Systems Report 16). Continued research and ongoing professional development is necessary for technology to reach its full educational potential. Technology will continue to make a difference in education as teachers and administrators adopt a pedagogy that will fully utilize today’s digital tools, and as preservice teacher training programs better prepare teachers for the connected classroom.

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Dr. Phyllis Gimbel, Assistant Professor of Educational Leadership at Bridgewater State College, teaches graduate courses both online and face-to-face. She is the author of the 2003 book, Solutions for Promoting Principal-Teacher Trust, published by Rouman & Littlefield. She is co-author of the 2004 article, “Effective Online Practices: Virtual Textbooks,” Sloan School, MIT and is a presenter at MACTE and at Pi Lambda Theta’s 45th Leadership Conference and Biennial Council.

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Evidence of Student Gains in Reading Scores through Technology Interventions

By Dr. Sally Grimes, Dr. Robert McCabe, and Alyson Rodman
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One of the most compelling findings from several recent longitudinal studies in reading research is that children who get off to a poor start rarely catch up and remain mired in a cycle of reading failure (Torgesen, 2004). As Torgesen states:

That’s the bad news. The good news is we now have tools to reliably identify the children who are likely destined for this early reading failure. Most importantly, given the results of a number of intervention studies, we can say with confidence that if we intervene early, intensively, and appropriately, we can provide these children with the early reading skills that can prevent almost all of them from ever entering the nasty downward spiral just described (p.7).

There are now, more than ever, very specific examples of our ability to interrupt this cycle for poor readers. This is due in part to changes in educational practices resulting from No Child Left Behind (NCLB). Educators are now quite familiar with the need to document the scientifically based research that supports the curriculum and strategies implemented in the classroom. Many schools are also using technology with great success and seeing significant effects in their students’ skill development. One example, and the focus of this article, is the work in improving reading in the elementary classrooms of the Revere, Massachusetts Public Schools through the use of supplemental skill-building, computer-assisted programs.

Revere Public Schools: A Case Study

Revere, Massachusetts is a large, diverse urban district just north of Boston. Across the six elementary schools, over half of the students qualify for free or reduced lunch. Additionally, 40% of the students are bilingual, and 47% are non-Caucasian. The schools and teachers in Revere utilize a strong language arts curriculum, basing instruction on the findings of the National Reading Panel and NCLB. In a study initiated in 2001, the elementary schools in Revere incorporated basic reading skills software programs developed by Lexia Learning Systems as supplemental learning tools in experimental treatment classes across the district. Using standardized pre- and post-test measures, and systematic use patterns of the reading software throughout the school year, reading scores were found to improve for students in kindergarten, 1st, 2nd, and 3rd grade. The second and third grade students in the study showed specific gains on the Gates-MacGinitie Reading Test, which was used as a pre- and post-test measure. The measures of word attack and decoding skills were interpreted to be direct measures of the fundamental skills involved in phonemic awareness and phonics. In the case of second graders in Revere, students who practiced their reading skills using the individualized software made significantly greater gains in word decoding than those students who received only classroom instruction.

Another critical dimension of reading success, comprehension, was shown to improve significantly for third graders who spent time using the software. In fact, in the third grade population, students who engaged with the one-on-one practice provided by the software actually had begun the year at a lower level of reading comprehension than the control students, and demonstrated post-test levels of comprehension that were significantly higher than their peers.

Findings in first grade were also impressive, and showed specifically how beneficial technology-based, individualized skills practice can be for students who are considered at-risk. Title I students who used the reading software in first grade were compared with both a Title I control group and students in the general school population who were also using the reading programs. At this stage of early reading skill development, the Gates-MacGinitie tests measures specific phonemic awareness skills, including recognition of initial and final sounds, consonant clusters, vowel sounds, and basic story vocabulary. The gains made by the Title I students were significantly greater than those made by their Title I peers who did not reinforce their classroom lessons with individual practice with the software. When compared to the general population of non-Title I students, the Title I students who used the software made gains large enough to demonstrate equivalent skills at the end of the year, essentially closing the reading gap by the end of first grade (Macaruso, P., Hook, P., & McCabe, R. 2006).

