

FACULTY **F**OCUS

Special Report

Teaching with Technology: Tools and Strategies to Improve Student Learning

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Teaching with Technology: Tools and Strategies to Improve Student Learning

If you're interested in using technology tools to enhance your teaching, it's easy to get overwhelmed by the mountain of information out there. To make matters worse, much of it is either highly technical or simply not very practical for the college classroom.

Teaching with Technology: Tools and Strategies to Improve Student Learning approaches teaching technologies from *your* perspective — discussing what works, what doesn't, and how to implement the best ideas in the best ways.

These articles were written by John Orlando, PhD, program director at Norwich University, as part of the Teaching with Technology column on *Faculty Focus*. You'll find the articles are loaded with practical information as well as links to valuable resources. Articles in the report include:

- Using VoiceThread to Build Student Engagement
- Wikipedia in the Classroom: Tips for Effective Use
- Blogging to Improve Student Learning: Tips and Tools for Getting Started
- Prezi: A Better Way of Doing Presentations
- Using Polling and Smartphones to Keep Students Engaged

Whether the courses you teach are face-to-face, online, blended, or all of the above, this report explains effective ways to incorporate technology into your courses to create a rich learning experience for students, and a rewarding teaching experience for you.

Mary Bart
Editor
Faculty Focus

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Using VoiceThread to Build Student Engagement

By John Orlando, PhD

Online educators have long known that asynchronous discussion is deeper than face-to-face discussion due to the increased thought time and the “democratization” of the classroom. But one major disadvantage of traditional online discussion is that it is separate from the lecture.

Students in a face-to-face classroom can stop the instructor during the lecture to ask questions, whereas students in an online classroom generally read or watch the lecture at one time and then discuss it in a separate forum later. Any questions or thoughts that the students have during the lecture are generally forgotten by the time that the students reach discussion. Plus, online discussion is usually tracked into preset questions determined by the instructor.

But a new technology allows online instructors to reconnect discussion to the lecture. VoiceThread is a web service that allows users to upload PowerPoint slides, videos, photos, etc. and add voice narration to create a multimedia presentation. But best of all, viewers can add their own comments to the presentation via voice or text. With VoiceThread students can attach questions or thoughts about a lecture directly to the lecture itself when and where they apply. The result is a discussion that is integrated into the lecture itself.

The advantages of VoiceThread include:

- Student driven discussion: Discussion originates from the students themselves, and thus students tend to bring more of themselves into the conversation. Discussion is freer and more open, touching on a wider variety of issues.
- A growing lecture: Discussion in a traditional online forum never leaves the classroom. The class is archived and discussion forums are wiped clean for the next group, meaning that the insights are lost. But because discussion in VoiceThread is attached to the lecture itself, which can then be used for the next class, students are adding to the lecture itself, which grows from class to class. Students contribute to an ongoing conversation with future classes.

- Improved social presence: Students find that the ability to see and hear their instructor and classmates improves the sense of social presence of others in the classroom.
- Better understanding of nuance: Students are better able to understand the nuances of discussion when they can hear the tone in someone’s voice.
- Student projects: VoiceThreads are a great way for students to deliver projects and solicit feedback from others.

New users can create up to three VoiceThreads for free, and after that reduced is available. VoiceThreads can be password protected to provide the same level of security as any learning management system. Set one up and try it yourself!

To learn more about VoiceThread and how it's being used in education, visit these sites:

VoiceThread introduction:

<http://VoiceThread.com/#u189469.b21651.i122786>

Creating a VoiceThread:

<http://VoiceThread.com/#q.b409.i848804>

Student outcomes:

<http://VoiceThread.com/#q + college.b99673.i508133>

Art class example:

<http://VoiceThread.com/#q + college.b8863.i62483>

Student project:

<http://VoiceThread.com/#q + poetry.b425796.i2574380>

VoiceThread 4 Education Wiki:

<http://VoiceThread4education.wikispaces.com>

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Wikipedia in the Classroom: Tips for Effective Use

By John Orlando, PhD

Most academics consider Wikipedia the enemy and so forbid their students from using Wikipedia for research. But here's a secret that they don't want you to know—we all use Wikipedia, including those academics.

There's a reason that the Wikipedia entry normally comes in at the top of a Google search. Google relies heavily on inbound links to rank a site, and Wikipedia is one of the most commonly linked sites on the Internet. Here's another secret—Wikipedia is vetted by volunteer academics. Wikipedia's motto is “no original thought,” meaning that everything must be cited, and uncited material is quickly removed. In fact, studies have shown the Wikipedia is about as accurate as Britannica.

Here are two ways to use Wikipedia to improve learning outcomes in your classes:

Have Students Build Articles

In the Spring of 2008, Professor Jon Beasley-Murray at University of British Columbia had the students in his class “Murder, Madness, and Mayhem: Latin American Literature in Translation” create articles for Wikipedia on the books that they read. He transformed his students from learners to teachers, which improves outcomes. Plus, creating public work improves motivation as well as performance.

