Our knowledge about what works well in online teaching and learning is growing rapidly and that is very good news. Yet it also means that it is easy to feel overwhelmed.

Here are ten best practices for anyone just getting started in the online environment. Research and experience suggest that these practices contribute to an effective, efficient and satisfying teaching and learning experience for both faculty and students. Using these practices can help develop confidence, comfort, and experience in teaching online.

**Best Practice 1: Be Present at the Course Site**

Liberal use of a faculty's use of communication tools such as announcements, discussion board postings, and forums communicate to the students that the faculty member cares about who they are, cares about their questions and concerns, and is generally "present" to do the mentoring and challenging that teaching is all about.

When faculty actively interact and engage students in a face-to-face classroom, the class develops as a learning community, developing intellectual and personal bonds. The same type of bonding happens in an online setting.

We have learned to quantify what it means to "be present." The "best online" faculty - according to students - are faculty who show their presence multiple times a week, and at best, daily. Setting clear expectations - as to when you will be present and when you will not - at the beginning of a course with course policies is very helpful, however, and can reduce the need for daily presence if that is not your particular style. Setting regular times when you can meet in a virtual classroom or be available by email or texting, and thus be available - almost in real time similar to office hours, can be invaluable.

Note: Students who feel abandoned or who feel alone may even post questions, such as "Is anybody there?" This is a very clear and unambiguous signal that not all is well.
Best Practice 2: Create a supportive online course community

A good strategy for developing a supportive online course community is to design a course with a balanced set of dialogues. This means designing a course so that the three dialogues of faculty to student, student to student and student to resource are about equal. In most online courses, the dialogue of faculty to student is provided with (1) mini-lectures in text or video or audio podcasts, (2) weekly coaching and reminder announcements and (3) explanations/interactions with the students.

Here are three strategies that can be used to encourage peer-to-peer, student-to-student engagement and thus the building of a course community. Note that an online instructor wants to develop three types of presence: social presence, teaching presence, and cognitive/content presence.

• Launch the class with a personal introduction posting so that students can get to know one another and you get to know "where students' heads are." The types of info often shared by faculty and students include info on professional experiences, personal information such as family/friends/pets, and a photograph. Faculty also often include a note about their teaching philosophy and research projects.

• Encourage use of a general open student forum for students to post and request help and assistance from each other through the various student-to-student tools, such as discussions, help areas, etc.

• Set up small groups where students can assume responsibility for supportive mentoring of fellow students and summarizing key points of a class assignment. The students might work in groups of 2, 3 or 4. This strategy is similar to a study group.

• Set up problem-solving forums or discussions boards, and assign students or student teams to monitor and support or direct questions.

Note: Learning within the setting of an online course community will work better for some students than for others. Some students may choose not to participate very actively at all; other students find it is the best way for them to learn in an online setting. The point of this is that for those students who need it, it is an essential part of how they learn. Vygotsky's theories remind us that we learn as social beings within a social context. The online community is part of what makes this happen for some students.
Best Practice 3: Share a set of very clear expectations for your students and for yourself as to (1) how you will communicate and (2) how much time students should be working on the course each week

This best practice cannot be overemphasized. Include on your course site a set of expectations for how students communicate and dialogue online and how they communicate with you. For example, many faculty tell students that they can expect a response within 24 hours during the week. Often before a major test or assignment, faculty will agree to hold special office hours by computer, being available either by chat/live classroom or email, or phone. In the interests of time and community, it is best to use a tool where responses and content can be shared with everyone and archived for flexibility in access and review.

This basic expectation of response time can easily be modified - so long as the change is communicated to the students. It is easy to know what to do, if we think about the students as family for the term. Students are very accepting of a faculty member's time and life requirements if they know what is going on. And students often step in and help each other even more when they know a faculty member is sick, traveling or otherwise not available.

Often students can agree to monitor course questions posted in the Open Forum or in the discussion boards for a week for example.

Online learning is just as intensive as learning face-to-face, and time to do the work needs to be scheduled and planned for, just as if one were attending face-to-face classes. Being clear as to how much effort and time will be required on a weekly basis keeps surprises to a minimum.

Best Practice 4: Use a variety of large group, small group, and individual work experiences

A community works well when there are a variety of activities and experiences. Online courses can be more enjoyable and effective when students have the opportunity to brainstorm and work through concepts and assignments with either one or two or more fellow students. At the same time some students work and learn best on their own. So, building in options and opportunities for students to work together and individually is highly recommended.

