Teaching and Learning Online

Communication, Community, and Assessment

A Handbook for UMass Faculty

Editors: Mya Poe, Research Associate for Assessment
Martha L. A. Stassen Director of Assessment
Office of Academic Planning and Assessment
University of Massachusetts Amherst

This handbook is a joint project of the Center for Teaching, Office of Academic Planning and Assessment, the Center for Computer-Based Instructional Technology, and Continuing Education. Publication was supported by a Professional Development Grant in Instructional Technology and Distance Learning from the University of Massachusetts President's Office and the Office of Academic Planning and Assessment.

Contributing Authors

Senior Online Fellows
Robert Feldman, Professor, Psychology (Amherst)
Donna Zucker, Assistant Professor, School of Nursing (Amherst)

Online Fellows
Keith Carver, Professor, Electrical and Computer Engineering (Amherst)
Nancy Cohen, Department Head, Nutrition (Amherst)
Dennis Hanno, Associate Dean for Undergraduate Matters, Isenberg School of Management (Amherst)
John Jessoe, Director, Distance Leaning and Video Production Center (Boston)
David Lewis, Professor, Manufacturing and Management Information Systems (Lowell)
John Leong, Professor, Molecular Genetics and Microbiology (Worcester)
Brian Miller, Lecturer, Hotel Restaurant & Travel Administration (Amherst)
Susan Pasquale, Director of Curriculum and Faculty Development in the Department of Medical Education (Worcester)
Mark Schlesinger, Professor, Communication and Theater Arts (Boston)
Tim Shea, Associate Professor Marketing/BIS Development (Dartmouth)
Greg Stone, Director of Internet Developing (Dartmouth)
Steve Tello, Associate Director of Distance Learning (Lowell)

Project Support (Amherst)
Kevin Aiken, Director of Continuing Education
Tracy Cantwell, Center for Teaching
Vicky Getis, Senior Research Fellow, Computer Science
Dave Hart, Executive Director of the Center for Computer-Based Instructional Technology
Mya Poe, Research Associate for Assessment, Office of Academic Planning and Assessment
Mei-Yau Shih, Coordinator of Teaching Technologies, Center for Teaching
Martha L. A. Stassen, Director of Assessment, Office of Academic Planning and Assessment

The contributing authors are grateful for the many UMass colleagues who provided their suggestions on earlier versions of this handbook. We'd also like to acknowledge the contributions of colleagues at other institutions of higher education whose work is referenced throughout this handbook.

Contents

Introduction

We are very pleased to welcome you to the first edition of *Teaching and Learning Online: A Handbook for UMass Faculty*. Whether you are totally inexperienced in online instruction or are relatively savvy about it, we think you will find the answers to many questions about how to create and manage a state-of-the-art online course.

This guide was developed by a group of UMass faculty and staff who participated in a year-long Online Fellows program supported by a Professional Development Grant in Instructional Technology from the UMass President's Office. The participants, who represented all UMass campuses and various disciplines, were already currently teaching online courses. The Online Fellows Program was developed through the joint efforts of the Center for Teaching, the Office of Academic Planning and Assessment, the Center for Computer-Based Instructional Technology, and Continuing Education.

Teaching and Learning Online is designed to guide you through the decisions that you will need to make if you teach online. It reflects the joint experience and wisdom of the Online Fellows, UMass faculty like yourself who up until a few years ago had no experience in teaching online. We have tried to make the guide straightforward and inviting, raising and answering the basic questions that novice online instructors would be contemplating.

Of course, no guide is able to cover every aspect of online teaching. There are several areas that we have not addressed, including specific technical issues (e.g., course management systems), legal issues involving intellectual property, and compensation issues.

What we hope we have accomplished, though, is to provide you with a guide to the major pedagogical and assessment issues associated with teaching an online course. All of the Online Fellows have found teaching online to be a rewarding and invigorating experience, and we hope this guide eases your transition into the world of online learning.

Donna Zucker
Robert S. Feldman
Senior Online Fellows

1

Teaching in Online Learning Environments: Overview

Contents:

This chapter outlines some of the advantages and challenges in teaching and learning in an online environment.

What is Online Learning?

The term *online learning* (or, as it is sometimes called, *distance learning*) includes a number of computer-assisted instruction methods. For the purposes of this handbook:

What is online learning?	*Online teaching and learning is faculty-delivered instruction via the Internet. Online instruction includes real-time (synchronous) and anytime, anywhere (asynchronous) interactions.*

Two parallel processes take place in an online environment:

1. Students become more active, reflective learners.
2. Students and teachers engage in learning through the use of technology and become more familiar with technology by using it.

Online learning is most effective when delivered by teachers experienced in their subject matter. The best way to maintain the connection between online education and the values of traditional education is through ensuring that online learning is "delivered" by teachers, fully qualified and interested in teaching online in a web-based environment (Feenberg 1998).

