

Best Practices for Teaching with Emerging Technologies
Second Edition
by **Michelle Pacansky-Brock**
Chapter 1: Building a Solid Foundation



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The first semester I integrated a social network into my online art appreciation class, I had a student come to me with an unexpected concern. This was an important moment for me, as it made me think more carefully about how my use of new technologies affected each student in different ways.

The semester was in its first few days and most of the students had already joined our network and were enthusiastically sharing photographs on their personal page—ranging from family vacation photos taken at the Louvre to pictures of their families and pets. I excitedly lurked in the network and enjoyed reading the student-student dialogue that was prompted by the photographs—“Hey, I went there on a family vacation too. When were you there?” or “Your dog is adorable. He looks like a dog I used to have” or, my favorite, “I remember you! You were in my geography class last semester!” I think about these early personal communications in an online class as being the early whispers of community building—kind of like the chatter and pre-class conversation that occurs in a hallway or in a classroom before the instructor begins speaking.

But the student who came to me with a concern wasn't so keen on the idea of interacting with her peers in our social network. In fact, she sent me a thoughtful email explaining that she “isn't a teen-ager” and doesn't have any interest in being part of a class that resembles something like MySpace (this story took place pre-Facebook). That email changed my



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understanding of what it means to teach effectively with emerging technologies. It made me think more inclusively about who my students are and how their own experiences contribute to the way they learn. While my younger students generally jumped in enthusiastically to the social network, my older students weren't yet engaged in social networking and were suspicious and unsure about how it could correlate with a college class.

It was important for me to take this concern seriously. First, I was pleased that she felt comfortable enough to bring it to my attention and realized there were probably other students who might be compelled to drop a class, rather than engage their instructor in a discussion about the learning environment. Second, I realized that her reluctance was an effect of me being ineffective in how I contextualized the technology into my class and introduced my expectations to my students. This chapter provides strategies that will help ameliorate student concerns like the one I've shared here.

Supporting Student Success

For a moment, shift your viewpoint and think about your class(es) from the perspective of your students. Most students register for classes to fulfill requirements and know very little about the actual class (expectations, requirements, etc.) until the class begins—that is, perhaps other than what they read on RateMyProfessors.com. Really, what happens when a student begins a class is she enters a learning environment. The first time she engages with that environment, she begins to understand what is expected of her, what the experience will be like, and what her role in the process will be. And, more than likely, she is simultaneously registered for several other “environments” that will each be distinct. It's up to her to navigate these environments successfully and this can be a tricky—even daunting—task.



Now imagine being that student and having each of those learning environments shift *unexpectedly* throughout their duration. Unexpected shifts in a class are like unexpected turbulence on an airplane. They are uncomfortable, and stressful. Teaching with emerging technologies can be like flying with unexpected turbulence—if they aren’t integrated into a learning environment effectively.

While today’s traditional college-age students are more comfortable with experimenting with new technologies than previous generations, they aren’t necessarily fluent with all tools, nor do they understand how to use them to be productive, lifelong learners—which, I believe, is a skill that all college classes can contribute to developing. Moreover, college classes can be comprised of generationally diverse groups of students. You’ll have students, much like my apprehensive student, who become anxious at the prospect of taking a class that integrates technologies they’ve never used. The key to supporting the success of *all* your students is to start students off on a solid foot the moment a class begins. Implementing the strategies outlined in this chapter will ensure your students are clear, from the start, about *why* you are requiring them to use tools in your class, *how* the tools will enhance their experiences, as well as what is appropriate and inappropriate behavior and content.

As you integrate emerging technologies into your classes, strive to communicate the following items in your course syllabus and share them with your students on or before the first day of class:

A. List of Tools That Will Be Used and Your Reason(s) for Using Each

Upon entering a class, students should have an opportunity to preview the supplemental tools you plan to have them use. This does not imply that you cannot use a tool not shared on the



list; it's merely an effort to communicate your plans to students so they have a clear picture of the road ahead.

As noted earlier, sharing this information with students *before* the start of a class, even before they register for a class, is ideal, as it empowers students to be able to register for classes that meet their own learning styles and overall preferences. Today, we have many students who are enthusiastic about using mobile apps or social media in a class, but, at the same time, we also multiple generations of students on college campuses now, as well as students with disabilities that may be challenged by using particular tools and others that may be supported more effectively in a rich media environment. Considering the student experience is an essential part of teaching effectively with emerging technologies.