Importantly, the students were instructed to make contact with the Wikipedia editors—called the “FA Team”—to receive feedback on their work for revisions. The instructor had effectively enlisted outside academics as reviewers for his class. Wikipedia also has a quality ranking system that assigns “Good Article” or “Featured Article” status to exceptionally good works. About 1 in 800 articles reach Good Article status, while 1 in 1,200 reach Featured Article status. The instructor guaranteed his students an “A” for Good Articles, and an A+ for Featured Articles.

The results? The students, who worked in groups of two or three, produced three Featured Articles and eight Good Articles, an exceptional result given how few articles

achieve these levels. These articles receive thousands of hits per month, demonstrating to students the value of their work. Now more than 20 universities have projects in Wikipedia.

Host a Course on Wikiversity

Wikimedia—the non-profit foundation that created Wikipedia—also hosts nine other wiki projects, including: [Wikibook](#) (free textbooks), [Wikispecies](#) (dictionary of species), and [Wikiquote](#) (compilation of quotes). One interesting site is [Wikiversity](#), which provides a space for hosting courses or other content. An instructor can build a course page with syllabi, lesson plans, and other material for the students to access whenever they need it. That page can also be linked to other educational material such as videos.

Best yet, students can be given editing access to the page to add their own material. Groups can be assigned to add material to the course, such as resources for further exploration of the topics. Another option is to have the students build self-tests on the material using free web-based quiz functions for future students. This will enlist the students in an ongoing project of developing knowledge that outlives their particular class and is passed on to future generations of students.

Resources

The Latin American Literature Project:

<http://en.wikipedia.org/wiki/User:Jbmurray/Madness>

Guide for university projects:

http://en.wikipedia.org/wiki/Wikipedia:School_and_university_projects/Piotrus_educational_boilerplate

Listing of university projects:

<http://en.wikipedia.org/wiki/Wikipedia:SUP>

Guide for peer review of articles:

<http://en.wikipedia.org/wiki/Wikipedia:PR>

Wikiversity:

http://en.wikiversity.org/wiki/Wikiversity:Main_Page

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Blogging to Improve Student Learning: Tips and Tools for Getting Started

By John Orlando, PhD

Most universities press their faculty to add technology to their classroom by adopting the Learning Management System—Blackboard, Moodle, etc. This is a mistake. Faculty often end up spending hours learning the system and loading the same content that they use in the classroom, and finish wondering if the benefit was worth the effort.

I instead encourage faculty to start by adding a blog to their class. A blog can be set up in minutes and is easy to learn and maintain. Plus, there are a variety of studies proving that blogging can improve educational outcomes. For instance:

- Faculty at the University of Maryland Baltimore County found that when they switched chemistry labs from individual students doing experiments and submitting their results, to groups of students posting their findings to a blog and receiving feedback from other students, the average passing rate in class went from 71.2 percent to 85.6 percent, even as the minimum score needed to pass went up. Read more about the UMBC experience [here](#) »
- David Wiley at Brigham Young University had his students post their written work to a blog before handing it in. The students received comments from other students and even faculty at other institutions, which improved their work greatly. Wiley found that dozens of other people were effectively doing his job for him by providing students with commentary to improve their work. It multiplied student outcomes without extra effort on his part. Read more about the experience [here](#) »

One of the benefits of blogging is that it is public, and we are more attentive to the quality of our work when it is public than if it is just viewed by one other person. Plus, blogging creates a person-centered discussion, as opposed to the topic-centered discussion of the LMS. Students are less invested in LMS discussions and often lend the

minimum commentary necessary fulfill the requirement. But students become much more invested in their work when blogging, and thus are more engaged with the material.

Also, Kris Kelly notes that blogging encourages higher levels of reasoning because the “focus is not necessarily on the content of the blog, but more on the process of constructing and evaluating knowledge helping us reach the sometimes elusive upper levels – analyzing, evaluating, and creating – of Bloom’s Taxonomy” (<http://tinyurl.com/mtj6kf>).

One simple way to incorporate blogging into nearly any course is to create a single class blog and post case studies, news items, or topics for commentary. Another option is to assign students to post notes on each class along with their thoughts on the material, and assign other students to comment on the postings.

Add blogging to your classes with any of the free platforms below:

Blogger – Google’s publishing tool:
<http://www.blogger.com>

Tumblr – A feature rich system: <http://www.tumblr.com>

Posterious – Super simple, and with lots of functionality:
<http://posterious.com>

Soup.io – Another powerful product from the “io” people: <http://www.soup.io>

Edmodo – Good for making password protected groups of blogs: <http://www.edmodo.com>

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Prezi: A Better Way of Doing Presentations

By John Orlando, PhD

Everyone seems to assume that a presentation must be accompanied by a PowerPoint. Conferences even require presenters to submit their PowerPoints as a condition of being accepted. But we've all seen terrible PowerPoints that detract from the presentation, and many people just don't use PowerPoints well, hence the term "PowerPoint-induced sleep."