Approaches to Online Learning
Two approaches to online learning have emerged: synchronous and asynchronous learning. *Synchronous learning is instruction and collaboration in "real time" via the Internet*. It typically involves tools, such as:

- live chat
- audio and video conferencing
- data and application sharing
- shared whiteboard
- virtual "hand raising"
- joint viewing of multimedia presentations and online slide shows

Asynchronous learning methods use the time-delayed capabilities of the Internet. It typically involves tools, such as:

- e-mail
- threaded discussion
- newsgroups and bulletin boards
- file attachments

Asynchronous courses are still instructor-facilitated but are not conducted in real time, which means that students and teacher can engage in course-related activities at their convenience rather than during specifically coordinated class sessions. In asynchronous courses, learning does not need to be scheduled in the same way as synchronous learning, allowing students and instructors the benefits of anytime, anywhere learning.

Adapted from Mark, Tony. "Web based Learning Primer." http://www.c2t2.ca/landonline/primer.html

Course Software
Rather than creating your online course from scratch, a number of software programs are now available that make it easy to develop an online course. These programs include features such as threaded discussions and document sharing and pre-designed design layouts to make the course design process easier. Check with the campus technology specialists to learn more about the preferred software for online learning in your department.

Advantages of Learning Online

Online learning offers a variety of educational opportunities:

Student-centered learning
The variety of online tools draw on individual learning styles and help students become more versatile learners.

Collaborative learning
Online group work allows students to become more active participants in the learning process. Contributing input requires that students comprehend what is being discussed, organize their thinking coherently, and express that thinking with carefully

constructed language.

Easy access to global resources
Students can easily access online databases and subject experts in the online classroom.

Experiential learning through multimedia presentations
New technologies can be used to engage and motivate students. Technology can also be used to support students in their learning activities.

Accessible for non-traditional students
Online delivery of programs and courses makes participation possible for students who experience geographic and time barriers in gaining access to higher education.

Draws on student interest in online learning
Many students are interested in online learning. In a recent survey conducted by the Office of Academic Planning and Assessment at UMass Amherst, more than 50% of students surveyed said that they were “very interested” or “somewhat interested” in taking an online course.

Advantages of Teaching Online

Teaching online courses can:

Offer the opportunity to think about teaching in new ways
Online teaching can allow you to experiment with techniques only available in online environments, such as threaded discussions and webliographies.

Provide ideas and techniques to implement in traditional courses
Online email discussions, a frequently-used practice in online learning, can be incorporated into traditional courses to facilitate group work. Other techniques, such as web-based course calendars and sample papers posted on the Internet (with student permission) can easily be incorporated into a traditional course.

Expand the reach of the curriculum
Online teaching can expand existing curriculum to students on a regional, national, and international level.

Professional satisfaction
Teaching online can be an enormously rewarding experience for teachers. Teachers often cite the diversity of students in online courses as one of the most rewarding aspects of teaching online.

Instructor convenience
Teaching online can offer teachers conveniences not available in traditional classroom settings; for example, at-home office hours and flexible work schedules.

Challenges of Teaching Online

"Faculty involved in [online learning] find themselves acting as a combination of content experts, learning process design experts, process implementation managers, motivators, mentors, and interpreters. In short, technology can leverage faculty time, but it cannot replace human contact without significant quality losses."

Massy, William. "Distance Education: Guidelines for Good Practice." AFT, May 2002, p. 16

According to a recent American Federation of Teachers report on distance learning, faculty must be prepared to meet the special requirements of teaching at a distance. Some of the challenges for instructors of teaching online include:

- Familiarity with the online environment
- Capacity to use the medium to its advantage
- Being available to students on an extended basis electronically
- Providing quick responses and feedback to students

Massy, William. "Distance Education: Guidelines for Good Practice." AFT, May 2002

Yet, the proponents of online learning argue that these obstacles can be overcome by employing such techniques as the following:

Become familiar with the technology used in your online course
Long before your course starts, become familiar with the technology used in your online course, including hardware and software, and spend some time exploring their options. An online course requires a high level of computing power and reliable telecommunications infrastructure. Make sure you have access to both.

Use the online medium to your advantage
The online environment is essentially a space for written communication. This is both a limitation and a potential of online learning. Written communication can be more time consuming, but "the ability to sit and think as one composes a question or comment also can raise the quality of discussion." Additionally, shy students who have trouble participating in a classroom discussion often feel more comfortable in an online classroom. Online classrooms can be developed with this fact in mind to take advantage of these considerations.