In another example, the ben-
Benefits of technology tailored to each student’s particular needs are especially evident for low-performing students in kindergarten. In this case, a study was designed to compare matched classes, utilizing an AM/PM model, wherein each teacher taught both a morning and afternoon session that covered the same curriculum. Across all of the kindergarten students, those receiving extra practice in their early literacy skills from the computer-assisted program made significantly greater gains on the Pre-Reading level of the Gates-MacGinitie. Moreover, improvements in basic reading skills were even greater when comparing the results for low-performing students. In fact, three-quarters of low-performing kindergarteners using the software demonstrated post-test scores above the mean normal curve equivalent (NCE) while only one student from the low performing control group showed a comparable gain in skills (Macaruso and Walker, in press).

Intervention through Technology

As implementation of these types of programs becomes more common across the country, instructional technology is being held to new standards. The ability of technology tools to meet the educational requirements associated with NCLB and thus, to comply with Reading First, must be demonstrated before universal implementation can occur. In many cases, such as computer-assisted instruction, it is not necessarily the technology itself that is a novel concept in the classroom, but rather, the expectations for the performance and results to which that technology is now held. Across the country there are now centers that disseminate standardized evaluations of many of these “new” technologies according to the objectives of instruction. For example, the Florida Center for Reading Research details the strengths and weaknesses of technology programs (as well as programs and materials not linked to technology) according to the five key components of reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension.

More schools are now using a three-tier reading model in general education classrooms to support the Response-to-Intervention (RTI) initiative. Together, these highly structured models provide an instructional framework for delivering assessment-driven, differentiated instruction to all students, including students at risk of reading failure. Lyon (2001) states, “We estimate that the number of children identified as poor readers and served through either special education or compensatory education programs (as well as children with significant reading difficulties who are not formally identified and served) could be reduced by up to 70% though early identification and prevention programs” (p. 260). Each level of the three-tier reading model provides an increased amount of targeted, intensive and supportive intervention, based upon individual needs; thus, classrooms are becoming increasingly diversified environments. Students are receiving prescriptive instruction in flexible groups (based on assessment) and at learning centers where skills and concepts are deepened and extended. Along with progress monitoring and formative assessment, this policy necessitates careful record keeping and instructional planning. All of this is highly demanding of teachers. They are, therefore, relying more upon computer-assisted instruction to tailor the general curricula to the needs of students at each tier of learning and shrink instructional group size by allowing some students to practice skills independently while others receive instruction.

The unique promise of educational technology is to provide a new level of supplemental support and assessment that further informs instruction and builds skills and understanding, while reducing the demands on educators who are faced with large class sizes and multiple learning needs within each class. The computer is not a replacement for the classroom teacher, but serves to reinforce the
classroom instruction in a tailor-made way, freeing up the teacher to devote instructional time to other students.

Teachers and others can evaluate detailed evidence of gains that are associated with successful use of a technology program and then use that formative assessment to inform and differentiate instruction. For example, if a student is trying to build reading fluency and is using software as one of the ways of doing that, teachers can quickly assess whether or not the technological support has been effective, based upon ongoing benchmarking assessments of oral reading fluency.

Once these research based programs and curricula are implemented in classrooms, they are then tailored to each learner’s instructional needs, based upon formative assessments and teacher judgment. In the case of technology-based interventions, certain programs use an “intelligent agent” to track a student’s progress as that student encounters various skills and concepts. This tool makes inferences about the strengths and weaknesses in specific areas, and then tailors feedback and instruction as the student works. This automatic adjustment of instruction and difficulty level optimizes the learning environment for each individual, allowing the student to progress at a much steadier rate according to his or her abilities.

For all developing readers, computer-assisted instruction that is research based and tailored to each student has significant potential to accelerate the learning process.

