

Technology Inspires Dynamic 21st-Century Teaching

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Introduction

These are pivotal times for educators as they face new and increasing demands for delivering on heightened expectations for accountability, for meeting budget constraints, for increasing enrollment and raising student satisfaction, and for managing an always-on, always connected world, all while staying expert in their subject areas and teaching.

An Increasingly Diverse Student Population

The image of 18 year olds spending four years in residence at a college or university in face-to-face lectures or seminars is becoming rarer as more students attend a mix of part-time, full-time, and virtual courses. With the rising cost of higher education, more students now attend part-time while working, and they are more likely to move in and out of programs, starting and finishing in different places.

Career changers and older students are attending in higher numbers, and dual enrollees (high school students attending higher-education courses) now attend in order to get a jump start on their degrees. At the same time, more students are also coming with special needs, such as dyslexia, ADD, and ADHD.

The convenience of anytime, anywhere access to information has changed student and institutional expectations. Educators are now expected to respond quickly to questions and to be available to students far more often than during the traditional office hours.

Students also have more educational choices than ever before, and they no longer just come to the institution as a matter of course. The institution must demonstrate the value of its programs and convince students (and parents) on the benefits of enrolling.

Students face increasing pressure from many directions, and they come to higher education with expectations about online learning. For example:

- Average student loan debt is \$33,000 per student.¹
- 33% of students transfer to a different college at least once before earning their diploma.¹
- Nearly half of all current college students take at least one course online. By 2019, it's predicted that approximately 50% of all college courses will be e-Learning-based.¹
- 77% of 2800 academic leaders rated online learning outcomes the same, somewhat superior, or superior to face-to-face.²

¹ "The Overworked Bachelor's Degree Needs a Makeover," The Chronicle of Higher Education, Jeffrey Selinger, June 16, 2014.

² "Changing Course: Ten Years of Tracking Online Education in the U.S." Babson Survey Research Group and The College Boards, 2012.

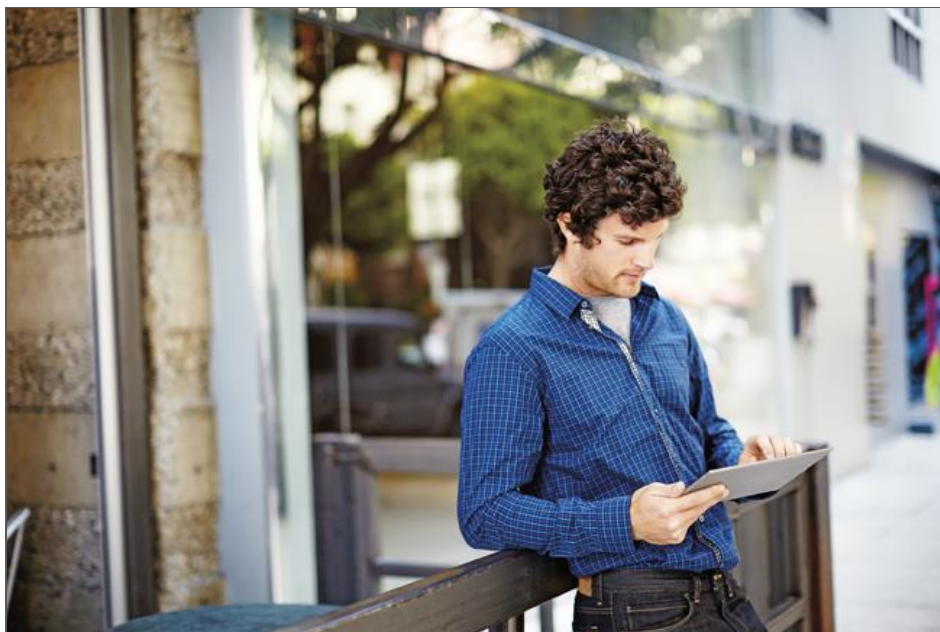
It has become unworkable to serve all students in one form. What's needed is personalized instruction that addresses the diversity of the student population in new ways that can help students prosper and achieve their (and the educators') goals.