Massy, William. "Distance Education: Guidelines for Good Practice." AFT, May 2002, p. 9 and *"Teaching at an Internet Distance: the Pedagogy of Online Teaching and Learning." The Report of a 1998-1999 University of Illinois Faculty Seminar. http://www.vpaa.uillinois.edu/tid/report/tid_report.html*

Keep connected with students
Use the technology of the online environment to help you keep in touch with students. Communicate frequently with students, both individually and as a group. A main part of this handbook focuses on how to connect with students. While keeping connected with students can be a challenge, the online environment offers a number of interesting pedagogical opportunities.

Common Questions

What is an online course?
An online course is offered in part or wholly via the Internet.

Who can teach an online course?
Faculty members as well as graduate students may teach online courses at UMass.

Will an online course echo a course I have already prepared?
It can, but be aware that many changes will be necessary for the course to "work" online. You may find it professionally stimulating to create an entire course anew.

Why would I want to teach an online course?
Do you want to experiment? Do you want to travel during the semester, have other scheduling complications, or want the convenience of working from home? Are you interested in reaching students whom you might not otherwise have a chance to teach? These are some of the reasons why instructors choose to teach online.

Where are online courses taught?
Anywhere. Most courses are taught entirely online and students and professors never or only rarely meet face-to-face. Other courses are taught with a strong on-campus component.

When are online courses taught?
UMass has many options for teaching online. Interested teachers can contact their own departments or the Division of Continuing Education.

How do I learn to teach an online course?
The best place to start learning how to teach online is in this handbook. Other places to look for information include your department, online teaching tools such as eCollege or Blackboard, the consultants at Continuing Education, or the instructional technologist at your campus. Also, colleagues who have taught online courses can be an invaluable resource. You can also gain experience with the online learning environment by developing a course homepage for your own classroom-based course.

Common Terms

Following are some common terms used in online courses:

- *lurking*—reading threaded discussion responses without posting a response. Students who lurk in online courses are like silent students in traditional courses; they listen but do not speak. In online situations where you do not know how many people are “listening,” lurking can be problematic if others do not know you are present.
- *threaded discussion*—an asynchronous discussion. In threaded discussions students may post responses to a prompt at any time. Threaded discussions allow students to work at their own pace, allow the teacher to respond more thoughtfully since all the responses are not posted simultaneously, and are easier to coordinate than expecting all students to be online at the same time.
- *webliography*—an online bibliography of web-related resources. Often online teachers will use a web-based bibliography to help students identity appropriate

Internet resources.

2
Teaching an Online Course

Contents:

This chapter outlines the Online Fellows' recommendations for preparing to teach and learn online. These recommendations offer advice to those instructors who may be relatively new at designing and teaching online courses. Also, they serve as a reminder that participating in an online learning environment may be a new experience for many students.

Preparing to Teach Online

As you plan your online course, it is helpful to remember that in any environment "good teaching is good teaching" (Ragan 1998). Experienced online instructors stress that teaching online is less about the mechanics of distance education and "more about what makes for an effective educational experience, regardless of where or when it is delivered" (Ragan 1998).

Qualities of successful online teachers

- They *provide a safe climate* for their students by providing reassurance and support to new online learners.
- They *invite student input* regarding the goals and agenda for the course.
- They *give* frequent *individualized feedback*, using a variety of communication tools.
- They *help students connect* with one another.

Ladon, E. H. (April 18,2002) "High Touch in a High Tech World: Strategies for Individualizing Online Learning." eCollege.com's eNewsletter http://www.ecollege.com/educator/Resources_edvoice.html

"Distance education instructors must plan ahead, be highly organized, and communicate with learners in new ways. They need to be accessible to students, work in teams when appropriate, and play the role of facilitator or mentor in their interactions with learners."

Ragan, L.C. "Good Teaching is Good Teaching: An Emerging Set of Guiding Principles and Practices for the Design and Development of Distance Education"

Many teachers have found the *Principles of Good Practice in Undergraduate Education* to be a useful framework for thinking about how to enhance student learning in their classes.

Principles of Good Practice in Undergraduate Education:

1. *Encourages contact between students and faculty*, especially contact focused on the academic agenda.
2. *Develops reciprocity and cooperation among students*, i.e., teaching students to work productively with others.
3. *Encourages active learning*, i.e., doing and thinking about the learning process.
4. *Gives prompt feedback* and helps students understand how to respond.
5. *Emphasizes time on task* by providing repeated useful, productive, guided practice.
6. *Communicates high expectations* and encourages students to have high self-expectations.
7. *Respects diverse talents and ways of learning* and engenders respect of intellectual diversity.

Adapted from Gamson, Z. and Chickering, A. "Seven Principles for Good Practice in Undergraduate Education." AAHE Bulletin, March 1987, pp. 5-10.

An additional good practice that does not appear on this list, but that many experienced online instructors mention as being essential to successful teaching, is:

8. Includes a well-organized course, the structure of which is clearly communicated to students.

Use these eight best practices as a framework for thinking about your online course. Of course, it is also important to acknowledge that some aspects of good teaching, such as faculty-student contact and cooperation among students, are particularly challenging to accomplish in an online environment. This handbook provides recommendations on how to accomplish these goals, despite the complications that may exist.

