



Morning Discussion Directions:

This morning's presentations showcased teaching technologies (blogging; ordinary objects that serve as models; translation of text to audio and audio mixing; and highly collaborative, hands-on, computer-rich, interactive learning environments) that faculty members can use in creative ways to enhance learning across a range of disciplines.

Question 1: *Which of these technologies and approaches might you incorporate in your own teaching and how would they change your students' learning?*

Red Group


Instructor: I'm interested in having the students interact, partly to share ideas with each other and with students in different colleges, and partly for the sake of practicing these skills. But, blogging creates confidentiality issues—ICON is a bit safer. But, I like the idea of using technology to having students practice a skill.

Another Instructor: Technology in the classroom has two purposes/forms; 1) communication, interacting with other students/teachers, community-based, and 2) learning skills, interacting with a model, individual-based. In some disciplines, one form works better than another.

Different Instructor: Tablet PC-based software can be used in math/engineering classes; student answers are beamed onto the teacher's tablet and the big screen, to make interaction in the classroom faster and easier.

Another Instructor: Different faculty might approach the same technology in a different way; being able to capture these differences would be a powerful tool.

Different Instructor: I like the alpha-omega technology, with the paperclip and such. I'd like to focus more on marshmallow-type technologies. I'm concerned that blogging is time-consuming and reinforces bad habits in student writing. We would need to attack careful writing in another way. I just don't see how it could work. There are certain instances where that kind of time investment would be useful, but in a lecture-style class with 250 students, it doesn't seem practical.



Another Instructor : The pecha kucha stuff is interesting to me, because you can cut the excess and get to the nitty-gritty faster. I also think the distance learning options available with this software is interesting—it terms of time and money, it might be efficient. Instead of meeting 5 days a week, for example, you might meet 2 days a week and have the other sessions computer-based. At the literature/culture level, for undergrads especially, I've been trying to find ways to accommodate an approach that is based on problem-solving, inquiry-based, but in the context of larger classes. For example, I have a class of 175-200 students. But I have another course with 60 in it, and 40 would be optimal, where you would have a table of nine and you could use on-site technology to make use of teams to do thought projects and research projects to structure each module. I can see that working. On the blogging thing, I made a mistake of having my students write 2-page reflection essays, 6 in the semester. $6 \times 60 = 360$. They come into the ICON dropbox. The good news was they weren't revising the essays so instructor response didn't need to talk about revision ideas, but they did have some basic grammar issues that you can't let go by—so it was super time intensive. I ended up just hammering in class that I would give a sentence and a number in response to each post, urging students with problems to come see me. But I just didn't have the time.

Instructor: I had the same problem—commenting can be so time consuming.

Question: Are the connections fast enough that you can actually communicate? Skype seems to skip/lag.


Response: I think if you have a DSL or faster connection that you can do it. Wired is definitely faster than wireless.

Question: Does the college of med communicate with doctors off-site?

Reponse: We're beginning to. Getting to medical records, for example. We're going to start opening up charts to the patients, which will be a whole another world to deal with. I know it's all coming. We're just not quite there yet. But I have problems—I have students who are still on dial-up. I've discovered it's just not good use of my time; I can only make my lecture so small.

Different Instructor: Screen-cast is a good option—it takes a lot of time to set up, but once they're done you have a library.

Another Instructor: You have the *start* of a library. They're never good enough, and you're always re-doing them. You have to constantly revise to keep up with the technology. I find it to be more of a commitment than it's worth, because you can't do it halfway. You have to get really, really into it to make it worthwhile.



Different Instructor: You've got to find balance. There's only so many ways to play the B major scale.

Instructor: My content, on the other hand, changes all the time. It's very frustrating to have to redo them.

Another Instructor: Once you start capturing stuff, you start to fine-tune in a way that you can't if you just wing it. So you stay on task and make yourself a better lecturer by revising, but it can go too far. The students get better content, better delivery, and more efficient learning. In a sense, we can get more knowledge into the students' mind in the same amount of time. Technology lets us do more things in less time. It's a potential but a challenge.

Instructor: 1/3 of our medical students don't come to class at all--because they can see the lectures/powerpoints online. As long as they can pass the test, they don't need to come to class anymore. They don't see any need to come. And that's a problem.

Another Instructor: I'll take the devil's advocate side. If they don't see coming to class as beneficial, then the class needs to change. This is something that makes me nervous. Will there just be one finance professor in the future?

Different Instructor: VHS didn't replace teachers, so I don't think computers will either. I teach big lectures. Even if I were to put 1000s of hours into making the perfect video, they wouldn't look at it. There's a lot more pressure on medical students. Take a first year student who's just discovered beer and sex, and I don't think they would actually look at the podcast at all. There's no accountability.