With that said, students also want to understand *why* you are using the technologies. This is important to share for two reasons. First, because it illuminates the connection between learning (the student's goal) and technology. Sadly, only about half of college students feel that their professors use technology effectively.¹ So, don't expect your students to feel excited about using a new tool or two until you can lucidly demonstrate why it's relevant to their success. Second, hearing your explanation may turn a reluctant baby boomer with little to no technology skills into a curious learner who is ready to try something new. And this can be an empowering experience for both the student and the instructor.

Here is a sample I've written:

In this class, you will create your own blog using Wordpress, a free blogging platform. Alternatively, if you would prefer to use a different blogging tool, just let me know. A blog is a website that is similar to an online journal. You will regularly add new entries or "posts" to your blog that will reflect on your learning in this class.



Creating your own blog will provide you with your very own website to examine, analyze, and discuss the content you will engage with in this class. You will find that blogging is quite different from writing a paper and submitting it to your professor for a grade. Your blog will be shared with your peers and the rest of the world, placing your unique ideas and perspectives in a collective, living, and global dialogue about our topics.

Your blog will extend you the opportunity to connect with people around the world who are engaging with similar topics, receive comments from these individuals, and your blog may inspire ideas for other bloggers. At the end of our class, you will have a living product that will remain active beyond the end of this term.

B. List of Required Supplemental Equipment

What equipment do students need to possess (or have access to) for your class? Most colleges and universities have basic technology requirements that are communicated to online students prior to registration (computer, browser, high speed internet connection). If you are teaching a face-to-face or hybrid class with emerging technologies, it's critical to establish a similar toolkit—this may be something already established and shared on your campus or it may be up to you to get this conversation initiated.

In addition to the tools and equipment needed to access your class, however, you must also clearly communicate the equipment students will need to contribute to your class. In your list, it may be more appropriate to encourage students to “have access” to the tools, rather than require them to be purchased.

Supplemental equipment for learning may include:

- webcam* (for participating in video web-conference or recording video presentations)



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- microphone* (for having online voice conversations during office hours, recording an audio presentation, leaving a voice comment in a discussion, interviewing an artist in Mexico, recording a variety of opinions about a current event);
 - smartphone or other device that can take digital pictures (to document a field trip, identify a biological specimen, share examples of local architecture that demonstrate influence from ancient civilizations).
- * Think mobile! Suggest applications students can use on their smartphones to record/host video and audio. Smartphones and tablets are terrific for creating digital content.

C. Access Expectations and Resources

Campus Access

Is the equipment available for student use on campus? You may need to do some research in this area. Visit your campus computer labs or reach out and contact the appropriate campus representatives. If the answer is “no,” it’s important for you to share the need for these resources with your colleagues involved with planning efforts. Today’s typical college or university provides students with access to WiFi and computers but some provide private audio and video recording stations, as well as mobile lounges in which students can check out mobile tablets for completing course assignments. Also, keep in mind that some campuses still block the use of some social media sites in computer labs. If you are having your students interact in a Facebook group, view or share videos on YouTube, or engage in a chat on Twitter, then you should identify if your students have access to these sites from computer labs on campus.



Discounts or Special Pricing

Are the tools you are encouraging your students to use available in your campus bookstore or through an online partner at a discounted rate? For example, the Foundation for California Community Colleges has developed “College Buys,” an online portal that provides discounts on software and hardware to students, faculty, and campuses. If you are aware of resources like this, be sure to share them with your students (and your peers!)

D. Necessary Software

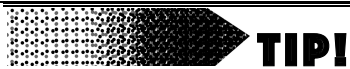
Will your students need to download and install or use any applications to complete class assignments and projects? Providing this information to students ahead of time will allow them to make alternative access plans. Also, it’s a good idea to encourage students to upgrade to the most recent version of the applications on your list (including web browsers). Include a direct link to the website(s) when possible.

