

Blending the Best of Online and Face-to-Face Learning to Improve Student Outcomes



It's a fact that student engagement leads to better learning outcomes. But how can teachers extend student interaction beyond class time? And engage the students who are reluctant to raise their hands in the classroom?

An increasing number of educators are finding the answer in blended learning. In this model, students continue to receive in-class instruction from their teachers and participate in other traditional classroom activities. However, the learning is supplemented by online activities, some of which are self-directed and self-paced; while others promote collaboration. According to Michael B. Horn of INNOSIGHT Institute, "Blended learning is 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."

The combination of traditional classroom instruction and the digital environment creates a highly personalized and more productive learning experience with better outcomes. According to The Gates Foundation, benefits of the blended learning model include:

- Access to high quality, relevant, and engaging content in a variety of forms
- More flexible class time and structure
- Ability to adapt to the learning needs of students
- Student access to multiple sources of instruction and assessment and diagnostic tools to help direct the pace and format of their learning
- Capability for teachers to tailor their instruction and guidance to ensure progress and mastery for all students, with a focus on those who historically have been underserved.¹

These advantages are driving more districts to adopt a blended learning instructional model. According to the International Association for K-12 Online Learning (iNACOL), "This blended approach combines the best elements of online and face-to-face learning. It is likely to emerge as the predominant model of the future – and to become far more common than either one alone".²

Shifting the Instructional Model

Blended learning is a significant shift from the traditional instructional model. According to iNACOL, a blended learning environment has the following characteristics:

- A shift from lecture to student-centered instruction in which students become active and interactive learners
- Increased interaction between student-instructor, student-student, student-content, and student-outside resources
- Integrated formative and summative assessment mechanisms for student and instructor."³

As an example, let's say a teacher begins a unit on US history. In class, the teacher focuses on key themes and content that are difficult to comprehend or that are unavailable on the internet. During their classroom time, students visit their teacher's website on the Schoolwires® Centricity2™ platform to access URLs for further exploration or login to a webcast with a noted historian and then discuss the presentation. After school, students can continue learning by accessing relevant URLs and other resources posted on the teacher's website. Students also can engage with their teacher and with other students in study and discussion groups, blogs, threaded discussions, surveys and wikis to apply what they've learned. For instance, a science teacher can post links and create a wiki focused on an upcoming solar event. Students can contribute information and resources they find leading up to the event, and later post their observations, perhaps adding images to a photo album or responding to a survey.

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Engaging Students Through Interaction

Gillian Ryan, a fifth grade teacher at Prospect Avenue School in California, integrates blogs throughout her blended learning curriculum using the Schoolwires Centricity™ content and website management solution. For example, in Language Arts, she posts a question on the blog and directs students to answer it using the language skills she has been teaching. In addition to reviewing the skills in the classroom, she provides students with specific details on the skills and the format they should use. For instance, she explains the elements that need to go into a paragraph and posts examples for the students to review. Then students respond to her posted question via the blog.

"I have been amazed and very satisfied to find that students who were never interested in writing are excited about blogging. They like that their voice and message are being posted on the internet, and they put more effort in to it because they know others will see it. In addition, I use a projector to review some of the blog responses in the classroom, giving my students practice in daily oral language as well," explains Ms. Ryan.

Students also learn from each other during the extended collaboration time. For example, for science class, Ms. Ryan might post, "describe the planet you are studying" and include URLs for additional research. Many students are motivated to learn more than what was covered in class and will share it with others via the blog. They also respond to each other's questions. The blog format also gives everyone a chance to respond, which is not possible to do orally in the classroom. "When I posted a question asking 'what do you know about outer space?' students posted multiple and lengthy blogs with their responses. I could never have taken enough class time to give every student a chance to respond," says Ms. Ryan.

Collaborating Beyond the Classroom

In addition to interacting with their classmates, students can collaborate or speak with learners and experts anywhere in the world. A teacher can complement her classroom instruction on space with a webinar or chat with an astronaut, for example.

Students at White Plains City School have been working collaboratively online with learners at Suzhou Lida Middle School in China. Using the Schoolwires Greenleaf Virtual Cultural Exchange Program, the students work together on group projects using a variety of multimedia and social media resources, including videos, chatrooms and blogs. The program helps the students build cultural connections, effective digital citizenship and online collaboration skills, leveraging the natural appeal of social media to engage students.