But maybe it's time to (gasp) question the use of PowerPoint itself (stick with me here)! Why do we assume that we must put up an outline of our points to help the audience understand them? The best presentations on TED are not accompanied by a PowerPoint of bulleted lists, but rather photos or other imagery that illustrate a point or make an effect. A speaker might flash the simple word "why" on the screen to prepare the audience for questioning a common belief. A single photo could be used to elicit a laugh or set the tone of the discussion.

One alternative to boring PowerPoint slides is to use Prezi. This web-based tool allows the user to create a single canvas of text, images, videos, etc. online. The presenter flies from location to location on the canvas, sometimes turning elements upside down, sometimes zooming in or out, to explore the relationship between ideas. Like a painter, the canvas draws the developer to choose visual imagery to create the presentation, in contrast to the text-heavy, outline-based methodology of PowerPoint.

The theory behind Prezi is that our ideas are not linear, but rather bundles of interconnected concepts that are better captured as a whole with many parts. Prezi allows the user to illustrate the relationship of concepts to one another.

I have abandoned PowerPoint entirely and now use Prezi exclusively for my presentations. This is a remarkably freeing experience. I find myself shedding my assumptions about what a presentation must be as I explore new ways to present concepts.

The true power of Prezi comes from painting a larger point composed of its constituent elements. For example, a Prezi on learning could start with the word "Learning" and then zoom in on each letter to find that it is composed of the elements that go into learning. The presenter zooms in and out during the presentation to illustrate the complex

relationships that exist at different levels of the topic.

Try Prezi for yourself, and then come back and share your ideas for using Prezi in the classroom by entering your suggestions in the comment box below.

Resources

A very funny comedy routine on bad PowerPoints: watch it [here](#) »

The Prezi homepage: <http://prezi.com/>

A great example of how to do a presentation without PowerPoint: Watch it [here](#) »

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Why You Should be Using Social Bookmarking Tools

By John Orlando, PhD

Still storing your bookmarks on your browser? That is soooooo 2007. It's time to get with the program and start using social bookmarking. Social bookmarking is a "two-for" — it will save you time and provide a way for students to collaborate on their research.

Bookmarks were originally saved on a browser, which creates a couple of problems. One, your bookmarks are not available if you are on another computer. Two, these bookmarks cannot be searched. New bookmarks are simply thrown into the bottom of the list, which becomes unmanageable once you accumulate a lot of sites.

Social bookmarking has changed all that. Tools such as Delicious and Diigo allow users to store their bookmarks

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on a password protected website that can be accessed from any computer on the Internet. Better yet, users can add searchable tags that make sorting and finding bookmarks a breeze. If I want to find that interesting website on social media in education, I type “education” into my Delicious system, and then can sort by the subcategory of “social media” within that tag, which brings me to exactly what I want.

Social bookmarking benefits

I find myself storing far more bookmarks than I once did. I have literally hundreds of bookmarks, and possibly over a thousand, but they are no less manageable than the millions of sites I can search on Google. The systems integrate into your browser to make it easy to add a new bookmark. I recommend opening the left side navigation bar in Delicious and leaving it open. This allows you to search bookmarks instantaneously without changing your screen. I’m sure that I visit far more sites each day than I once did now that finding them is so much easier.

But it gets better. A database keeps track of the number of people who store each bookmark. The user can search this database to see which bookmarks are the most popular. For instance, when I was looking for free online music program, I typed “free online music” into Delicious and found Pandora Radio at the top of the list, with more than 60,000 users bookmarking the site. This is quite an endorsement, and Pandora turned out to be a fantastic site.

Both Diigo and Delicious allow users to form groups that let all members to share their bookmarks. I can create a group in Delicious that is just open to my students. When they find a good website, they are instructed to share it with others in the class. They are also required to provide a short description of each site in the bookmark, including why it is of value. This forces students to think about and articulate the value of different sites in comparison to one another.

Resources

Delicious: The first and still one of the most popular social bookmarking tools. Its interface is very easy to use. <http://delicious.com>

Diigo: A little more functionality than Delicious. Allows you to annotate and highlight bookmarked sites. <http://www.diigo.com>

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Unleashing Innovation: The Structured Network Approach

By John Orlando, PhD

This is a true story. Professor “Jones” decides to experiment with a blog in his class. It takes him about 10 minutes to set up a free site using Blogger. He then watches students engage in lively discussions of case studies outside of class, and tweaks the blog as experience teaches him how best to use the system.