Working in teams is particularly effective when working on complex case studies or scenarios for the first time.
Best Practice 5: Use both synchronous and asynchronous activities

When online courses were first introduced, they were almost totally asynchronous - an updated version of the distance learning courses by correspondence. Now we have course management systems and virtual live classrooms and audio tools that make it possible to do almost everything we do in campus classrooms. Plus we can often engage learners in more collaborative and more reflective activities, and what happens is recorded and archived and there for review and occasionally revision.

Sometimes there is nothing better than a real-time interactive brainstorming and sharing discussion; other times the requirement to think, plan, write and summarize is what makes learning most effective for an individual. The variety of activities that are now possible online makes it possible to create many types of effective learning environments.

For example, in many financial and statistical courses, real time problem-solving and question and answer review sessions can be very effective learning experiences. While working professionals often choose to complete advanced degrees online so that they can make use of the asynchronous, anytime, anywhere features of a program, these same learners enjoy getting together from anywhere at a specific time to interact in real time.

Best Practice 6: Early in the term - about week 3, ask for informal feedback on "How is the course going?" and "Do you have any suggestions?"

Course evaluations have been called "post mortem" evaluations as they are done after the fact, and nothing can be changed to increase satisfaction or facilitate learning. Early feedback surveys or just informal discussions ask students to provide feedback on what is working well in a course and what might help them have a better course experience. This early feedback is done early in the course so corrections and modifications can be made. It is an easy opening for students who might have comments or suggestions or questions.

Best Practice 7: Prepare Discussion Posts that Invite Questions, Discussions, Reflections and Responses

Discussions in an online course are the equivalent of class discussions in a face-to-face class. A key difference, of course, is that these discussions are asynchronous, providing time for thought and reflection and requiring written /and or audio responses that become part of a course archive.
Discussions might be designed for one of the following purposes (Painter, et al., 2003; and Goodyear et al 2003, cited in Grogan, 2005):

- Provide an open question and answer forum
- Encourage critical or creative thinking
- Reinforcing domain or procedural processes
- Achieve social interaction and community building - have the students get to know each other personally and intellectually
- Validating experiences
- Supporting students in their own reflections and inquiries

Here are a few hints for discussion postings culled from many conversations with experienced online faculty.

**Quick One-Liner Hints**

- Create open-ended questions that learners can explore and apply the concepts that they are learning
- Model good Socratic-type probing and follow-up questions. Why do you think that? What is your reasoning? Is there an alternative strategy? Ask clarifying questions that encourage students to think about what they know and don't know.
- Stagger due dates of the responses and consider mid-point summary and/or encouraging comments
- Provide guidelines and instruction on responding to other students. For example, suggest a two-part response: (1) what you liked or agreed with or what resonated with you, and (2) a follow-up question such as what you are wondering about or curious about, etc.
- Provide choices and options for students. Providing choices for students in questioning follows the principle of providing options for personalized and customized learning for students and a way of validating and affirming knowledge and skills. Working professionals are often grappling with many issues - providing choices and options makes it possible to link the learning more directly with their work experiences and needs.
- Don't post questions soliciting basic facts, or questions for which there is an obvious yes/no response. The reason for this is obvious. Once one student responds, there is not much more to say! Very specific fact-based questions that you want to be sure that you students know are best used in practice quizzes.
- Reminder: Log in to your course at least 4 times a week - answer email, monitor discussions, post reminders, and hold online office hours.

You may also want to peruse some of the hints about questioning from other ecoaching hints available at www.designingforlearning.info/services/writing/ecoach/index.htm.
**Best Practice 8: Focus on content resources and applications and links to current events and examples that are easily accessed from learner's computers**

If content is not digital, it is as if it does not exist for students. This means that the content that students will more likely use is that content and applications that are available from their computers. Students want to be learning anywhere, anytime and often while they are doing other things, such as driving, exercising, etc. Carrying around large, heavy textbooks and even laptops sometimes feels like an anachronism. Content that is mobile and can be accessed via smartphones, ipads, ipods, and mp3 players are welcome additions for many students.

For many courses and disciplines, however, textbooks are not yet available in digital form, so this best practice applies mostly to supplementary resources and to library resources. A reference document with detailed instructions on accessing library resources is included in most courses. Additionally, a key member of the instructional team is the library reference person assigned to supporting online learners.

Students enjoy seeing how what they are learning links to current news events. Thus, building into a course discussions and links to current events is often motivating to learners. So, this best practice includes the following: "Encourage students to help make the best use of the world of Internet resources." Here are some ideas.