E. Supplemental Mobile Apps

Chances are, most of the students in your classes have a smartphone. According to the Pew Research Center, 92% of Americans age 18-34 own a smartphone.² Compiling a list of mobile apps that students could use to support their learning in your class is a great idea. Keep your eyes peeled for the “mobile” icon throughout this book to identify emerging technologies that may be used with mobile devices, but also take some time to peruse the apps available that align with your own discipline. You may be surprised at the great resources you discover!



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Use Jing for Easy Screenshots and Screencasts

There are many ways to create screenshots (still images of your computer screen) and screencasts (videos of your computer screen). My favorite free tool is Jing. It runs on both PCs and Macs, and produces .png files that can easily be annotated and saved to your computer, as well as screencasts that can be shared online via a free Screencast.com account or downloaded and then shared within a course management system or website. See Chapter 4 for further discussion.

F. Examples

You will have many students who are not familiar with the technologies you've identified so it's always a great idea to include a link to an example of a podcast, a wiki project, a collaborative mind map, etc. Seeing an actual example will relieve a student's anxiety and start to help him understand what to expect more clearly. You may also consider including screenshots of the environments in your syllabus.

G. Student Perspectives

It's amazing how much more relevant advice is to a student when the advice comes from another student, rather than a professor. Our society has swiftly evolved into a participatory culture, placing peer reviews at our fingertips before we dine at a restaurant, vacation at a hotel, or buy a book. Students want to hear from other students about what they should expect in a class—and that desire is the fuel behind the popularity of RateMyProfessors.com.

SHOWCASE

Wisdom Wall



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Figure 1.1 Screenshot of Wisdom Wall.

Here is a creative, fun, and easy way to use a collaborative tool like Google Docs, VoiceThread, or Flipgrid to share past student perspectives with incoming students and start to build community in your class. Provide students with a link to the *Wisdom Wall* at the beginning of a new class. The Wisdom Wall is a collection of advice contributed by students from the previous term.

I am consistently impressed by the advice the students share with each other and, honestly, learn a great deal from the comments myself!

Sample Wisdom Wall Contributions

“It may seem like a lot of work at first but just breathe and try not to get overwhelmed as this class is very rewarding. Just be sure that you keep up with your blog posts ... and do your VoiceThreads and you will do great!”

“Don’t be afraid of all the technology. The teacher is really good about showing you step-by-step how to do everything and after a while it gets easy and starts to become fun.”

“If you are dreading this class, listen up! Michelle makes this class so interesting and exciting. You will be learning and enjoying the class before you can say yuck . . . This class was awesome!”

“The main advice I can give is DO NOT GET BEHIND . . . If you choose to procrastinate you will not be happy with the results because things pile up quickly and unexpectedly.”



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How to Create a Wisdom Wall

Coordinating the Wisdom Wall can be a very simple process or it can be a time-consuming task. One option would be to have students email their “advice” to you and then you’d be responsible for curating a display of the feedback on a website or in your course management system. At the end and beginning of a new term, there are many other, more important, tasks for you to focus on. So, empower your students to be able to create the Wisdom Wall on their own!

Here’s an easy solution: Log into Google Drive and create a Google Doc (see Chapter 5 for more information). Adjust the share settings so the doc can be edited by anyone with the link. Then include the link to the doc in your course. In essence, selecting the following settings transforms a Google Doc into a wiki page:

1. Refer to the online Google Drive Help Center for instructions to change your share settings in Google Drive: <https://support.google.com/drive>
3. At the top of your doc, compose clear instructions to students. I prefer to say, “Click in the white space below the red horizontal line and type your advice to my future students.” Then insert a simple horizontal red line below the instructions.
4. If you prefer, create a fun graphic and insert it at the top of your Wisdom Wall. I created the graffiti text in Figure 1.1 using The Graffiti Creator (GraffitiCreator.net/), took a screenshot of it, saved it to my computer and then uploaded it into my Google Doc.
5. Paste the link to the Wisdom Wall Google Doc in your course management system and encourage your students to leave their advice by a particular time and date.