Thinking that others might want to add a blog to their class as well, he goes to IT and offers to lead workshops for faculty on blogging in higher education. A few weeks later he is informed by IT that they have not only rejected his proposal, but that he is in violation of university policy and must stop immediately. Professor Jones asks what university policy he has violated, and is told that the policy has not yet been created, but will be soon. Professor Jones asks how he could possibly have violated a policy that does not yet exist.

Soon afterward the IT department announces a new initiative to implement blogging at the institution. A committee is formed, and after nearly a year of deliberation they choose to pay for a system—rather than adopt a free, readily available system—because it allows for centralized control. IT sends out an email announcing the new system, along with a text document outlining a long list of policies that strictly limit how it may be used. No one adopts the system, leading IT to complain that faculty do not want to use technology in their teaching.

Two models of control

Dave Snowdon, founder of Cognitive Edge, provides insight into what happened here. Colleges implement technology using the industrial revolution era top-down

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decision-making model drawn from the military. But it turns out that this model was never successful in war or business (let's call it the General Motors model). Successful organizations like Google are built on a structured network approach—a bottom-up model that draws ideas from its constituents. Google gets many of its best products from engineers that fiddle with new ideas and discuss their projects in open forums. The forums provide for a public vetting of ideas, with the best floating to the top to be supported by the company.

The strength of a structured network is that it provides a medium to draw together the creative talents of its constituents. For instance, Wikipedia draws its content from thousands of contributors, yet has been proven to be nearly as reliable as the Encyclopedia Britannica because it has strict citation guidelines for contributions.

Snowdon points out that technology should come before planning. Often the true power of technology isn't known until users make it their own. Facebook began as a way for Harvard students to connect with one another, but morphed into so much more.

Colleges do it backwards. They start by choosing one system and one way to use it and impose that on users. The smart institution will encourage instructors to try five different systems in five different ways and provide a forum for them to share their experiences. Faculty will see what their colleagues are doing and ask questions, thus generating interest in the technology. Best practices and systems will emerge from the discussion, at which point IT enters the picture to implement those systems that have been proven in the court of public opinion.

The structure of technology implementation is rarely discussed, but until colleges move away from the GM model and toward the Google model they will continue to waste time, money, and talent on initiatives that are bound to fail from the start.

Resource:

See Dave Snowdon's fascinating discussion of structured networks [here](#).

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Save Time and Teach Better with Screencasting

By John Orlando, PhD

It is critical to spend time training your students how to properly use the systems you've adopted into your teaching repertoire. A common fallacy is to believe that because students today are "digital natives"—meaning that they grew up with technology—they are good at using any technology. I've found that students' understanding of technology is narrow and deep. They are very adept at text

Assuming that your students will pick up a new technology on their own is a recipe for disaster. You must also be explicit about *how* you want them to use these systems to avoid them going off in the wrong direction.

messaging and navigating Facebook, but they are not versed in using blogs, wikis, document sharing systems, and the like.

Assuming that your students will pick up a new technology on their own is a recipe for disaster. You must also be explicit about *how* you want them to use these systems to avoid them going off in the wrong direction.

Training your students in the use of technology need not be time consuming. The secret is to only do it once—it becomes time consuming when you need to repeat the training over and over.

You can take time in class to demonstrate how to use a system, but what about the students who miss class that day, or simply forget parts of the presentation? You can write out the steps for an online class, but seeing how something is done is far more effective in learning a process than reading about it.

Happily, it is very easy to make a screencast that walks

people through the process and allows them to view it as often as they need. I've found that it takes far less time to make a screencast of a process than to write out the directions. I've also found that I get far fewer questions about a process with a screencast than written directions.

I make screencasts to explain nearly any task to students or colleagues. For instance, if I make a spreadsheet for my boss or others, I'll accompany it by a two or three minute screencast pointing out which cells contain which information. This saves a lot of time explaining things later. I also make screencasts showing students how to post to the class blog and wiki, and allow them to view them on their own.

Screencasting only requires a microphone, which are built into some laptops, and if not can be purchased for around \$30. The system will record your mouse movements and everything you do on the screen while you describe the process. There are numerous free and easy to use systems, and sites to post the results for your audience to watch or download at their leisure.

Once you start screencasting, you won't want to stop. Have fun!

Links to Free Screencasting Software for Teachers

Jing (<http://www.jingproject.com>): An excellent system from TechSmith which allows users to make five-minute screencaptures and either download the videos or post them to screencast.com.

ScreenJelly (<http://www.screenjelly.com/>): Allows for 3 minute videos that can be shared by email or Twitter.

ScreenR (<http://screenr.com/>): Make screencasts without downloading any software.

Screencast-O-Matic (<http://www.screencast-o-matic.com/>): Allows for up to 15 minute screencasts that are hosted on the site or uploaded to YouTube.