Orange Group


One instructor runs a safe question zone.

A librarian is interested in using blogs for community outreach to promote and inform those interested.

An instructor was nervous about implementing new technology in a class she taught over the summer because she felt the students were already too immersed in technology.

Group seems interested in using blogs to track academic development in students throughout the semester. Blogs will allow teachers to identify how well students are understanding the material.

An instructor is frustrated by what teachers describe as a lack of knowing what knowledge students bring into the beginning of the course. She talks about how certain



students describe a class as meaningless, and fail to attend. These students generally fall into the D-F range.

Group is talking about using surveys and clickers to enhance student learning by keeping them engaged.

An instructor brought up a great point in terms of communicating using a blog. He brings up a valid claim. He is apprehensive about posting important class information on a blog rather than the more traditional direct method of email or icon announcements. He questions whether students will take the extra step to check blogs or other media.

Yellow Group

Group: The first technologies discussed were the discussion boards, blogs, and Illuminate Live.


An Instructor stated that she is using those technologies for her online courses. Specifically, the blog is being used to disseminate information about grants to students and others. The discussion boards are being used for assignments in her online courses. And Illuminate Live is being used for virtual office hours for the online courses. The instructor stated that she is having students undergo an orientation for the technologies prior to the open of courses so that they will be familiar with all of the technology used for the courses. The instructor is pleased with the support and assistance of the SITA group of ITS in setting up and utilizing the technologies.

Another instructor mentioned that there is a technology that is specifically designed for online teaching. Other participants agreed that Illuminate Live is ideal for those persons with low bandwidth. Participants also discussed the use of Skype and Illuminate rooms for the enhancement of courses. It was mentioned that one benefit is that the desktop can be shared with Skype.

An instructor asked if others are using Captivate and Camtasia as well as the aforementioned technologies to enhance learning. The other participants had not yet used those technologies.

An instructor discussed what technologies are being used for local courses as opposed to the online courses. One instructor mentioned that he is using blogs for his course. Another instructor mentioned that she was not aware of the difference between wikis and blogs and asked for clarification.

An ITS Staff member advised that the blog is mainly a one-way flow of information that others cannot edit, whereas the wiki can be edited by more than one person in more of a collaborative effort.



An instructor mentioned Google Waves and another participant stated that that might be less useful for some international students as Google has been pulled from China. That instructor further discussed that she is considering what is involved with sizing the digital materials that can be posted to the blogs since many students use their smartphones to read blog material.

The ITS Staff member advised that there are discussions about the guidelines for sizes of videos and digital media for blogs, and that there was previously also a need to change some coding in ICON so that it could be properly opened on the smartphones.

Group: The discussion turned back to the use of Skype and one participant mentioned that the advantage of Skype Illuminate is having students just log in with their hawkids and passwords to authenticate.

An instructor mentioned that the question of what technologies are needed for the new music building, and the faculty of the department do not have a wide range of knowledge regarding technology at present. In addition, he noted that new technologies are continually being produced and that some technologies that are used at present may be obsolete in five years. Furthermore, the instructor stated that there should be someone with technological knowledge who can explain what options there are in terms of technologies that are available and to advise what the new music building should incorporate.


Green Group

Group: Question: What was gained from the blogging?

Response: Read each other's journals. Conversation between students. Share resources. Say things about work (i.e. more artists than would otherwise not have covers. Connection with future professionals. Doubled the size of the material covered. The blogging offered a central location for the text so that notebook did not have to be passed back and forth.

Instructor: The piano technology provided instant feedback. Material passed back at the end of the semester is not considered by the student after the class is over. They miss the feedback. Immediate feedback is important to the learning process so that it can be incorporated into their next version of the work. Students benefit from instant feedback.

Instructor: Like the idea of using the technology to communicate one on one to students, allowing the rest of the students to continue to work. The teacher could interact with the individual or group (as in the TILE classrooms) allows feedback and interaction that is specific to targeted students as opposed to the whole classroom. This



also allows the instructors to get to know all of the students more closely as opposed to struggling to get to know students in a large classroom.

Group: seemed to be an interest in knowing about TILE classrooms. Takes a large classroom and breaks it up into small groups.

Response: It is important to arrange the room so that computers are a tool, but do not take away from the personal interaction between the students. For example, a classroom designed with the computers against the walls so that students could gather in the middle of the classroom and interact.

Instructor: Using technology to accomplish repetitive tasks of which there is really no learning going on.

An instructor expressed the concern was the components of learning that it lost when technology is used (i.e. the touch).

Response: technology should be a value-add to the learning experience. We don't want to lose the tactile components. The example of the Wii was used. The motion of the games are not the same as actually playing the game with someone else.