- Enlist student assistance in identifying high quality content that is available online. This can include tutorials, simulations and supplementary stat material online.
- Incorporate into assignments and discussions how the various statistical tools are used in professional situations and in decision-making. Include examples of when and why they helped and perhaps when they went awry.

**Best Practice 9: Combine core concept learning with customized and personalized learning**

This best practice combines a number of basic learning principles, explained in length in other resources. Very briefly, it means that faculty identify the core concepts to be learned in a course - the performance goals - and then mentor learners through a set of increasingly complex and even customized projects applying these core concepts. Many online learners within professional certificate programs are working professionals. Supporting learners with their professional goals that are closely linked to the
performance goals of a course and even beyond the course parameters is a win-win for the learners individually and as a class. How does one do this? Building in options and choices in assignments and special projects is a way to do this.

Another key principle that aids in concept learning comes from Vygotsky (1962, 1978). Vygotsky notes that concepts are not words, but rather organized and intricate knowledge clusters. This is a simple, but profound principle. This means that while we must teach in a linear fashion, presenting concepts individually and in small clusters, we need to apply concepts within case studies, problems and analyses that combine concepts and principles within a context. Effectively learning concepts - as we know from novice and expert studies - requires a focus on patterns and relationships and not individual facts or vocabulary.

When faced with a new field or discipline, students often focus on learning the vocabulary of a discipline, but this activity is often done in isolation from an understanding of the concepts that give the words meaning. Without the underlying concepts, words are akin to isolated "weeds" and "seeds" likely to be blown away by the winds of time, usually mere hours after an exam.

A popular new teaching and learning mantra advocates making students' thinking visible. Making our thinking visible requires students to create, talk, write, explain, analyze, judge, report and inquire. These types of activities make it clear to students themselves, to the faculty, and to fellow learners what students know or don't know, what they are puzzled about and about what they might be curious. Such activities stimulate student's growth from concept awareness to concept acquisition, building in that "series of intellectual operations" that Vygotsky believes is required for concept acquisition.

Discussion forums, blogging, journals and small group work are all excellent strategies for engaging learners in clarifying and enlarging their mental models or concepts and building links and identifying relationships.

**Best Practice 10: Plan a good closing and wrap activity for the course**

As courses come to a close, it is easy to forget the value of a good closing experience. In the final weeks of a course, students are likely to be stressed and not take the time to do the lists and the planning that can help reduce stress and provide a calming atmosphere. A favorite image of mine is from David Allen of *Getting Things Done*. Allen notes that making a list helps us to clear the "psychic ram" of our brains and we feel more relaxed and more in control. Once we have made our list and schedule, we don't have to
continually remind ourselves of what needs to be done and when.

Here are a few hints for closing out a course experience with style and panache.

• Take time to remind students of what's next and when assignments and readings are due. Announcements of this type provide a "To Do" list and schedule for the learners. And by implication this list provides a helpful "To Do" list and schedule for you. As always, it is good to post reminders and make references to the planning list in your comments. And update as you go.

• Plan the ending of the course experience. A well-designed ending of a course provides opportunities for reflection and integration of useful knowledge. It is also a time to wrap up positive social and cognitive experiences.

End-of-course experiences often include student presentations, summaries and analyses. These reports and presentations provide insights into just what useful knowledge students are taking away from a course and a final opportunity for faculty to remind students of core concepts and fundamental principles.

Concluding Thought

Traditional courses have long focused on tools and techniques for the presentation of content. Traditional concerns from faculty focused on covering the material, getting through the book and meeting expectations so that faculty in other courses won’t muse and wonder, "Didn't you learn these concepts from faculty X?" And "Didn't you study the work and contributions of ____ (Fill in your favorite who)"

A major drawback with designing for content as a priority is that it focuses attention on what the faculty member is doing, thinking and talking about and not on the interaction and engagement of students with the core concepts and skills of a course. The new focus on learners encourages a focus on learners as a priority. The new focus on the learner is to develop a habit of asking, what is going on inside the learner's head? How much of the content is being integrated into their knowledge base? How much of the content and the tools can he/she actually use? What are students thinking and how did they arrive at their respective positions?

Additionally, we are seeing a shift to looking at the student no only as an individual, but as an individual within the learning community. Other questions that we are now considering include: How is the learner supporting the community of learners and contributing to the overall growth of the group?
We have much to learn about teaching and learning and specifically about teaching online. The good news is that in 2011 we now know much more than what we did in 1990 or even 2000. The list of references that follow are starting points for both general teaching and for teaching online.

References