Building Community



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The mainstream use of social technologies like Facebook, YouTube, Twitter, and Instagram has transformed learning outside the college classroom into a rich, community-based experience. Each year, more and more traditional college-age students enter our classrooms with an intimate understanding of the relevance and value that participatory learning provides. As Cathy Davidson and David Goldberg noted in *The Future of Thinking*:

Since the current generation of college students has no memory of the historical moment before the advent of the Internet, we are suggesting that participatory learning as a practice is no longer exotic or new but a commonplace way of socializing and learning. For many, it seems entirely unremarkable.³

Participatory learning simply “looks” different from traditional college learning. In most college classrooms, learning has historically relied upon the successful transfer of information from a subject-matter expert (professor) to receptacle (student). This traditional model expects students to play a passive role in learning. In contrast, participatory learning situates individuals within a fluid community in which members make contributions by sharing ideas of their own and responses to the contributions made by other members. Those contributions are commented on by other community members, leading to further dialogue, refinement, growth, and debate. The intermeshing of community members in a participatory learning environment is grounded in clear “community guidelines” that are a stipulation of joining the community.

Michael Wesch’s 2011 video, “The Visions of Students Today’ 2011 Remix One,” a compilation of student-generated videos submitted in response to Wesch’s call, conveys experiences of 21st-century college “learners” who are immersed in traditional lecture classes, wondering what their peers are thinking and feeling like their opinions and thoughts



are irrelevant, even locked out from the process of constructing knowledge and understanding.⁴ To me, the video (a still from which is shown in Figure 1.2) illustrates the relevance gap between our mainstream teaching pedagogy and the effects of our students' participatory learning experiences outside the walls of college.

Integrating emerging technologies into your college classroom does not necessarily mean you will transform your class into a participatory learning community. But it does extend this opportunity to you and it's a concept that you should think about as you begin to experiment and understand the technologies you will employ. For those professors who wish to create a community-based learning experience for students, it's necessary to realize that you will need to explicitly frame your class in this way from the very first day of class and then cultivate a learning environment that fosters and encourages trust, student contributions, peer comments, and the overall collaborative construction of knowledge. This vision of learning should inform the decisions you make about tools to use in your class.



Figure 1.2 Video still, “My space in the room” by Derek Schneweis. Used with permission.

A. Class Philosophy

Compose a brief description of the type of learning environment your students should expect and include this in your syllabus. Each college professor has his/her own style. Communicating how you approach your class and the role that emerging technologies play will communicate your style and expectations and encourage students to be more productive.



But the most important element of a class philosophy is making a commitment to modeling it throughout the semester. A philosophy is only words on a page—the time your students spend in your class will infuse it with meaning.

Sample Online Class Philosophy (CC-BY Michelle Pacansky-Brock)

This class is a community. We all have the same objective: to learn. Online students often feel isolated but it's important to know you are not in this alone! I need each of you to approach our online class with a great attitude and a willingness to help each other. Many problems and questions can be resolved by asking a fellow student. I am always here to help you but I truly believe your experience will be better if you communicate with your fellow students throughout the semester. The technologies woven into this class will increase your ability to share, connect and learn from one another.

Sample Face-to-Face Class Philosophy (CC-BY Michelle Pacansky-Brock)

This is not a typical “lecture” class. In “lecture” classes, students come to class and passively receive information delivered via lecture format. Throughout the semester, you will be completing regular web-based assignments prior to coming to class. This will include micro lectures, videos, and readings that may be accessed on a computer or smartphone. Rather than using class time passively, you will actively participate in critical analysis, discussion, and debate as we apply the ideas from the digital course materials. Your full commitment to the format of this class is critical to your success.

Every person in this class is part of a community focused on learning. Throughout the semester you will be expected to help each other and you will learn to rely upon each other. You will treat each other with respect and should always feel comfortable approaching one another for help. I will do everything in my power to create a trustworthy, stimulating, active



learning experience for you. As your instructor, I am here to facilitate your learning and guide you each step of the way. I am also here for you to discuss any problems or challenges you are having. Please don't ever hesitate to contact me via email or phone or visit me during office hours.

My role is dependent upon having a group of individuals who are committed to being here for every class and being ready to contribute keen insights and perspectives to our discussions. We are in this together! This class will not be a success if you do not hold up your end of the bargain. Deal?