Blue Group

An instructor states that the point is how the students can use technology. His students produce communication projects using YouTube and Facebook and the real challenge is to find a forum where they can use the technology. What he would like to do is to teach students how to make little film. He liked having a bog, and a wiki, but the oral part of Jeff Porter's lecture was great, and maybe we can incorporate models, and also reflection.

Another instructor states that reflecting on what you do and the impact on instruction is important, and not only how fun something was. She uses cartooning (low tech), by hand and then scanning, so that they create a story.

A different instructor states that instead of what approaches and technologies, we can think of what kinds of problems we can address, we can handle with some of the ideas we were presented with. It is easy to think about the "flashy" stuff, but it is important to ask "What is the problem we are trying to solve." For example, a situation that would typically NOT call for technology, and there appears a problem which CAN be solved through technology, like in the Piano presentation.

Another participant: It is a conceptual thing, I think. In many disciplines we think of "text" approaches to what students need, But then there is the question: "Why do they



come to class?” It is not only having a text that we pass on so that other can hold it. We know so much more than this, more than the text alone. The idea is to also be reflexive about it, so that there is a difference in meaning, to avoid this orientation to just transmit a text.

A librarian states: I don’t know where to start sometimes because people are at different levels when they search for information, some know how to use databases, some not.

Response to librarian: You can get information in hundreds of places, what can not be replaced is the expertise in problem solving, and that is the part that has no brochure for. Just repeating things, repeating a text is not all we teach, the idea is to move it out in other spheres.

Another instructor states: One of the things we try to tell our students is that there is meaning in text, but also meaning in context. We read the content, but the context is different. In Mexico, things have a lot more context, a lot that is transmitted in it. Whatever is in the context can be important for a business deal, for example. Do you have your students cartoon to express this?

Response to question: So that drawing has to represent a narrative, otherwise it has no meaning. Maybe using video in place of text reflections, and journaling, can also bring about something genuine, not only “we had a nice time”

IT Staff Member: That is part of what I do, and the context, and how to reflect on a learning experience and link that to your own experience. Shaping experience. For example, Second Life, one of the big problem is that some people use it without thinking to an experience. It is not a solution for everything, it is not good transmitting information, but the idea of experiencing things online, not just spitting out information is valuable. A game, for example, I think is important (just like videos) because they are interactive. We can make it easy for students to upload videos, to comment. We are working on that, is coming.

Response to IT Staff: You can also flip that around, for a good spreadsheet and business plan. A spreadsheet is a narrative too. If it does not make a coherent story, just like a business plan, it doesn’t make sense. We can look a technology that way. Not only numbers, but there is a story there, a story which should make sense. If you do a business plan, and do not get what it is about, there is no use.



Purple Group

Instructor: I am going to post a question of the week on ICON. [It will say] write down what you want to learn. I will encourage the students to comment on each other's comments. I've never done this before.

Another Instructor: Anonymity is the best way. I've done that with success.

Different Instructor: I teach nursing and health informatics. I mostly use ICON's discussion board because it has an advantage over blogging in terms of confidentiality. But blogging has potential for forming interest groups around technology and for career development. [The video conferencing shown in] the music demonstration – that's doable.

Instructor: It was Skype and internet [meeting?] used together.

Different Instructor: Big bandwidth?

Another Instructor: Echo 360. If you want to show a presentation remotely. Personal desktop capture is easily possible.

Instructor: My students aren't happy with ICON; it's hard to find the posts and too many barriers. It's a monster really.


Librarian: I teach one-shot classes with a condensed format. Skype might be good as a tool for reference librarians. The person with the question can share and show their screen but without the security issues.

Instructor: A good way to get on the same page when you're in different locations.

Librarian: Some people are visual [learners] like me. I'm not going to get it from the talking.

Different Instructor: My students research video games and journal as they are playing the games. They keep a paper journal right now but maybe instead could record and upload audio-file journal entries to ICON.

Another Instructor: I had some ideas for pharmacy classes. Faculty members are assigned mentees. How we conduct that relationship, it's up to us to decide. Blogging is one way of creating this little community for them and you. Blogging could lead to more face-to-face interaction.



Librarian: Faculty will probably seem less intimidating in a blog. Not too busy to share ideas.

Different Instructor: Can technology change the way students learn? How do you discern students' learning needs?

Another Instructor: Will technology enhance learning for everybody? No, it depends on what type of technology. Also I see the challenge as adapting the technology to students' needs, even so you can't reach all of them [through technology]. It's a blessing and a curse. I'm not sure technology is the answer for all kinds of teaching and learning.

Librarian: Students love to work together. Some technologies foster that.

Instructor: ICON is a love hate relationship.

Different Instructor: I teach all facets of technology as it relates to business students.