The White Plains students, many of whom are in the schools' Global Ambassador program, participate in the Greenleaf program during their study hall or after school. "Participation is 100 percent voluntary," says Jody Kennedy, program teacher. "When I explained the program to my students and asked who wanted to participate, they all raised their hands. They were very excited."

"The Greenleaf program provides technology tools that allow students from different cultures to communicate with each other in way that is meaningful to adolescents," adds Dr. Christopher P. Clouet, superintendent. "Our district embraces opportunities like these to provide a global-oriented education to our students and help them understand and participate in today's global society."

At State College Area High School in Pennsylvania, students were assigned to groups that communicated as teams with their counterparts in China. Using the Greenleaf program, they created an FAQ page with answers to questions posed by the Chinese students, including the college admissions process. Students also created a shared blog to cover the topics of food, sports, holidays and celebrations.

"Students want to engage in technology, especially if it's socially based, whether it's with teachers, students, other schools, or experts around the world," says Julie Evans, CEO of Project Tomorrow. "But they want social interaction that is school-oriented, about serious topics and not the personal 'dramas' of Facebook."⁶

Personalizing Learning

The addition of the digital environment to a teacher-led classroom can deliver a more personalized and productive learning experience for students. For example, by providing materials online, students can spend as much time as they need on a topic without being limited by a class period or feeling embarrassed in front of peers. At home a student can watch a podcast explaining a physics equation repeatedly until he or she understands the concept. The student also can work on practice equations posted by the teacher. Similarly, more advanced learners can move on to deeper exploration of a concept.

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Likewise, students who miss class can access materials from the day's instruction, and possibly even at the same time the rest of the class is engaging with them. This frees teachers from having to catch up students who have been absent, and is especially helpful for students who are likely to fall behind when sickness or injury prevents them from attending school.

According to Mr. Horn and Heather Staker, also of INNOSIGHT Institute, "blended learning allows for a fundamental redesign of the educational model ... it creates a more consistent and personalized pedagogy that allows each student to work at her own pace and helps each child feel and be successful at school. Leveraging technology, blended-learning programs can let students learn at their own pace, use preferred learning modalities, and receive frequent and timely feedback on their performance for a far higher quality learning experience."⁴

The diversity of the learning resources in a blended learning environment also ensures that students are getting some instruction in the method they prefer. For example, a learner can view videos on subject matter, or podcasts of a math teacher working out an algebra equation. Another student can listen online to an assigned reading task. And students who are reluctant to participate in the classroom can reply to a blog.

Increasing Learner Control and Responsibility

Other benefits of the blended learning environment for students are increased learner control and responsibility. "By definition, blended learning creates some level of learner control. For many students the ability to make some choices about what to study, how to approach a topic, and when and where to learn can make a difference," says Tom Vander Ark of Getting Smart.⁵

The 24/7 availability of resources, class materials and homework assignments also make students more accountable. They can no longer use the excuse of losing their homework assignment or being absent from school.

A blended learning environment also makes it possible for parents to engage with their children more in the learning process. Parents can access the same learning resources as their children to help with studying and learning outside the classroom. This is especially helpful when it comes to math and science which are taught differently than when many parents were in school. By accessing the online resources, parents gain more insight into how the topics are taught and are better prepared to help their children understand concepts and complete assignments. It also gives parents a chance to have more in-depth conversations at home about the subject matter. Rather than ask, "What did you do today?" they can elevate the conversation to, "How would you apply what you learned in architectural design to our remodeling project?" They can also look for other opportunities for their children to apply – and strengthen – what they learned in the classroom.

Adjusting Practices and Policies

Because blended learning is a new instructional model, and not simply the application of technology, it requires a significant shift in teaching practices. Teachers that have been teaching for numerous years might be stuck in their traditional lecture style. Others might be apprehensive about using technology, especially with students who are undoubtedly more familiar with its use than older adults.

