BLENDED LEARNING:

A disruption that has found its time

Combining different modes of delivery, models of teaching and styles of learning, blended learning offers the possibility for educators to reinvent teaching and learning.

Clay Christensen said it best in his book, "Disrupting Class." Education needs an immediate, abrupt infusion of technology in public education that will do just that – disrupt the system (2008). Disruptive innovation is that which brings about non-traditional changes to improve a system. And some may say that system improvements are needed in public education and in teaching and learning.

In the pre-digital age, combinations of differing learning contexts were used for teaching. In today's classrooms, learning environments more frequently incorporate "e-elements" into varied instructional contexts. We are immersed in a paradigm shift in learning whereby blended learning has emerged as a flexible, differentiated, updated approach to learning.

Simply put, "blended learning" is learning facilitated by the effective combination of different modes of delivery, models of teaching and styles of learning, and apply-

ing them in an interactively meaningful learning environment. Think of it like this:

Mobile learning + eLearning + classroom learning = blended learning

The Innosight Institute released a report, "Classifying K-12 Blended Learning," in 2012 that outlined the different models of blended learning. They define blended learning as, "Any time a student learns at least in part at a supervised brick-and-mortar location away from home and at least in part through online delivery with some element of student control over time, place, path and/or pace."

However, there are four standard modes of blended learning that have proven to meet student academic needs and provide flexibility with instructional settings. The

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four blended learning approaches include:

1. The rotation model, where students rotate between teacher-led instruction and online learning.

2. A flexible approach, where students experience most learning online, while teachers provide a personal approach and touch.

3. The self-blend model, in which students choose their courses from a menu to supplement their regular, non-technical school offerings.

4. The enriched-virtual model, a whole-school experience in which students divide their time between attending a brick-and-mortar campus and learning remotely, using online delivery of content and instruction.

Fortunately, it does not require a massive investment to take steps in the direction of blended learning. The following resources are free, relatively easy to use, and very beneficial in terms of increasing options for student learning.

Content

In terms of content, the most notable free provider of instructional resources is **Khan Academy** (www.khanacademy.org), a website with more than 3,300 academic and real-world videos from basic arithmetic to quantum physics, introductory science to art history, and American civics to the basics of computer programming. These low-tech conversational tutorials last a few minutes and provide an introduction or a reinforcement of concepts and topics for students.

Khan Academy also has an exercise system that generates problems based on a student's grade and skill level, all of which can be monitored by the teacher. What makes Khan Academy the poster-child for blended learning is its ability to assist with the delivery of small chunks of content that can assist students needing reinforcement from a differing perspective, or those interested in higher-level skills.

■ **Honorable mention:** www.knowmia. com. **Knowmia** boasts more than 7,000 teacher- and student-created videos in topics ranging from math to science, world languages to English, social studies and technology.

Conversation

During classroom learning, technology resources can be used to promote higher levels of engagement and interaction. One such approach is the use of a backchannel, which provides opportunities for students to use devices such as their own mobile phones, laptops or iPads to ask questions, provide input and share reflections about what is happening around them.

TodaysMeet (todaysmeet.com) is a free, simple option that works with just about anything that can get to the web. TodaysMeet allows for real-time conversations and connections with a live stream to make comments, ask questions and provide clarification. Even without web access, Twitter integration allows participants to use text messaging and interact with one another through this resource.

In a classroom, a ninth-grade teacher might pose a prompt such as, "What is your interpretation of 'walking in someone else's shoes' from *To Kill A Mockingbird?*" Students can then respond to the question during a classroom discussion, with the backchannel becoming the discussion platform. Students respond to the prompt, to the comments of others, and reflect on other applications of the concept or topic.

Want more information on the use of backchannels? Check out http://derekbruff. org/teachingwithcrs/?p=472.

Social hubs

The link for students between the content, conversations and productivity tools can be a social hub such as **Edmodo** or a Learning Management System (LMS) such as **Haiku**. Edmodo boasts more than 7 million users and has been described as the "Facebook of education." Edmodo now has apps for iOS and Android platforms that promote mobile access as well.