How can instructors teach effective, engaged, collaborative, personalized courses, while also being accountable for their own program and professional goals? How can educators stay motivated and motivate their students? How can they be inspired professionally while needing to inspire students?

The answer is the thoughtfully designed and applied use of technology in teaching.

Integrating Technology for Personalized, Impactful Teaching

With increasing demands and a limited amount of time, educators are often stretched to the limit. It's easy to see how introducing new technologies and asking them to do more just won't work. But integrating technology in teaching doesn't necessarily require educators to do more—it requires them to do *different*. And that difference can actually make them more effective, provide much needed flexibility and efficiency, and can result in greater success and satisfaction for both educators and students.



Students have many ways to access higher education.

Before committing to an expensive college or university program, students can survey or try out different areas to see if they're interested. Students who enroll in a particular program with some past (often online) experience in their area of study are likely to benefit more and be more likely to complete the programs they start.

A diverse student population can learn more effectively and, ultimately be more successful, when given access to a variety of learning sources through MOOCs (massive open online courses, such as MIT OpenCourseWare, Coursera, and Khan Academy), e-Learning/distance learning, hybrid or blended learning (part online, part classroom) courses, and more. MOOCs enable students to have a defined course experience online at reduced cost and in less time than in a face-to-face class. Online learning also enables students to participate with a wider range of peers, and it gives them access to much broader, more diverse instruction from a wide range of educators. Hybrid courses can deliver the best of both worlds, with valuable in-person interactions backed by the benefits of online materials, interactions, and collaboration.

As they integrate technology into their teaching for even greater impact, educators can benefit from using already familiar tools, as well as by taking advantage of new tools. Office 365 (Microsoft Word, Excel, PowerPoint, Outlook, OneNote, and SharePoint in the cloud) provides familiar email, online collaborative editing and storage of documents, instant messaging, video conferencing, calendaring, resource sharing, 24/7 anywhere access from browsers, and data loss prevention and sensitive data protection. Using familiar tools like Office 365 not only simplifies the integration of technology in higher education, it prepares students for collaborating in the global, connected world they will face after graduation.

The Changing Classroom

Just as students are changing, the classroom and methods of engagement are also changing. Technology is transforming the learning environment, and it makes a broader and more comprehensive education possible.

Online materials can now effectively deliver key information before students meet face to face. Lectures can be recorded and videos and other materials made available online so that students can access them when they want, repeatedly if needed.



In the classroom, technology can provide valuable real-time information to both students and educators.

Classroom time is also changing. It can provide a space for valuable discussion, promote collaboration that builds on the online materials, and provide practice with the specialized tools, equipment, and processes used in particular fields. When technology is integrated in the curriculum, students experience and develop the self-directed learning, collaboration, and reflection skills they need to be successful in the global, digital 21st-century world.

For example, Office 365, with its cloud-based browser, makes it easy for students to collaborate with others in their programs through email and video conferencing, or by sharing documents, reviewing presentations, and even recording lectures for later viewing.

Students can work from their favorite device, virtually anywhere and anytime.

In lecture situations, technology can increase student engagement and give educators valuable data immediately through polling, back-channel content, comprehension checks, feedback, and more.

In the classroom or at a distance, Office Mix, a PowerPoint add-in, helps educators create lessons, annotate slides, add video and sound, and add labs and other interactive content. With analytics on every slide and easy-to-build-in quizzes, educators can get immediate data about student performance, and students get immediate responses to their quiz answers.

Students also benefit from powerful visualization and interaction online. Lync, an enterprise-level application with video calling, shared screen, and digital whiteboard, simplifies long-distance discussion and content sharing. For examples, educators can present a lesson, share pictures, or share a document with students using the Lync

shared desktop. During discussions, the shared digital whiteboard makes it easy to note points, draw figures, diagram a concept, or show how something works, just like on a physical whiteboard. This visualization can help students make pertinent connections in the topic being discussed, and students who learn best visually especially benefit from the Lync presentation.

Students benefit by working with the tools they will use in their chosen fields, and they gain important creation and production skills needed in the workplace. They also learn how to network with experts in their fields and how to collaborate with their peers and others.