Pink Group

The technologies showcased this morning can fit into both quantitative and qualitative courses. However, there is no "one-fits-all" model for all instructors. Each course needs distinctive tools to serve its educational objectives and the students' learning styles.


Some students might not like the use of technology at all. The instructors need to find out what works best for their own classes.

A participant stated that teaching is like building a bridge, which requires a wide array of skill, technology and information. Instructors have to be constantly making choices as well as to be reflective and resourceful in order to meet the demands in the dynamic learning process.

In terms of constrains of using technology in the classroom, participants identified that class-sizes, personal preferences, department budget and students' budget could affect the relevancy of the technology.

In previous generations, teachers tended to dominate the classroom. How to release the control of the class and incorporate other types of pedagogy and assessment is a challenge to today's educators.

A participant stated that students work twice as hard while technology is involved in the assignment than without technology (e.g. submitting a paper). Students are



particularly motivated when they are making a movie or a sound bite, with which they can show off to their friends later.

Teaching should remain organic – technology shouldn't outshine the goal of the class and what students really need.

White Group

In the group a variety of disciplines were represented, including library representatives as well.

A faculty member in physics mentioned how he already incorporates model technology in the classroom already. He has found models to be an effective way to engage large level classes. Years later students have told him that they remember certain concepts that were taught through models. "Things stick beyond the class."

A faculty member from nutrition discussed her success in teaching through tactile models.


Many expressed their the wider framing of technology to include non-computer tools, including plastic models, candy and Hershey's kisses. The use of candy, brainstorming, ice-breakers, and impromptu role plays was discussed as ways to engage students, encouraging them to participate on a number of levels.

After the presentation on literacy and orality, some in the group mentioned that they would attempt to incorporate listening more in their classes, e.g., incorporating NPR as an additional class text.

The downside of putting all information online, including videotaped lectures with accompanying PPT, is that coming to class oftentimes becomes seen as irrelevant. Some students in professional schools have insisted that they should learn at their own pace, even if that means listening to a lecture at 3am while on the treadmill. Low student attendance can be frustrating for faculty members who invest time in a lecture only to give it in front of an empty classroom. One way to encourage regular attendance is through Clicker technology. Students appear to prefer anonymity, and because of this, Clicker technology has provided a way for students to participate with little risk of losing face.

The role of an instructor has shifted from one who transfers information to one who coaches students "through the hard bits." Practice moves beyond book work.

A faculty member mentioned the decentralized notion of instructors who have shifted from being a "sage on the stage to a guide on the side."



Some suggestions for student engagement include: inviting students to leave notes/questions on the podium for the instructor and letting them know that it is their responsibility to learn.

Evidence suggests that attendance is worth about a letter grade improvement in some courses, controlling for aptitude and other factors.

A faculty member in the health professions has found that students appear more willing to talk in small groups. The fear factor is reduced, and some students find it easier to speak when they are speaking for a group, not just themselves.

Next, the discussion turned to blogging. Some found that they fostered a sense of community and were effective for reflections, rather than assignments that require “a more in-depth product.” The need to protect students’ privacy was discussed, something that was mentioned during the presentation. A couple of participants mentioned the different functions of discussion postings (ICON) and blogs. They found that blogs appear to be more appropriate for more informal, reflective (often unedited) assignments. On the other hand, discussion board postings may be more appropriate for “saying something more substantive.”


Next, the practicality of interactive video-to-video software was discussed as an alternative to a transmission model of distance education (which meets once a week). Virtual office hours were discussed. The technology exists for phone-to-phone interactions as well.

Question 2: *Technology enables increased access to knowledge and immediate participation in the discovery, processing, creation, and dissemination of knowledge. How does that change the roles of and relationships between instructor and student? What are the ramifications of these changes for you and your students?*

Red Group

The roles of instructor and students have shifted with changing technology. The instructor has a more interactive role. Clicker technology allows for way to interact with students that may appear to be less intimidating than “putting them on the spot.” This may be particularly helpful when teaching freshmen. A low-tech way to do this would be to use color-coded cards.

A helpful technique that a faculty member discovered at The Center for Teaching is 10 + 2. After 10 minutes of lecture, students turn to their neighbor and consult in a private way first before reporting back to the rest of the class.



There are multiple ways to assess learner progress, including 10+2, minute papers, discussion boards. These techniques can be adapted to meet the needs of particular classes. Angelo and Cross have a nice reference book on assessment that is available through the Center for Teaching library.

The instructor's role is one that shifts from a provider of knowledge to one who guides a student through using that knowledge to solve problems. Through the expanding technological tools, instructors are able to look beyond text-based assessment. With low tech digital video now available, there are more options to interact with students and how we assess their problem-solving skills. How does one assess these different tasks? The expectations for in-class and out-of-class activities have changed.