Katie Angelone, social studies teacher in the Roseville Joint Union High School District, regularly uses Edmodo with her students: "I use Edmodo to engage my digital-native students, to teach them good digital citizenship and to post assignments and videos. Recently, students posted avatars (using the free program Voki) to describe what enlightenment philosopher they thought had the best and worst ideas and why. They had to view and comment on at least one other student's Voki.

"I have had students submit work digitally as well. Students have been asked to preview material before coming into class so they may be better equipped to participate in that day's activities (flipping the classroom). Students also are involved in discussions (kind of like a blog) and have sent me private messages asking for clarification on an assignment as well. Students and parents are enjoying Edmodo very much, as do I."

A Learning Management System can

empower students and also be very useful from the standpoint of the instructor who is facilitating all of this activity. Haiku (www.haikulearning.com) is a popular option with both free and paid versions. The free version includes features such as a gradebook, attendance book, assignment list, and discussion forums.

The paid version, like many competing platforms, offers integration with student information systems and expanded customization options. Most LMS options also allow for importing and exporting of Common Cartridges, such as University of

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California Online Academy content (www.ucoa.org).

■ **Honorable mention:** www.schoology.com. **Schoology** is a free LMS that incorporates online sharing, connecting, gradebooks, attendance management and more.

Productivity

In addition to providing access to content and conversation, students need ways to produce and share their work. Our favorite, free web-based resource for this purpose is **Google Docs.** This ever-expanding suite of tools includes word processing, presentations, spreadsheets, forms, and drawings. Additionally, sharing options allow for groups of students to collaborate and work as teams in real time or asynchronously.

Importantly, that collaboration does not require students to be in the same place as they work with one another. This article, for example, was co-authored in Google docs with relative ease, in spite of the fact that the two authors live hundreds of miles apart.

In the world of conventional K-12 education, we now have enormous opportunities to connect our students and emphasize collaboration through online/blended learning.

For example, Craig Miller, ninth-grade computer literacy teacher in the Pajaro Valley Unified School District, regularly uses Google docs with his students. Miller said, "When my students are placed into project teams by their teachers, the first question they ask each other is, 'What is your gmail address?' After sharing a document, presentation, spreadsheet or drawing online through the address, they are able to work collaboratively from their respective houses in real time. Keystrokes are literally displayed on each student's screen as the characters are typed. The team is truly looking at the same document as if they are all in the same room."

The next steps

Greg Ottinger, director of blended and online learning at the San Diego County Office of Education, says that "Leaders are wise to thoroughly evaluate LMS options before making a selection" because not all options work in every environment. As with all of these blended learning resources, Ottinger points out that "the transformative aspect can be realized when the LMS is coupled with professional development, a reliable Internet connection, and overall program vision and management."

For those interested in moving in the direction of blended learning, our recommendation is to start small – pick one of the suggested resources and engage in a small-scale pilot to identify issues, opportunities and challenges. To accelerate the learning curve, connect with others who are engaging in this work – colleagues both within your organization and outside of the organization can provide valuable insights that will help you make progress.

For example, you can use the ACSA Community (http://community.acsa.org), Linkedin's 21st Century Education, the International Society for Technology in Education or Technology Integration in Education groups to ask questions and cultivate relationships with those who have similar interests or experiences.

The process can also be assisted by using research and resources from agencies such as the International Association for K-12 Online Learning (www.inacol.org). Emerging forms of professional development such as Leading Edge Certification (http://leadingedgecertification.org) can also be powerful accelerators in the learning process (see article about LEC on page 28 of this issue).

Continuous learning

Girlie Ebuen, math teacher and BTSA support provider at Murrieta Mesa High School in the Murrieta Unified School District, blogged about her experience with the LEC certification: "I had never blogged before, but now I see a blog as a tool for reflection both as a learner and instructor. Working with more web 2.0 tools such as VoiceThread and several Google apps, I realized how much I can vary assessment in an online course. The LEC course confirms my belief that in order to teach, I need to continue to learn."

Most importantly, take the time to step back and realize that our educational system is at an inflection point. The broad changes in society, coupled with rapid advances in technology, are creating possibilities for transformation that simply were not feasible just a few years ago. Enjoy the process and appreciate the opportunities to be a part of the reinvention of teaching and learning. This is an amazing time to be an educator. ■

References

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