B. Community Groundrules

Communities thrive through the active contributions of their members. Students need to feel safe and perceive their learning environment as a trusted space to share and collaborate with their peers. Developing a clear set of community groundrules and sharing them with your students is imperative. Aside from developing the set of rules, it's critical that you weave them into the use of the participatory tools you'll be using. Agreeing to the groundrules could be made a condition of participation, for example, and/or you could share your groundrules on a website (a simple Google Doc will do for those of you without knowledge of html or a process for hosting your content) and link to it from the assignments you share in your course management system. Essentially, keeping the groundrules at the surface of your students' participation is important, as this approach serves to remind them of their expectations and also provides an opportunity for you to communicate how students should deal with violations. The groundrules empower students to play a central, rather than peripheral, role in their learning.



Sample Community Groundrules

A community is a group of individuals who work together to support a common goal or interest. We are working together to support the successful achievement of our learning outcomes. In an effort to ensure our community develops, thrives and sustains throughout our time together, the following groundrules will be in effect at all times.

- Treat contributions made by other members of the class with respect.
- Reach out and help when you see the need. And ask for help when you need it.
- Back up your contributions. As with any content you share online, keeping an alternative copy is essential. Each community member is responsible for keeping a back up of his/her contributions.
- Have patience and a sense of humor with technology. There will be hiccups, expect them.
- Keep an open mind. If you're feeling reluctant, that's ok. Take it one step at a time and look at this as an opportunity to learn something new.
- Contribute regularly to collaborative activities to ensure other members of the community have ample opportunity to read/listen, reflect, and respond to your ideas.
- Respect the diverse opinions and viewpoints of each member of our community. Differences allow us to learn and grow together.
- Understand that communications shared through text have a higher likelihood of being misinterpreted than the spoken word. Therefore, when you type a thought or a comment, read it carefully before you submit it. If you question the way it is worded, read it out loud to yourself. If you still question the way it's phrased, rewrite it.
- Contribute regularly to group dialogue, including blog posts and replies. The contributions of each individual play a role in the collective strength and diversity of our community.



- Members of our community are to be restricted to enrolled members of our class, in an effort to maintain a safe, trustworthy discussion environment.
- All image and video content shared within this community will reflect acceptable content standards. You are expected to use discretion and, if asked, you will be expected to demonstrate how your content supports the theme of our community: “[enter a description of the community’s theme here].”
- Understand that any network member has the ability to create a new forum in our network. However, s/he who creates the forum immediately takes on the responsibility of moderating it. This means you have committed to regularly responding to new comments and greeting new members of the forum or group.
- If, at any time, you feel that any of these groundrules have been violated by a member of our community, you are encouraged to bring your concern directly and immediately to [enter professor name], our community leader. Clearly identify which groundrule has been violated and include specific evidence of the violation in your email. Your concerns will be addressed promptly with careful consideration in an individualized manner.
- After this class is over, your access to this community will end. If you share content that you’d like to preserve, it is your responsibility to make a back-up of it before the class ends.



Write a general set of community groundrules that apply to all of your classes. Type them up into a Google doc and include the link in each syllabus/course.



Empower Students to Prepare Prior to the Start of Class

Emerging technologies provide many options for professors and institutions to increase a student's readiness for the start of a new term. Our newly participatory society has crafted higher expectations for understanding precisely what an experience will be like before it begins or before a purchase is made. When I visit Amazon.com to purchase a book, for example, I read the reviews left by other users before I make my decision. When my 13-year-old son wants to purchase a new video game, he goes online and reads the reviews left by other users to decide whether or not it's worth his money or if the advertisements are just a slick persuasive tactic. When I'm traveling, I'll pull out my smartphone and check the reviews of a restaurant on Yelp before I decide to dine there. Our participatory society has empowered us as consumers to be informed and make choices that are tailored to our preferences, needs, and expectations before we make a decision to take the plunge.

Unfortunately, things don't work this way in the world of higher education. But I like to imagine how different things would be if they did. Now we can easily make the argument that students *want* to know about their professors and the expectations that will be placed upon them after registering for a course. This desire is easily confirmed by considering the wild popularity of RateMyProfessors.com. At the time of writing this, the site boasts that it shares more than 15 million student-generated ratings of over 1.4 million professors (up about 50% from the first edition of this book!). And the site is viewed by more than 4 million college students each month.⁵

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Notes



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⁵ Wolfram Alpha [website]. Accessed on February 20, 2012 from: http://www.wolframalpha.com/entities/web_domains/ratemyprofessors.com/98/2v/kh/.