John Flores, CEO of the US Distance Learning Association, says "requisite skills for successful blended learning teachers include the ability to challenge students with higher-order thinking through such methods as inquiry-based assignments, and the ability to offer many opportunities for support, such as responding to student emails within 24 to 48 hours."⁶

According to Digital Learning Now!, other policy changes being discussed include eliminating the cap on the enrollment of students in blended-learning programs or courses, rethinking assessments, and changing staffing assignments.⁷

Shifting Paradigm Pays Off

Teachers who are willing to make the paradigm shift often experience many positive outcomes in addition to increased engagement with students. These include:

- Ability to personalize learning activities
- Ability to incorporate digital tools to promote student learning and creativity
- Added time to focus on important activities like developing students' critical thinking and writing
- Means to capture student performance in real time and provide frequent and timely feedback
- More opportunities to offer students help where and when it's needed

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CEO, US Distance Learning

For example, students are directed to log on to their home computers and watch an instructional video on basic algebra concepts. Following the three-minute video, they take an online quiz posted by the teacher. If they get an answer wrong, they automatically receive a hint to help them find the correct answer. Meanwhile, their teacher checks online to see how well each student did on the quiz. In class the next day, the teacher discusses the lesson in more depth with the students who struggled on the quiz, providing personalized support where and when it's needed. When the students understand the material, they join other students on a project to apply what they have learned.

By monitoring and tracking student progress, the teacher becomes more effective in refining lesson plans to provide the coaching each student needs. As a result, teachers focus on what matters most: what the students learn and how they apply it.

Critical thinking can be encouraged by providing students with resources online and asking them to think deeply about a question as they read the material. During class the next day, students discuss their thoughts, often posing new questions and insights that might never have come up during a standard class period.

Essential technologies for blended learning

Whether teachers are tech-savvy or apprehensive about using online applications, they need intuitive tools that can be easily learned without extensive training or increased demands on IT resources. The Schoolwires' Centricity2 content and website management solution is designed to meet these objectives.

"Centricity2 is so user friendly that many teachers need little if any training to build their websites," says Laura Bruhn, executive administrative assistant to the superintendent and district webmaster at Flemington-Raritan Regional School District (FRSD). "It is very easy for them to upload clip art, graphics, links, photo galleries and other resources for their students and parents. Our goal is to help our teachers by removing roadblocks; the Schoolwires' technology helps us assist our teachers-rather than frustrate them."

Many teachers post upcoming assignments, resource links and calendars. Examples of strong use of the Centricity2 functionality include:

- A J.P. Case Middle School music teacher records students performing and uploads the recordings as podcasts.
- An art teacher at J.P. Case Middle School posts student artwork, her own paintings, and a calendar of area art shows.
- The website of a teacher at Robert Hunter Elementary School is full of eye-catching graphics that lead young students to online learning games. A parent page gives parents a preview of upcoming units and associated links, and reminds them of classroom events and snack requirements.

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Flemington-Raritan Regional
School District

Blended learning also requires a robust platform that can support a wide range of interactive tools, including blogs, wikis, podcasts, email, chat, wall posts, feeds, discussion boards, work spaces, collaborative documents, file and media sharing, photo albums, polls and social media. In addition, teachers need to be able to easily connect students with the vast resources available outside the classroom by pulling in RSS feed, urls and third-party applications. Centricity2 is designed to seamlessly integrate with all of a district's compatible systems, data and third-party applications. This makes it easier for teachers to access in one central location all the resources and applications they need to support blended learning.

Another key element of the technology environment is safety. In a blended learning model, students are often asked to research or work online with others outside of the classroom. Social media tools like chat rooms, walls, blogs, wikis, and project-based photo albums keep learners engaged outside the classroom. However, the district needs to make sure that its technology platform delivers up these instructional and social learning tools in a safe and secure environment.

The fact that all communications in the Schoolwires' Greenleaf program take place in a secure environment eliminated concerns about online exposure at White Plains City School. "This gave us a lot of confidence in the program. It wasn't the Wild West of Facebook or Google chat. Parents would have never gone for that and we wouldn't want them to. Parents were very supportive of the program after we explained the security to them," says Kennedy.



Embracing the Blended Learning Model

Blended learning will continue to grow, driven by its proven outcomes and the expectations of today's digital generation for increased engagement and collaboration. But its adoption requires a real change in the instructional model. Teachers will likely require some professional development and ongoing support, and districts may need to create new policies around social learning, class size and other areas.

And in order to be successful, the application of the technology needed to support this new model must be simple to use. If the technology requires a steep learning curve or is time-consuming, teachers will not adopt it. But if the technology is intuitive and makes their efforts more productive, more teachers will embrace the blended learning instructional model. The possibility of providing students with a highly personalized, interactive and more productive learning experience is worth exploring this promising education model and the technology that supports it.