Take Advantage of Social Media

Most people are familiar with and use technology in their personal and professional lives, whether they use Microsoft Office tools, blog, surf the Internet, share photos on Facebook, use Twitter, or send text messages. For students, their community is online and their relationships often exist as an interchange in social media. Educators can take advantage of social media in their work with students.

Going beyond common social media tools, Yammer from Microsoft provides enterprise-level social networking that encourages discussion and collaboration throughout the institution by enabling everyone in the domain to post comments and engage in open dialog. Students and educators can confer, debate, and share, and others can contribute or promote their ideas. Because Yammer provides asynchronous communication (unlike instant messaging, which is synchronous), Yammer provides an opportunity for students to reflect, craft their thoughts, and then respond to each other.



Learning can happen anywhere.

Educators can use Yammer to moderate a debate or discussion, embed articles or videos, post announcements, or use polls that provide immediate feedback to all parties. And because Yammer is similar to the social media that students already use (Facebook and Twitter), there's little ramp up needed. Students can even "like" a response or add commentary of their own.

Personalized Learning

Learning that is personalized (as much as possible) often provides the best educational experiences and outcomes. Through their online presence, educators can increase personal contact with all their students, and they can use technology to help personalize the educational experience for all types of learners. Educators can easily measure student comprehension frequently and in real time, making it possible to adjust course content or strategy as needed. For struggling students or those with special needs, technology enables educators to provide special tutoring and/or personalized or additional or different practice opportunities that can improve student comprehension.

Students can also benefit from engaging in discussion forums online as well as in the classroom. They also benefit when they communicate with educators and with experts in their fields, and when they can receive valuable feedback on their work in real time. Ongoing feedback makes it possible for students to know throughout the course which areas on which to focus, and educators learn the areas in which students are confused or having difficulty. Educators can use this data to adjust and improve their courses, leading to greater student success.

Increased personal contact, real time feedback, instructional adjustments based on data, and ongoing collaboration made possible by integrating Office 365, Office Mix, Yammer, Lync, and more can help educators deliver the personalized instruction that students need.

Beyond the Classroom

One of the disadvantages of distance learning or hybrid learning situations is that it is difficult to build a sense of belonging. Videoconferencing with Skype can help students feel a greater sense of connection to their learning community. Skype enables students to interact with others from their courses, helping them build relationships with their peers and educators and develop a sense of belonging.

Students can also gain from talking face to face with educators without the time and expense of having to travel into the classroom. Educators can provide feedback and discussion in a way that's more personalized and effective than in writing.

Skype provides free voice over IP (VOIP) videoconferencing on the desktop or via browser, and provides free Internet calls and cheap online calls to phones. No matter where students are, Skype makes talking face-to-face with their peers and educators, as well as with others beyond their program (for example, students at other institutions or experts in their field of study), an everyday reality for students. The broader picture they gain can help them not only in their current studies but also in their future work in the global, connected workplace.

To satisfy reporting and various compliance requirements, educators and administrators must provide data that shows student and program success. They can take advantage of the powerful data and analytics that SharePoint provides, and policy-based access to resources and IT optimization provide the security and protection that institutions need.

SharePoint also provides the platform for creating student and faculty websites that provide access to learning resources that can be accessed anytime from almost any connected device. Educators can use SharePoint to create websites, manage workflow on collaborative projects, and organize, manage, and secure projects and files.

Conclusion

The pressure is on for educators to respond often and more quickly and interact more with students, to collect and use data in their courses, and to meet reporting requirements. In this always-connected, always-on world, technology makes it possible for higher education to deliver the broad, engaged, and collaborative education needed by 21st-century students.

Educators can communicate in a variety of ways, personalize learning, and engage and inspire their students by integrating Office 365, Office Mix, Skype, Lync, and Yammer into their teaching. They can manage resources and workflow using SharePoint, and, from the powerful analytics of SharePoint and Office Mix, they can gain important insight needed to adjust their teaching in ways that can increase student performance and improve overall satisfaction levels for all.

Resources

- [Office 365 in Education](#)
- [Office Mix](#)
- [Skype](#)
- [Lync](#)
- [SharePoint in Education Videos](#)
- [Yammer](#)

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