In Conclusion
Now, five years after the completion of the first phase of research in Revere, projects focused on successful implementation of computer-assisted reading skills programs continue to provide promising results. As the data from those initial studies was being analyzed and prepared for publication, teachers and administrators most closely involved with the classroom use of this technology were thrilled with the results, but definitely not surprised by them. They reported that the motivation and confidence that their students demonstrated as byproducts of their tailored supplemental practice was obvious to school personnel from the beginning. One teacher recalls how quickly she noticed her students’ investment in their own success. “This reading skills practice was something they could be successful in, no matter what their level of achievement was, and that made them want to work harder.”

It is increasingly evident that, for the millions of struggling readers in our schools, the delivery system for reading instruction can be impeded by lack of personnel and adequate resources and training. However, instructional technology is evolving, and with it, the standards by which efficacy is measured. Presently, with respect to the studies cited above and others, the data indicate that the appropriate technology can most certainly improve student achievement in reading.

For all developing readers, computer-assisted instruction that is research based and tailored to each student has significant potential to accelerate the learning process. This is more important than ever because schools are continually searching for ways to close the achievement gap. As schools implement a three-tiered reading model along with the Response to Intervention initiative, the need for tools to supplement classroom instruction will increase. Computer-assisted instruction that can deepen and extend what is being taught in the general classroom will become increasingly valuable.

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Sally Grimes provides consultation and professional development to administrators, teachers, and policy makers in reading instruction and literacy initiatives. The Grimes Reading Institute was one of the three entities responsible for implementing the Massachusetts Reading First Professional Development Plan (NCLB) and served as an author and Lead Trainer for this and for the Bay State Readers Initiative. Sally is experienced as a teacher (K-graduate school), diagnostician, and administrator. She holds a Bachelor's Degree from the University of Illinois and a Masters Degree in Reading from the Harvard Graduate School of Education.

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Are you considering becoming an administrator? Would you like an opportunity to earn a license and an advanced degree?

The Leadership Licensure Program (LLP) is a unique, Massachusetts DOE-approved, highly selective one-year program administered jointly by the Massachusetts Secondary School Principals’ Association (MSSAA), Massachusetts Association for Supervision & Curriculum Development (MASCD), and Teachers21. The Leadership Licensure Program - Superintendents Cohort (LLPS) is our newest program which is offered in partnership with READS Collaborative.

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Courses for the LLP are held at the MSSAA Offices located at 33 Forge Parkway, Franklin, MA. Courses for the superintendent program (LLPS) are held at the READS Collaborative located at 105 East Grove Street, Middleboro, MA.

Applications are being accepted now, so don’t delay. The program begins in July and ends in May 2008. Orientation for the LLP class of 2008 will be held on June 19. Orientation for the LLPS class of 2008 will be held on June 21. For more information, visit www.mascd.org/pd/license.htm. There’s still time to apply!
According to P. Elizabeth Pate & Gayle Andrews (2006), student achievement is enhanced when there is frequent communication between home and school. Parents can respond more quickly and appropriately if they know of problems or concerns when they occur. Often times after the report card goes home, it is too late to influence the change of a poor grade(s). In addition to the proactive impact that regular communications between the school and parents can have on student achievement, parent attendance at school events also increases when parents are provided with advance knowledge of the dates and times of such activities. We usually depend on our students to bring printed material home with this information. However, middle school students are not always reliable about getting such materials home, leaving parents in the dark about school activities.

Technology has become an integral part of every family in one way or another. Students of all ages and grades use computers, wireless hand-held units, cell phones, and iPods. In our classrooms, teachers are encouraged to develop lessons that include the integration of technology while administrators track data – student and school – for the district and the state. Technology can now help schools communicate school information quickly and accurately with the home as well. For the past three years, we have been using technology to improve our communication with parents using a secure web site called Edline. Please note that there are other web sites, in addition to Edline, that provide an electronic way to provide important information to students and parents at any time of day. One such site is noted by Donald Beverly (2003) as he documented his success with home-school communication using ParentConnectxp software. A simple web search will provide other such vendors.