Oftentimes students feel that instructors are available 24-7 via e-mail. Phone calls to the instructors' homes are fewer, but many students appear to expect instant feedback to their questions and concerns. The importance of outlining a communication policy in the syllabus was discussed. E-mail communication appears to have minimized the use of registers. A couple of participants mentioned the opportunity to teach civility and the use of appropriate registers.

Next, the topic turned to lecture capture systems, including Echo 360 and Camtasia. Those who have used the technology shared their experiences. One found that it is helpful to have students engage with through completing a worksheet rather than having the lecture as a standalone. Also, video captures seem to work more effectively when broken into short videos (1-10 mins). The participants discussed the importance of communicating expectations clearly, especially when it comes to how students need to spend their time (e.g., how much time is spent watching the video lecture).

Orange Group

An Instructor brings up an instance someone described in the previous group meeting about a teacher who used the live chat interaction system on ICON and encouraged the students to talk to each other about questions. This led to poor reviews at the end of the semester for the teacher who was viewed as "not doing anything". The students were upset because they felt they didn't need a teacher and all they did was talk to each other.

Response: The relationship between information and knowledge. How there are room full of wikipedia experts who looked up a few facts, vs. those to specialize and look extensively into the subject matter.



A UI Instructor: brings up that teachers should not be gatekeepers in regards to limiting research materials, but rather shepherds, helping students responsibly use the internet to do research.

An instructor up how internet is both an incredible source of knowledge as well as an endless supply of distraction.

Another Instructor comments on how modern students blend work, school, and social lives together.

An Instructor: brings up a software feature that he uses in statistics courses that are sometimes taught in computer labs. Typically students could access the PCs during class and the TA's would find themselves talking to a completely detached class. This software allows the TA to control the class computers and blank the screens. The students typically don't like this but it forces the students to focus.

An instructor states how she recognizes how modern students have a very high capacity for technology and she wonders should she rise and become more familiar with the way that modern students learn and communicate.


Instructor states that teachers should find the technology that suits their teaching style. He says that he has seen clickers being used in great fashion however he would not use them because it doesn't fit with his teaching style. Each person must figure out what sort of technology would benefit them the most and fit most cohesively with their pedagogy.

Discussion ensues on students' feelings of PowerPoint, and how some students may not like them, but anarchy will ensue if they are not present. An instructor brings up how many students simply don't know what to write if there is no power point to take notes from.

An instructor gave a few examples on using a rapid pace slideshow to literally "dump" information into students heads, or another example of giving a lecture that scrolls on the screen in a way similar to the star wars opening.

Yellow Group

The question asked is how to encourage students to use the technologies selected by faculty for the course. Specifically, how does one get students to engage in social interactions using the technologies. One participant stated that consultation for her medical students is a part of the grade and that encourages the students to use the technologies to interact with each other. She also noted that when the topic is of interest to the students they do participate willingly. Furthermore, she advised that it must be clear that the use of the technology is required and they must also have it used



by a specific deadline. The participant stated that she gave credit for the use of technology for discussion and used the quizzes in ICON as a way of also keeping the students aware of their progress.

A participant asked how one goes about grading for the online discussions and the aforementioned participant stated that she is less concerned with the grade but simply gives credit for the use of the technology. Another participant noted that using a blog requires giving feedback that allows the students to know that you understand what they are communicating. In addition, the participant states that the quantity of reading and writing is what is important for the learning process of the students in his courses. The participant also states that it is beneficial to be able to ascertain who is participating in the class.

A participant stated there is also a question of how technology changes the role between the teacher and student. The interaction online is very different from the traditional relationship.

One participant stated that professors need to be able to generate the interest and motivation for the material dispersed by using the various technologies. He stated that the students would be more self-sufficient and professors would become more like observers with some types of technology used which make the students take on a more active role in learning.

A participant stated that there are some classes for which many students do not attend but rely upon Camtasia to get the material for class. **Another participant noted** that some of his colleagues require that students attend courses to avoid the problem of students not attending lecture. **The other participant stated** that the Clickers technology is also used and the students lose credit if they are not present to participate in class using the Clickers (the inclusion of questions in the lecture is not announced beforehand). Moreover, the student IDs of the students are checked when they enter the class. **The participant also stated** that the use of Clickers is beneficial because she is able to know what the students are understanding and what material needs further explanation. **Another participant stated** that the College of Business has been using Clickers for about five years already, and they allow the professors to know how much of the class is up to speed on the material. **A participant stated** that some students are able to use their iphones to answer Clickers questions using texting. That brought up the question of what happens when a teacher usually wants the students to turn off their phones to avoid distractions.

A participant noted that the students must be given a time frame in which to answer or they will take a long time when using Clickers.