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Integrating Social Media into Online Education

By John Orlando, PhD

Many people take it on faith that online education must be run through a learning management system (LMS) like Blackboard, Angel, etc. Those systems were originally designed to allow faculty to move their courses online without having to learn HTML coding. They provided all of the tools needed to deliver an online course in one package.

As online learning grew, so too did the functionality of course management systems. As the systems grew more and more complex, they became more and more fragile, necessitating the new administrative function of instructional designer to manage the systems. Control of distance learning gradually shifted from faculty to administrator as instructional designers started dictating how online courses would look and function.

Now faculty are starting to wrestle control back from administrators through the use of social media such as blogs, wikis, and VoiceThread. These systems can be easily set up by faculty and students to foster interactivity and user generated content that is not possible in course management systems. Best of all, instead of spending hours stocking the modules of a course management system, a faculty member can create a blog in minutes and spend nearly all of his or her time communicating with students.

But few colleges have a social media strategy. The assumption is still that all content must be housed within the LMS. Systems such as Blackboard are adding social media modules like blogs and wikis, but moving them into the locked-down LMS removes the very openness which gives these media value. The better approach is to understand that the LMS is just one tool among many for delivering online learning, and just like a carpenter, use the tool that best suits the job.

Here are some ways to incorporate social media into your course:

- Faculty members who want to create a hybrid course should use social media systems such as blogs or wikis rather than an LMS. An LMS is good for a fully online course, but requires needless administrative time for a hybrid course.

- Many faculty are teaching fully online courses though a combination of social media and LMS systems. For instance, Michelle Pacansky-Brock uses Moodle to manage assignments and maintain her gradebook, and Ning to teach her class. Steve Kolowich uses Moodle plus Skype and Elluminate to add interactive elements to his online courses. At Norwich University, I've added blogs, wikis and webinars outside of our LMS to provide students with an opportunity to explore issues within the profession that interests them.
- Schools are starting to attach social media “shells” to their LMS. GoingOn provides blogs and other forms of discussion that exist outside of the classroom to allow collaboration between students across the institution. For instance, all students in a business program can carry on discussions related to business outside of their particular courses. Learning Objects is another system that provides students with a “personal learning space” where they can create a blog, share sites, and collaborate in a variety of ways with like-minded students. It also allows clubs and departments to create Facebook-like sites to share information.
- Schools are changing to an LMS built on social media principles, such as Drupal. An open source platform, Drupal gives faculty the flexibility to make student blogs the homepage of their course, rather than administrative functions, encouraging collaboration. Better yet, any part of a course can be made public so that students can engage in conversations with other students, faculty, or professionals in the field.

Education is changing, and social media is presenting a world of opportunity to improve learning outcomes.

Resources

Insidious Pedagogy: How Course Management Systems Impact Teaching [link](#).

Learning Management Technologies: Enterprise Systems or Consumer Goods? [link](#).

Envisioning the Post-LMS Era: The Open Learning Network [link](#).

The Traditional LMS is Dead: Looking to a Modularized Future [link](#).

Drupal: <http://drupal.org/>

GoingOn: <http://goingon.com/>

Learning Objects: <http://www.learningobjects.com/>

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Using Polling and Smartphones to Keep Students Engaged

By *John Orlando, PhD*

It's an age-old problem. You want to make the most of every minute you have with your students, but it's been proven that most people can only retain about 20 minutes of content in our short-term memory before we have to reflect on it in order to move it to our long-term memory or it will be lost. Add to this the violently condensed attention span of the general population and anyone hoping to provide a content-rich education in the time slots of traditional classes faces an uphill battle.

Polling provides an ideal way to both keep a class' attention and provide a reflective activity to move information into long-term memory. Plus, it's remarkably easy. Free websites allow you to set up polls that students take by submitting their answers via text message or on the Web. These polls are a wonderful way to engage students in the material and keep their interest. Best of all, the results appear in real time so students can see changes as they come in.

One good use of polls is to gather information about a subject before it is covered. This is especially helpful when the subject concerns information that students might not want to make public with a show of hands. For instance, a teacher could introduce a discussion of cheating on exams

by asking students in a large lecture to indicate if they have every cheated on an exam. This could be used to demonstrate that cheating is more common than people think. A science instructor can ask students to guess the results of an experiment before it is conducted to generate thought and interest in the outcome. Forcing students to take a position not only creates reflection, but also commitment to results. Everyone wants their position affirmed.

Another option is to ask students for their opinions and use the results as a way of initiating a discussion on the issue. Or you could ask a simple factual question that you know most people will get wrong in order to demonstrate a widespread misconception.

Polls also can be used after content is presented as a means of generating reflection on the issue. These can be simple factual questions that demonstrate whether the students understood the material, or higher level questions that will help them to retain the material.

Using smartphones to conduct polls

While many instructors consider smartphones the bane of teaching—causing distraction and even cheating during a test—polling turns the technology into a teacher’s advantage by engaging students with the content.