Academic Progress and Discipline

During the first year of implementation, we concentrated on communicating academic progress to parents as they had often asked us for weekly written progress reports to better monitor their child’s progress. This was difficult to accomplish in a punctual manner due to many competing time factors involved in the school day – teaching schedule, parent availability during the school day, after school call-back support, duty assignments, extra-curricular activities, and meetings. With the Edline service, parents can now access their child’s academic achievement from this secure site anytime. Every student and parent receives an initial password to set up their accounts. Once the account is activated, they establish their own password for future use. The opportunity to access test and quiz grades transfers the accountability of monitoring progress from teachers to parents and students, where it is better handled in a more expeditious manner.

In order for teachers to post their grades to the website, the use of an electronic grade book is required. Many of our teachers were already using an electronic grade book, GradeQuick, that includes many options for recording student progress such as homework, attendance, and commentary about their assessments. Jackson Software, developer of both Edline and GradeQuick, provided the training for our teachers who were still using paper and pencil. This change was not easy for those individuals who had used standard rank books for many years. These teachers also expressed a concern that their grades would get lost or deleted, but with the help of our technology support specialist, we were able to alleviate their fears that their grades would disappear into cyberspace. As teachers became more comfortable with electronic grade books, training was provided on how to upload them to the Edline web site, a relatively simple process to complete. After discussion with the staff, it was agreed that staff would update their grades at a minimum of every two weeks. This decision was made to avoid parents’ expecting daily updates that are not possible with the teachers’ schedules. However, many teachers update more frequently as they grade assignments and tests. Teachers can also post from home, as the service is available on the web from any location.

In addition, our assistant principal monitors discipline and is able to post major and minor behavior infractions, consequences, and conduct grades daily. Previous to posting them on this secure web site, parents would not know of many of the minor infractions until the report card was issued — often too late to correct such behavioral problems.
Newsletters and Assignments

In addition to posting grades, this service also allows teachers to post many other items of information for their students. Each teacher has his own web page to post assignments, calendar dates, special links and e-mail messages. In addition to teachers, the web site allows various school groups to have a web page to post important information. Currently the theater club, band, ski club, and parent advisory council all have their own pages where they post meeting dates, rehearsal dates, agendas, and minutes. These groups have reported that their information has been seen by many more parents than in prior years when they depended on students to bring items home.

As a principal, I use this service to post the monthly newsletter, school items, and special notices from the superintendent. Each Friday I send an e-mail to all parents with reminders and special weekly notes. When school is cancelled or delayed, I am able to quickly send an email from home with the information. If a school-wide emergency occurs during the day, I can communicate immediately with families with an email.

The initial response from staff members was very skeptical. They were concerned about keeping grades in an electronic grade book without a paper back-up. They were nervous about grades being posted electronically for fear they would not be private. However, their biggest fear was that phone calls would greatly multiply if parents were able to monitor grades daily. Some staff members thought parents would call immediately when a bad grade or missing work was posted and they would not be able to respond to all of these concerns in a timely fashion. They were also fearful of being able to post grades with an Internet connection that was not always reliable in the school district. However, during the four years that we’ve utilized the service, these fears have disappeared. Teachers now indicate that posting grades electronically has, in fact, reduced phone calls and notes between parents and teachers. As a result, our students and parents now work together to monitor progress, as they can readily identify missing work or poor test/quiz grades and work with the teacher for improvement. Parent conferences have also changed with the use of Edline. While past conferences were spent primarily analyzing grades, parents now attend teacher conferences already having the data. This enables the meeting focus to be directed to specific strategies to help with improvement or maintain success.

A Worthwhile Investment

The response to Edline from parents and students has been overwhelmingly positive. We have found that most students use the site faithfully to check their academic status. Their parents also report that they can and do check their child’s progress often, especially when their child reports to them that everything is fine!