Green Group

Notes are missing for Green Group, Session II

Blue Group

In a larger lecture, instructors used to receive limited feedback. Now with ICON and blogs, students can post their questions before the exam and instructors can detect the problems students commonly have with the course materials and guide students' learning more effectively.

Technology places more responsibility on students.

Students now don't check emails – they spend more time on Facebook and Twitter. A sentence like “check your email daily” is now needed in the syllabus.

Technology could take away students from the physical classroom because they could access the course video online or watch another instructor's lecture on the Internet. This leads to a question: Why should students come to the class? What could/ should a class provide?

According to the ITS participant, when a class was videotaped and could be accessed online, students in fact watched it over and over again. This shows that students do want to learn but in their own pace.

Students can post their work on the Internet (YouTube) and later the instructor might be able to use the students' work as course materials.

Teachers and Students can share their resources online. For example, students would like to see what reading list the instructor has on a particular subject.

We need to teach students how to identify “credible sources” as students are searching information online.



Purple Group

Instructor: Students also want to get quick responses, which is a challenge for me because I am not technology oriented, and I cannot be available all the time. Technology can change the T-S relationship because we can provide support through it, although students can get frustrated if they do not get support fast.

Wrangler: you mention frustration, do you think they are more or less frustrated when technology is in the mix?

Instructor: In general, I think students understood before that things take time, but now, students want to figure things out themselves, and quickly. The instructors should guide students to find the resources that they need.

Another Instructor: it is a grand question, and it might be true that there is more bidirectional communication, some equalization (that is not necessarily true in all cases). That poses challenges. Sometimes the relation T-S becomes distant or remote (online, for example), and some things need to be adjusted. So, it is important to think “what kind of faculty development initiatives can we develop to alter positively those relationships?” We focus on hardware and software, and we forget of equipping faculty members with the skills that they need to use technology.


Question: What kind of software do you think can help?

Response: We are piloting a project to help faculty to be successful mentors in an online context. To think how they can be successful in that role. I don't think that we have hard and fast answers for this. A lot of exploration needs to occur.

Different Instructor: This makes me think of the idea that we don't have to use all technology because we CAN. We have a small teaching lab, and we run students to understand, say, human motion. How do you set up a lab so that students, in 45 min, can get even interpretations so that they have a credible report. The implications can range from extensive studies that can last months, so how do you condense this? The implications of having technology is that we don't have to use it if after studying the implications, these have many difficult parts.

Wrangler: Our estimations of “how long is it going to take” might not match the actual reality of the situation.

Different Instructor: We have to be aware of how we expect things to screw up, why and when. What is the contingency plan. If the power goes out, what do you do? If there are no projectors, no sound. One time, this facilitator told jokes in the dark for 10 min, and it was great. That is something to think about, what versatility do we have in our contingency plans. I try to remind students that the opposite of PowerPoint is “PowerPanick.”



Yet Another Instructor: From a teacher and student standpoint, we have to realize that we don't have to use technology just because it is there. I teach in real pianos, with the technology of the instrument only, but I look for technologies that make my life easier, and my students' life easier. I was inspired by the blogging presentation because I think that might make my life easier, class management easier. But in music, we deal with technologies in different ways, so that students can record themselves in an easy, cheap way, with acoustics built into the wall, so that students can download it into iTunes and play it...

Different Instructor: Just the existence of the midi format is amazing...

Yet Another Instructor: Yeah, but we have to think if the investment is worth it. If I have to spend weeks learning some piece of technology, and the outcome is "It is cute", I will stay away from it. The good thing of the technology we have in the School of Music is that it is efficient and can be used immediately.


Instructor: We have some medical stimulations that are 20,000 dollar worth but research shows that low tech can work just as well, and the technology can get of the way, actually.

Different Instructor: It is important for people to understand how to operate from basic principles. If you lose all the technology, you want to be able to work from these basic principles.

Another Instructor: As an engineer, I can think of a positive side about technology. In large classes, I can get contact with students though email, one on one, which might be an advantage for many students. And for the shy students, it might be easier, less problematic, to write to me directly, instead of the TAs. UI is a great resource to learn how to do this, the ITS folks, they can help you work through things and teach you how to do things with teaching technology. Having access to these resources, and events like today, these are important advantages we have as faculty.

Different Instructor: This idea of immediate response, this culture now, it is all about the next thing, the next thing. How does this affect the idea of a "work in progress"? If students feel that once the project is done, it is all over, that is a problem. And that can be a problem with technology. Before, we taught the idea of going back and fixing it. Now it is about moving on to the next thing.