In this screencast, I demonstrate how easy it is to use polling software. [Watch it here »](#)

Links

Poll Everywhere (<http://www.polleverywhere.com>)
Unlimited polls with up to 30 respondents on the free plan.

Flisti (<http://flisti.com>)
Super easy polling system. No signup required.

MicroPoll (<http://www.micropoll.com>)
Good for creating a poll to embed in a blog or some other website.

Vorbeo (<http://vorbeo.com>)
Another system for creating a poll to embed in your website.

Polldaddy (<http://www.polldaddy.com>)
Free and paid plans available.

TextTheMob (<http://textthemob.com>)
Free plan allows for up to three questions with 50 responses.

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Lecture Capture: A New Way to Think about Hybrid Courses

By John Orlando, PhD

“Hybrid education” has become a hot catchphrase recently as faculty blend face-to-face learning with online technology. But the growth of hybrid education has been steered by the unstated assumption that hybrid technology should be used to facilitate discussion outside of the classroom, while classroom time should be spent lecturing.

Now José Bowen, dean of the Meadows School of the Arts at Southern Methodist University, challenges this assumption by asking his faculty to put their lectures online and devote face-to-face classes to discussion. His logic is impeccable. Lecturing is simply delivering delivery, and not much different from reading a textbook in this regard. If so, then why must lectures be held in class? An instructor could just as easily record his or her lectures and put them online for students to view at their leisure. Better yet, the time freed up from delivering the same lectures year after year, course after course, could be spent putting together rich multimedia content that combines narrated PowerPoints, podcasts, Prezis, videos, VoiceThreads, etc.

In fact, why should faculty create their own lectures at all? Bowen notes that our system of faculty creating their own lectures is a bit like having every instructor write his or her own textbook. If faculty wrote all of their own textbooks, most textbooks would be terrible. Why not just use the best lectures that have been posted on iTunesU, TED, etc. for content?

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I tell faculty that their real value is not the information stored in their head. After all, nearly all of that information is publicly available in books or journals. A faculty member's real value is in their interaction with students. The back and forth with students in discussion, or commentary on their assignments to improve their writing, for example, is what gives them value. Faculty should focus on this aspect of their teaching and automate as much as possible the simple content delivery part. Yet most faculty have it backwards—clinging to their lectures as their most important function.

Teachers can test the waters of Bowen's teaching model by putting one or two of their lectures online and devoting the subsequent class to discussion of the topics in those lectures. I've done this with wonderful results. But the secret is to avoid the all-too-easy mistake of falling back into lecturing during class time. As faculty, we think that lecturing is our primary duty, and it is hard to break ourselves of this habit.

One option is to assign students to come to class with one question about the lecture content written on a sheet of paper that the instructor collects to initiate discussion. To avoid embarrassment, have the students crumple up their sheets at the beginning of class and throw them around the room for 30 seconds. Then have each student pick up one of the pieces and start reading them in order to guide discussion.

Give it a try, and let me know how it works.

Resources

This video features an interview with José Bowen as he explains why he removed technology from his classroom, and the resulting benefits. [Watch it here »](#)

Lecture sites:

- TED—Wonderful compilation of short lectures on interesting topics. <http://www.ted.com/>
- Free Video Lectures—over 18,000 free lectures. <http://freevideolectures.com/>
- Video Lectures—Great lecture exchange site. <http://videolectures.net/>
- iTunesU—Must download the player to access the lectures. <http://www.apple.com/education/ipodtouch-iphone/>

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Master of Science in Information Assurance programs at Norwich University. John develops faculty training in online education and is available for consulting at jorlando@norwich.edu.

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Personal Learning Environments Help Students Extend Learning Beyond the Classroom

By John Orlando, PhD

My son Alex is an average 20-year-old college sophomore. He gets OK grades, and like many people his age, seems more interested in video games than school. Looking at him, you might think that nothing in particular excites him.

But you would be wrong. Alex is actually very interested in the opposition between science and religion. He reads books about evolutionary theory and creationism, as well as scientific examinations of religious doctrine. He watches TV documentaries on religion and science, and posts videos on his Facebook page of famous scientists speaking on religion. In fact, he talks about his interest at the dinner table and even plans to write a book on it someday (he is actually a very good writer).

We all know that much of a college education happens outside of the classroom. Colleges foster an intellectual atmosphere around campus by bringing in speakers, and one of the purposes of student centers is to enable evening “bull” sessions around coffee or some stronger drink.

Until recently, students had no way to structure their learning experiences around topics that excite them. They attended talks as they came up, or pursued interests with others they happened to meet. But now social media allows institutions to provide students with a “Personal Learning Environment” (PLE) for pursuing their intellectual interests

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outside of the classroom.