With the technology available through Edline, report cards are also no longer a surprise to our parents. Each year a letter is sent to parents asking them to indicate to us if they will be utilizing the Edline web site. Parents have the option of choosing hard copies of report cards if they don’t have Internet access or simply prefer paper. The popularity of this technology application is evident as only 30 students of the 450 enrolled have elected paper-based report cards. With the application of this web-based technology, we are clearly in a “Win Win” situation. We are able to save on paper and postal expenses while providing critical educational data and other pertinent information to parents and students in a timelier manner.

There is an annual fee for Edline that amounts to approximately $2.50 per student. When we began, the school budget did not allow for this expense. When the benefits were explained to parents, the Parent Advisory Council was willing to fund the first year. After that first year, we have since been able to include the fees in our school budget. Although the budget process often requires reductions, it would be very difficult to eliminate this inexpensive communication tool. When we ask our students and families about Edline, it is conveyed to us that they are more informed with correct information and thus better able to work with us to support student achievement. The student data that is readily available on a daily basis to our students and their parents has certainly improved our working relationship. Clearly, our investment in this web-based technology has reaped much community support.

References

EdLine http://www.edline.com/
GradeQuick http://www.jacksoncorp.com/company.html

Sandra Esmond is the principal at Bird Middle School in Walpole, Massachusetts.
Have you ever been a member of a captive audience in a professional development program with a well-intentioned expert who proceeds to tell you what you already know and practice? If so, then you may understand why many professional development programs aren’t advancing teachers’ pedagogy and students’ learning. In the profession that specializes in teaching and learning, how did this happen? More importantly, what is the solution? Online professional development offers a number of attractive benefits.

Traditional Professional Development

At a recent networking meeting, administrators from a local collaborative were discussing the text *Results Now* by Michael Schmoker. Schmoker (2006) advises eliminating one-day professional development programs in favor of giving teachers choices in forming learning communities that collaborate at a deeper level examining student work, developing common assessments, and designing instruction. These local administrators agreed that much professional development can be characterized as single-day events with little significant impact, disconnected from teaching practice and limited by time and scheduling. They also agreed that professional development needs to be embedded in the curriculum, that teachers should have a voice in professional development offerings and that there should be sufficient support after receiving initial training to make ongoing professional development meaningful and effective.

Grant Wiggins and Jay McTighe (2006) don’t mince words when examining staff learning:

Much of what passes for in-service professional development is neither professional nor adequate for developing new learning by staff. In the worst cases, it is merely a day-filling smorgasbord, a tasting of interesting tidbits that teachers are free to try out or ignore. (29)

Michael Schmoker decodes the unsaid message to teachers:

We have struck a strange bargain: if you sit through our workshops, we promise not to make any real claims on your time or practice. We’ll allow you to work alone while assuming (wrongly) that our programs and training are having a positive impact on practice. (26)

Today’s professional development is a product of the climate created by The No Child Left behind Act of 2001 and its goal of having a highly qualified teacher in every classroom. Highly qualified teachers are certainly needed for successful student learning. However, the current climate perpetuates a testing culture that measures not only students, but teachers. Teachers need to measure up as highly qualified in their instructional areas.

This situation harkens back to the industrial age model of one-size-fits-all productivity. This assembly line model operated in the early 1900s much to the dismay of educators like Maria Montessori. She identified stationary desks and chairs as a science perfected for students to sit immobilized for long periods of learning. Her description is gripping. “In such a school the children, like butterflies mounted on pins, are fastened each to his place, the desk, spreading the useless wings of barren and meaningless knowledge which they have acquired” (Montessori, 1912). Montessori also advocated for teachers: “We wish to direct the teacher, trying to awaken in him, in connection with his own particular field, the school, that scientific spirit which opens the door for him to broader and bigger possibilities.” (Montessori, 1912). Rather than awakening this spirit in teachers, it may be said that professional development in many school districts is putting teachers to sleep. Teachers dutifully show up for these sessions as part
of their contractual obligation. Well-intentioned administrators organize professional development days having seemingly lost sight of teachers’ needs. John Dewey (1947) who influenced most of the twentieth century and now the twenty-first, exposed the danger of dictates:

The vice of externally imposed ends has deep roots. Teachers receive them from superior authorities; these authorities accept them from what is current in the community. The teachers impose them upon children. As a first consequence, the intelligence of the teacher is not free; it is confined to receiving the aims laid down from above. Too rarely is the individual teacher so free from the dictation of authoritative supervisor, textbook on methods, prescribed course of study, etc., that he can let his mind come to close quarters with the pupil’s mind and subject matter. This distrust of the teacher’s experience is then reflected in lack of confidence in the responses of pupils. (84)

Teaching is a complex process requiring practitioners to possess significant content knowledge, pedagogical expertise and understanding of student learning. Teachers also require collaborative skills to share ideas on instruction and student work with their colleagues. They need information and models to move from the isolation of individual classrooms to open collaborative situations such as professional learning communities.

Without a choice, how invested can teachers be and how likely are they to exhibit special spirit or engage in intellectual inquiry and reflection? What is needed to make professional development successful? In fact, what does professional development look like? And what factors and philosophies must be present for effective professional development to occur?

The Online Professional Development Solution

At its core, professional development is learning for teachers. In his *Nicomachean Ethics*, Aristotle explains the method that is required for much learning: “For the things we have to learn before we can do, we learn by doing, e.g. men become builders by building, and lyre-players by playing the lyre.” (in Cahn 115). Aristotle’s advice for active learning also contains the necessity of contemplation which adds up to the ultimate end of happiness. Aristotle further elaborates that “happiness is activity in accordance with excellence” (in Cahn 125).

Contemporary writer Nell Noddings (2004) elaborates on the theme of happiness:

Fundamentally, there should be a joy in learning. There has to be hard work, too. But people are willing to struggle through the hard work if there is some intrinsic reward. Whitehead talked about the first stage of learning as the stage of romance; that has to be the way we get started. (95)

Alfred North Whitehead himself offered advice that could apply to teachers. “Unless the pupils are continually sustained by the evocation of interest, the acquisition of technique, and the excitement of success, they can never make progress, and will certainly lose heart” (in Cahn 273). The exodus of teachers from the profession within their first five years represents substantial loss to the profession and no doubt, a considerable amount of heart loss too. Teachers should teach and be simultaneously engaged in a state of learning that moves toward satisfaction and happiness. Their own intellectual curiosity needs to be sparked, their intellectual development needs to be nurtured, and their learning direction needs to be supported.

Today’s technology provides new tools and a different approach to professional development. Online learning environments offer a robust structure for professional development that has the potential of redefining how we learn and how we teach.

Online professional development offers teachers choices that advance their subject content knowledge while offering opportunities to interact with teachers from around the world. Many traditional universities offer online courses, as well as online institutions like Walden University http://www.walden.edu. ASCD Professional Development Online http://www.ascd.org offers online instruction that is easy to access and builds on basic technology skills. Massachusetts teachers have a no-cost opportunity to learn about online courses through MassOne, the Massachusetts Online Network for Educators at http://www.massone.mass.edu. A good introduction is available at MassOne in the Instructional Orientation course, developed by the Virtual High School http://www.govhs.org. Online learning can provide both the opportunity to master content and engage in group dialogue that facilitates critical inquiry and higher levels of understanding. Teacher choice is promoted because teachers can choose the options that fit their own learning needs and interests. By tapping into teacher curiosity and passion for learning, teachers will take ownership for their own professional development.

Just as all learning has a social component; so does productive professional development. The isolation of the single teacher in the classroom is counter-productive to the sharing of
instruction, knowledge and effective practice. Schmoker recognizes that most teachers don’t work in continuous learning communities and references Richard Elmore’s “buffer”: a protective layer perpetuated in schools wherein teachers are protected in the privacy of their classrooms which are far away from critical eyes (Schmoker 13). John Dewey cautioned against this kind of isolation. “The essential point is that isolation makes for rigidity and formal institutionalizing of life, for static and selfish ideals with the group” (in Cahn 291). He further notes, “Every expansive era in the history of mankind has coincided with the operation of factors which have tended to eliminate distance between people and classes previously hemmed off from one another” (292). Online education has the capacity and power to eliminate barriers between people and classes and transform education in the twenty-first century.