Instructor: Yeah, doing things in Pecha Kucha, the 20 sec slots, made me think that there is a danger, which feeds into a problem in society which is not getting to the core of things, staying only at the surface and moving on, without learning anything, without having any memory of it. I think that "popular" technology can have this danger if we don't know how to use it.



Different Instructor: The other side of that is that (as you see the video that I recorded on my iPod) something that can take you 50 minutes in class, you can say in 10 minutes in a video. This technique of doing things in a short amount of time, we can transmit the same amount of knowledge and furthermore, we can rewind it, and they can play it over and over. If we think of squishing every class by so many minutes, done in the right format, students do not complain, and they might know what is happening. Real time takes time. If we capture that, edit it, the students can get a streamed experience, that is actually at double speed. If there is a delay in real time, that is a waste of time. If we remove all the delays, we could have an advantage.

Wrangler: They might get the same output from you, but are they getting the same experience?

Response: My students tell me, “you know, I watched the video 4 times, and I finally got it.” Some students get it in the first try, some take longer. Having the opportunity to see it several times helps some.

Different Instructor: There is something on the Web, from MIT, from a professor that explains differential equations in a very elegant presentation, which can be playing over and over. Students have different learning styles, and something might resonate differently with different students. As a graduate student, I used to get different textbooks to get different perspective. Replaying things over and over is wonderful, but students might need a different take to understand a problem.

Wrangler: Do you have a sense on how this affects the students’ creativity?

Response: The class is very non-creative, very “skill” oriented. The outcome is that students learn scales, harmonies, arpeggios. It is more of a music class than a piano class, in that sense. So they are learning basic music skills. What we HAVE seen is that it helps our versatility as teachers, more possibilities, visual, aural, technological. Because they know so much about computers, some of them can “self-teach”



Pink Group

Technology creates the challenge to have more depth to assignments... With i.e. blogs, their response may be quick and superficial. It is a challenge to get them to think about the material at a deeper level. There is almost too much stuff.

By allowing students to choose their subjects enables instructors to see their interest and challenge them in an area they are interested in.

Changing the rules of the game. Locus of control to the students has both positive and negative aspects. Mostly positive. There is reluctance to take responsibility of their own learning.

These methods are messier... there are trade off. Instead of just telling them what to do, we take on a new role as educators.

There is a pressure to implement distance learning. What does mentoring look like with distance learning?

How do we build a community in education with technology? It is a challenge. You can create virtual friendships.

As an instructor, there is more information to sort through.


Everyone is the knowledge-holder... not just the instructor anymore. The instructor now becomes the facilitator.

As an instructor, how do we balance nurturing creativity, allowing students to think, and at the same time, reign them back in from their wacky ideas?
Does technology allow us to have students think instead of just getting the answers for the test?

Technology serves two purposes: Access to knowledge and social connection. This frees the instructor up to be more of a fact conveyor to a discussion leader. It does increase the student's workload. Technology allows students to learn the real-world application.

Technology can be a distracter from learning. For example, electronic books with links... students follow the links instead of following the book. Can the teacher be one who focuses the students' attention?

Technology is a teaching opportunity for teaching students how to find good information?



Videos of students singing and then critiquing the signing. On YouTube does not provide the quality to enable professional critiquing. Must get students to focus on what is important.

White Group


Instructor: I would like to focus on participation. I strive to have it increase how we work together. Separated in space and time from our students, it really has to work in a way that we can't do face-to-face. It shouldn't just reiterate verbal conversations, because it will always be inferior. It needs to do something new.

Another Instructor: My first instinct is to challenge the second half of this statement. I'm not sure that I'm trying to get them involved in the creation and process of knowledge. I teach first and second year students. I have a body of info that I want them to understand. I want students to do research, but I don't want them to reinvent economics. I want them to understand what's gone before before they start reinventing economics. I'm worried about this idea that every voice is equal. There are a gazillion people online who think they know economics, and this expansion to access makes us stop paying attention to where info comes from. Just because an idea is on the internet doesn't mean it's legitimate. 20 years ago this wasn't a problem. It's a waste of my time to explain this distinction to students.

Different Instructor: I agree—but I think there's a bigger point that goes back to academics. The way we engage students as instructors has changed over time. One change is that we "invite" students to comment/reflect on their experiences. The piano technology wasn't about feelings—it was about accuracy and validity. This is very different from talking and blogging. I don't mean that discussion is wrong; it's just two very different uses of technology. Students think they already know everything; they just want to attend class to talk about it. They don't see research as relevant, which is mind-boggling to see at university-level study.

Instructor: You really have to think about how you can use this stuff. You can't let the technology guide you. Don't passively let the technology take over. I think that, for someone like me in engineering and English, technology can allow me to see how much my students know. That's useful technology—it allows more opportunities for students to communicate with the instructor and demonstrate their proficiency.