Imagine that Alex's university provided each student with a blog to devote to whatever interests him or her. Alex's blog would focus on religion and science. He would post links to articles that he read, as well as his commentary on them. He would start working out his thoughts on his upcoming book, or how current events relate to his interest. But more importantly, Alex would have a forum to connect with others who share his passion. Group members could share articles or documentaries relating to the topic, and bounce ideas off of each other. Because the PLE would be public, unlike the closed Learning Management System, Alex's group would be made up of students and non-students from around the world.

Of course, Alex would still attend classes to satisfy his degree requirements, but his PLE would be a way of extending his education through a self-structured and self-organized learning environment. Whereas some of his classes might intersect his particular interest, everything about his PLE would revolve around his interest. Maybe his passion would eventually fizzle, but until then he would be honing his communication and thinking skills through collaboration with others—which will benefit him in any future pursuits.

Is this concept really so radical? After all, students choose their major according to their interest, as well as their outside activities. So perhaps we have all been creating a Personal Learning Environment around our lives. This system is just a way that higher education could facilitate that pursuit.

A few universities and K-12 schools are experimenting with the PLE to improve learning outcomes. Consider how a PLE can work at your own institution.

Links

“Personal Learning Networks for Education” – A YouTube video explaining the value of a PLN. [Watch it now »](#)

“7 Things you Should Know about Personal Learning Environments” – A nice, concise overview from the folks at Educause. [Get the pdf »](#)

“The networked student model for construction of personal learning environments” – An interesting article from the Australasian Journal of Educational Technology. [Read it here »](#)

“Personal Learning Environments, Networks, and Knowledge – A great free course for educators exploring the PLE. [Explore »](#)

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Education Remix: Unlocking Creativity to Boost Learning

By *John Orlando, PhD*

When considering the major advances in communication — from the printing press, to the telephone, to the television — each medium shared the characteristic of allowing either one-to-one communication or one-to-many communication. But social media changed all that. For the first time in history “many” can speak to “many,” and this has radically changed our world.

People are just starting to understand the fundamental transformation in communication that has occurred during the past five years, and some educators don't believe in the power that social media can bring to learning. They think of social media as students sharing personal information on Facebook. But many students are well beyond that in using social media as a combination entertainment/learning device.

One example is through the new remix culture. Not only do ordinary people create videos that are viewed by millions on YouTube, but when they become popular others soon create remixed versions that interpret it in their own way. For instance, there are scores of remixed versions of “Charlie Bit My Finger” floating around YouTube. Each revises certain elements to apply the central themes to

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some other area, such as work, sports, etc., thus making it their own.

While fun to create, a remix also can be used as a learning activity. A group of medical students did a remix of Justin Timberlake's "Sexy Back" that they titled "Diagnosis Wenckebach." Wenckebach is a cardiac arrhythmia, and the resulting video has been viewed by millions. It is now being used by medical students around the world to learn about the condition.

Creating the video was a learning activity. The students who developed it had to fully understand the condition and how it is treated in order to create a coherent and accurate narrative that fits the melody, as well as elements of the original theme.

Remixing is also a fundamentally creative process, as the creator must develop links between two different topics. The process forces the creator to see the topic from new perspectives. This gets to the very heart of creativity, and even genius. Many great scientific breakthroughs were a result of connecting seemingly dissimilar elements. For instance, Einstein came up with his General Theory of Relativity when he saw workers on a roof outside of his window and imagined what would happen if one fell off.

One simple way to use remixing in your classes is to provide extra credit to students who develop a short video that reinterprets some part of popular culture in a way related to the class subject. The original can be a song, commercial, movie, etc. Students can also remix elements of photographs or text.

Consider how remixing can foster engagement, creativity, and learning in your classes.

Remix examples:

- "Diagnosis Wenckebach" (Student video. A lot of fun. Trust me.)

<http://www.youtube.com/watch?v=GVxJJ2DBPiQ>

- The Class (Parody of "The Office" for a class)

<http://mediatedcultures.net/ksudigg/?p=254>

Discussions:

- TEDxNYED—Lawrence Lessig (Great discussion of remix culture). [Watch here](#)
- The Machine is (Changing) Us: YouTube and the Politics of Authenticity (Discussion of social media and communication forms) [Watch here](#)

- How Social Media can Create History (Discussion of the transformation brought about by social media) [Watch here](#)

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Effective Uses of Video in the Classroom

By John Orlando, PhD

Social media has allowed anyone to become a video producer. The result is an explosion of high-quality teaching videos. Thirty years ago a teacher might show a PBS video in class every once in a while, mostly just as a break from the usual routine. But today there are thousands of videos from which to choose.

Some teachers are resistant to showing videos in their classrooms because they think of them as cheating. Teachers get paid to use up class time, and filling it with something made by someone else seems like shirking their duties.