Online learning also promotes just-in-time professional development. “The need for professional development that can be customized to fit teachers’ busy schedules, that draws on powerful resources often not available locally, and that can provide real-time, ongoing, work-embedded support has prompted the creation of online teacher professional development programs” (Dede 13).

Another benefit of online learning is the opportunity for personal reflection and stimulating dialogue with other education professionals. Online education provides the opportunity for the type of “knowledge-in-action” promoted by Donald Schön. For Schön, the reflective practitioner is someone who is able to respond to problematic contexts through reflection, effectively solving the particular problem while at the same time learning from the experience” (Dede 166). These elements of application and follow-through are seldom possible without significant and often prohibitive costs. Online education provides teacher choice and voice, saves on time and travel, and offers new and exciting opportunities for teacher learning.

In Conclusion
While online professional development will not solve all the current problems with professional development, it does offer promise. Today’s teachers and the teaching profession can benefit from a new learning landscape where teacher choice, voice, and collaboration are essential components and teaching outcomes and student learning can be advanced. Online professional development offerings vary widely, and quality standards need to be considered. If teachers and districts initiate the online journey, there are advantages for teachers, for the teaching profession and for the technology natives, the students whose learning success is impacted by their teachers’ knowledge, expertise, and excitement in teaching.

References


Mary Hansberry McCarthy is the District Director of Community Relations and Character Education in Hudson Public Schools, Hudson, Massachusetts. She also coordinates the district mentoring and professional development programs. Mary taught English on the high school, junior high, and college levels. She served as a social worker, high school principal, college teacher, and college supervisor. Mary has triple eagle status at Boston College with graduate degrees in English and American Literature, Educational Administration, and School Leadership. She co-teaches a graduate course on service-learning and a VHS (Virtual High School) course on service-learning which she designed for high school students. Her doctoral research in Educational Leadership at the University of Massachusetts Lowell involves online professional development.
## MASCD Institutes

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### DINE & DISCUSS*
- Standards Based Report Cards
- Attracting & Supporting a Diverse Staff

* An informal gathering around a topic of interest, led by a facilitator.

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If you would like MASCD to organize professional development for you, or if you would like to host any of the above programs, all you need are 8 participants (who will attend at significantly reduced rates). Call or email mfhayes@mascd.org, 781-237-7881.
We are now accepting submissions for prospective publication in the winter 2007 issue of Perspectives, Sustaining Learning Communities. Deadline for submissions is August 1, 2007.

Guiding questions in considering your contribution to this issue include:

1. What internal and external supports are necessary to ensure that a school's learning community is established and can take hold and root?
2. How will the school community manage the use of time in order to sustain this type of model?
3. How much professional development and collegial collaboration are essential for the sustenance of learning communities?
4. What elements of school culture would need attention to support the intent of learning communities?
5. How does a leader ensure that a learning community is a part of the school's culture rather than a function of the leader?
6. What are examples of successful learning communities that are not site-based?
7. How can technology sustain a learning community beyond its immediate resources?

Interested authors are invited to submit a 1-2 paragraph proposal describing the intended focus of the article and how it addresses one or more of the focus questions, as well as a brief biographical statement, including the author's related experience or expertise. Articles may range from 1000-1500 words and should bring forth an essential question and the tensions and challenges within the topic, inform readers of new and useful ideas and/or practices, explore some of the obstacles, "forks in the road"/choice points, and questions that are raised in what you are trying to do to provoke, entice, and stimulate readers to continue the discussion beyond the article itself. Author's Guidelines are sent upon acceptance of article proposals. Send all proposals or requests for a sample of the publication to: Walter McKenzie, MASCD Communications Director at wmckenzie@mascd.org.
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