Another Instructor: There's more than one way to think about how society works. In my class, there are certain things my students need to learn. When they say "economics think" or "economics believe," students need to know which economists they're talking about. What we can't do is have students believing the wrong thing about economists because they're reading blogs online and assuming these are



economists. I don't know much about music—it seems that there is a space for interpretation, but there is some basic knowledge that you just have to know. There is a point where they move beyond the idea that there is always a right and wrong answer—as they develop, they realize that there are different solutions and different arguments. But this doesn't mean that any answer is good; they need to be able to evaluate which answers are better than others, even if it's not a black/white right/wrong distinction. That's the complex thinking I want for my students.

Instructor: You have to play the notes correctly if you're going to perform a piece. And that's what we really ought to be teaching—the tools you need, the skills you need to do a task.

Another Instructor: There's not a lot of room for blogging in Econ 101.

Yet Another Instructor: There are times when remembering info is needed and there are times when higher level thinking skills are needed, and it's important to understand that both are necessary in different contexts.


Different Instructor: Students may not find something useful, but they need to understand it if they are going to be able to explain why it isn't useful in a way that is successful.

Another Instructor: Let me argue with you, because I understood the question differently. I think in the last ten years that the amount of useful info on the internet has increased dramatically. Wikipedia is the first place I go on a lot of things. If a student goes to Wikipedia, they will get reliable information. Ten years ago, everything you read on the web was garbage. But today, that's changed. There are some really reliable and accessible sources. I try to use technology to have my students understand technical information, so I come to this from a different angle. But I have to say, I was really impressed by the cookies and marshmallows.

Instructor: This does change our roles. It's not essential for us to give information. Our role becomes more about teaching students how to use information. There's plenty of info elsewhere; we can teach the process of acquiring, using, and adapting information. We can move toward higher levels of thinking.

Another Instructor: One word used here is accessibility. This is a different type of social dynamic, though, between faculty and students. You don't have to rely on office hours; you're available 24/7 now. In terms of human contact, we have a lot of new opportunities. I can have my students turn in a paper at 3:00am or talk online via ICON in ways that we couldn't have before.

Different Instructor: I've had emails from students saying "I missed class. Did I miss anything important?" That's a major problem.



Another Instructor: I have a standard response: come talk to me.

Instructor: I tell them to look on ICON. That tells them we're doing stuff in class. They need to be there.

Different Instructor: I have students in a buddy system so that they ask a specific peer if they miss class.

Another Instructor: It would be good if they could be accountable to each other. What if 2 of the 3 drop the ball?

Instructor: I think it's nice to use wiki for team projects. Those kinds of things can allow us to track team activity in a way we couldn't before, and they can publish the results of their work in ways that they couldn't before.

Another Instructor: The common problem with team projects is that one student didn't pull his load and another student had to do all the work. If we did things technologically, we could see who did what. We can have a meter to see who did what.

Instructor: I allow my students to fire a team member, after due process.

Different Instructor: I had my students write a cover letter individually after a group project, explaining what they did, what they would do differently, etc.


Instructor: I have students tell me what they're doing all along through the project. Then there are no surprises at the end.

Different Instructor: As teachers, there is always the issue of time and what we can afford. These are wondering ideas—how can we do them using time efficiently?

Another Instructor: I at times already get overwhelmed with emails. There ought to be a rule that you can slap students like that. I get a fair amount of useful stuff, too, via email, but it's changed things a lot. It can be very overwhelming.

Instructor: You have to be able to ask for what you want.

Different Instructor: I tell them what kinds of questions I will and will not answer via email. They have to make an effort to engage in the material, and I will help them over a hurdle—but if they ask a vague question, that says that can't be bothered to open the book, and I won't answer it. I can communicate better as a talker rather than an emailer. Trying to answer a question in a paragraph is trying too hard for me; I'd rather talk with them.



Another Instructor: And to write a paragraph takes an immense amount of time. I wish I knew how to manage email better, because some things can be useful, but these general questions of what did I miss in class today aren't useful.

Instructor: Sometimes writing an email reply is useless; the students need to know how to ask a good question if I'm going to give them a good answer.

Different Instructor: If one kid asks me a question, odds are 100 others are thinking the same thing. It's much more efficient to go over that stuff once together than a hundred times individually. If lots of people are having trouble, then it's a good use of class time to discuss.

Instructor: I think the trouble with technology is that we're overwhelmed by the presentation aspect of it. It has to be a dialog for it to work in the way it should be.

Another Instructor: Do you use technology to have the student present information back to you?

Instructor: My students produce youtube films as commercials for clients, powerpoint displays, some film, all kinds of stuff. I teach the analysis, though, not the technology—they use the technology to show that they can do the analysis, not to show that they can use technology.