But this is wrong. A teacher's value is not in the information stored in their head, but rather their ability to pull together the best learning resources to produce a desired outcome. The modern teacher is (or should be) more an aggregator than a producer. Why are thousands of teachers all reinventing the wheel by creating individual lectures on the exact same topic when someone else has already produced an excellent video on it?

Think of videos as a way to bring the best learning resources to your students. One of my favorite resources is TED talks, which are wonderful 20 minute segments by famous thinkers on a variety of topics. My motto now is "If someone can say it better than you—let them."

Below are some excellent videos on learning itself which

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are well worth a view. They opened my mind on what teaching really is, and what is possible.

I have also included some repositories of free lesson and video material. I hope that these will provide you with some good material and ideas for use in your classes.

But first, for your holiday enjoyment, another example of the power of social media.

Eric Whitacre is a composer who wrote “Sleep” in 2000. A young girl sent him a video of her singing it, which gave him an idea: Why not invite anyone to send in videos of themselves singing different parts of the song—Bass, Soprano, etc,—which he would then combine into a “Virtual Choir.” The video isn’t about teaching with technology, but it’s nothing short of way-cool.

<http://www.youtube.com/watch?v=D7o7BrlbaDs>

Videos on Teaching

Jeff Jarvis—This is Bull....

A discussion of how traditional education is built on a model of the transfer of knowledge from instructor to student, but that more and more people are reversing the flow by making education a collaborative experience.

<http://www.youtube.com/watch?v=rTOLkm5hNNU>

Dan Meyer—Curriculum Makeover

An interesting presentation that explores the intersection of instruction, multimedia, and inquiry-based learning, and how the way we teach students isn’t preparing them for problem solving in the real world. While presented by a high school math teacher, the concept applies to most any subject in college as well.

<http://www.youtube.com/watch?v=BlvKWEvKSi8>

Links to Video and Lesson Material Repositories

Open Courseware Consortium
(<http://www.ocwconsortium.org>),

Open Learning Initiative (<http://oli.web.cmu.edu/openlearning/forinstructors>),

OER Commons (<http://www.oercommons.org>),

OpenLearn (<http://openlearn.open.ac.uk>),

Academic Earth (<http://academicearth.org>),

Video Lectures (<http://freevidelectures.com>),

Einztein (<http://www.einztein.com>),

Federal Resources for Educational Excellence
(<http://free.ed.gov/index.cfm>),

Apple iUniversity
(<http://www.apple.com/education/mobile-learning>),

Scitable (<http://www.nature.com/scitable>),

World Public Library
(<http://worldlibrary.net/Collections.htm>),

Video Lectures (<http://videlectures.net>),

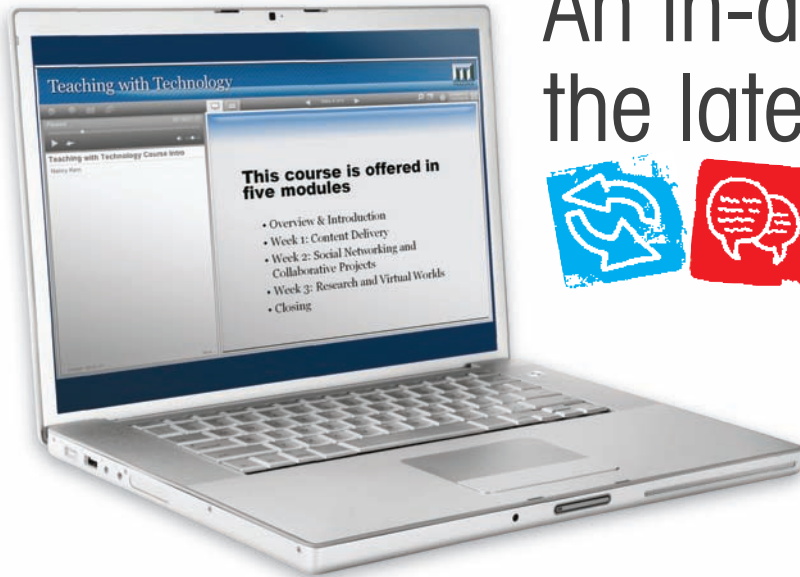
Lecture Fox (<http://lecturefox.com>.)

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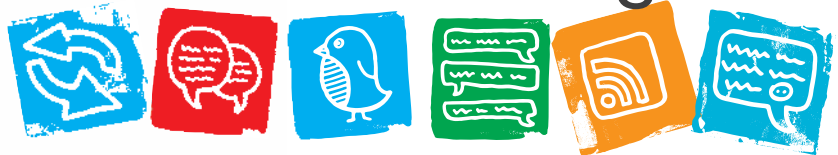
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John Orlando, Ph.D., is Instructional Resource Manager of Norwich University's School of Graduate Studies. He's a long-time veteran of the online classroom and faculty training programs, and he'll lead you through the course with a friendly, engaging style.



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