About Schoolwires

Schoolwires, Inc. provides a suite of technology products and related services to more than 1,300 educational entities, including K-12 school districts and schools in the United States and China. The company's technologies are designed to foster community, student, teacher and parent engagement in the classroom, locally and internationally. Its solutions include an integrated website and content management system, a safe social learning and networking system, and an enterprise technology platform. Schoolwires brings together a district's essential technologies, information, and content to effectively engage the K-12 community in support of district and student success. The company currently serves an estimated 10 million users and has been recognized as one of the top privately held education companies for the fifth consecutive year by Inc magazine.

Find out how Schoolwires® technologies support a blended learning environment.

Visit us at <http://www.schoolwires.com/domain/32>

Additional Reading

Blended Learning Initiative at Penn State

http://weblearning.psu.edu/blended-learning-initiative/what_is_blended_learning

Defining the Emerging Role of Social Learning Tools to Connect Students, Parents & Educators June 2012

http://www.schoolwires.com/cms/lib3/SW00000001/Centricity/Domain/36/schoolwires_ProjectTomorrow_WhitePaper.pdf

Digital Learning Now!

<http://digitallearningnow.com/>

District Administration: Building a Blended Learning Program

<http://www.districtadministration.com/article/building-blended-learning-program>

INNOSIGHT INSTITUTE: Classifying K-12 Blended Learning

<http://www.innosightinstitute.org/innosight/wp-content/uploads/2012/05/Classifying-K-12-blended-learning2.pdf>

INNOSIGHT INSTITUTE: Rise of Blended Learning:

<http://www.innosightinstitute.org/innosight/wp-content/uploads/2011/05/The-Rise-of-K-12-Blended-Learning.pdf>

International Association for K-12 Online Learning

<http://www.inacol.org/>

Project Tomorrow

<http://www.tomorrow.org/>

U.S. Distance Learning Association

<http://www.usdla.org/>

November Learning:

<http://novemberlearning.com/>



¹ Next Generation Learning: The Intelligent Use of Technology to Develop Innovative Learning Models and Personalized Education Pathways. Copyright 2010 Bill & Melinda Gates Foundation gatesfoundation.org

² Watson, John; Evergreen Consulting Associates; Blended Learning: The Convergence of Online and Face-to-Face Education for INACOL; http://www.inacol.org/research/promisingpractices/NACOL_PP-BlendedLearning-Ir.pdf

³ Watson, John; Evergreen Consulting Associates; Blended Learning: The Convergence of Online and Face-to-Face Education for INACOL; http://www.inacol.org/research/promisingpractices/NACOL_PP-BlendedLearning-Ir.pdf

⁴ Horn, Michael B and Staker, Heather; INNOSIGHT INSTITUTE; The Rise of K-12 Blended Learning; January 2011; <http://www.innositinstitute.org/media-room/publications/education-publications/the-rise-of-k-12-blended-learning/>

⁵ Vander Ark, Tom; Getting Smart; Blended Learning Can Improve Working Conditions, Teaching & Learning; June 29, 2012; <http://gettingsmart.com/blog/2012/06/blended-learning-can-improve-working-conditions-teaching-learning/>

⁶ McLester, Susan; District Administration; Building a Blended Learning Program; Oct. 2011; <http://www.districtadministration.com/article/building-blended-learning-program>

In the flipped model, students prepare for class at home by watching brief teacher-created videos, taking quizzes, listening to podcasts or reading articles. Using e-mail or text messaging, students and parents connect with the teacher as needed. Blogs, forums, surveys and wikis also help to increase student and teacher interaction,

⁷ Digital Learning Now! <http://digitallearningnow.com/>



The Schoolwires story

Schoolwires is dedicated to K-12 education, and to the people who are part of every local school community — students, families, teachers, administrators, and supporters of education. From the beginning, we've believed that a successful school district is a product of total community involvement. That's why our Web-based solutions are expressly designed to connect K-12 communities with the information, services and people they need to achieve their district goals. For more than 10 years, our intuitive technologies have been helping administrators and educators, students and parents, communicate and collaborate like never before — to come together around success.

Today, more than 10 million users in the U.S. and China rely on our website, content management and safe social learning solutions to drive engagement in the classroom, locally and across the globe. We're proud to be a part of that. And we remain committed to helping K-12 communities extend their local reach and transcend the boundaries of their districts so that individuals everywhere can achieve their full potential.

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