Preparing Students to Learn Online

Respecting Differences in Technological Comfort

Keep the main content format of your online course accessible for the student with the least technological savvy.

Students new to online learning may initially find this kind of learning disorienting without the physical classroom space and guidance from the physical presence of a teacher. Other students may initially misperceive learning online as "easier" than learning in a physical classroom space. In reality, students often find the workload in an online course heavier because they must cover course material on their own and type their discussion comments.

There are a number of suggestions for how to help prepare students for online learning:

Clarify computer skills/terminology

- Provide guidelines that detail the minimum technological requirements needed for the course (both in terms of hardware and technical expertise).

- At the beginning of the semester, provide a detailed worksheet with instructions on how to complete the technical tasks required for completing course work. For example, while it may be clear to you how to post a message for many students, such tasks are new. Also, while some students may be familiar with one online environment, do not assume that they are familiar with all online environments. Some examples of information to provide include:
  - Where to find information online
  - How to post a message and homework assignments
  - How to access course readings and take online exams

- Describe how to seek help immediately when having trouble

- Explain online conventions for tone, such as using ALL CAPS for emphasis. Set rules for using abbreviations and emoticons (or "smileys," signals of emotions that look like faces on their sides).

- Provide a tutorial on computer basics.
  - ◊ *Tip: If you cannot provide a tutorial on computer basics, try working with a local community college to schedule a series of computer orientations. One Online Fellow scheduled five 2-hour computer orientations at a local community college to help her students learn computer basics. The college's IT staff setup 15 computers with updated browsers and word processing. Students learned basic computer operation as well as word processing skills. The final tutorial was dedicated to navigating library databases and the World Wide Web. The collaborative effort helped ensure student success for those students unfamiliar with online learning.*

"If you are stepping into an online class for the first time, you don't consider the class time and homework involved in an online course"

- Chuck, student from a UMass online course talking about under-estimating the amount of time an online course can require.

Explain the differences in learning online versus learning in a traditional classroom

- Emphasize the amount of time needed for taking an online class and the importance of working independently. Because all class discussions are written, students must be prepared for the amount of time needed to type their comments. A 3-credit online course can easily require more than six hours of time, especially for students who type slowly.

- Emphasize the extensiveness of reading and writing in an online course. Because all class assignments are provided in written format with no opportunity for class questions, teachers detail class assignments thoroughly in online courses. Consequently, students must become careful readers in order to ensure that they understand the assignment.

- To help students understand the communication differences of learning online, provide a detailed worksheet with instructions on communication guidelines.
  - ◊ *Tip: See the Appendix: Conventions for Communicating Online to this chapter for an example.*
  - ◊ *Tip: One instructor uses the following explanation to clarify to her students the definition of a threaded discussion post:*

    How much to post, and what makes a "good" post?
    These are hard questions to answer because discussions are organic, developing and evolving depending upon what is said by whom. . . In general, posting only once is not enough to really engage in a discussion. I am expecting probably 3-6 posts depending upon the amount of time I've allotted for the discussion and how in-depth your posts are. . . What I expect and hope to see is a dialogue *evolving, with give and take, back and forth, questions asked and ideas explored like in a face-to-face class discussion. . . . So as you post be cognizant that you are engaging in a discussion. Do not post long pages of responses--probably a couple of paragraphs at most, sometimes a sentence or two can be effective, especially if you're asking a question.*

An American Federation of Teachers survey has found that not all students do equally well in online classrooms. Highly motivated students with strong written communication skills tend to have more success. On the other hand, students who are particularly dependent on visual and verbal cues tend to do less well in online classrooms.

Massy, William. "Distance Education: Guidelines for Good Practice." AFT, May 2002.

Address students' concerns on cyber-culture anxiety

- Encourage questions and comments about technology.

- Use a survey to assess student technical knowledge at the beginning of the semester.
  - ◊ *Tip: See the Pre/Post Survey example in this chapter for ways to assess student technical knowledge.*

Clarify expectations

- Post guidelines for participation on the class homepage. For example, explain to students how many days each week they should login to the course website. In online courses, it is not uncommon to expect students to login every week day.

- Give a detailed, conspicuous course outline. Because you must clarify course expectations only in writing, make sure that you give students enough detail to complete class assignments. Even simple assignments like a journal need detailed explanations.
    - ◊ *Tip: One instructor uses the following explanation for the weekly journal exercise. She posts this explanation in every unit to remind students weekly of the assignment:*

      Your journal (click on the journal tab at the top of the screen to access) is the place for you to keep thinking about, wrestling with, exploring the issues we've discussed online. Feel free to add your own day-to-day observations about issues related to our course. Your journal is only read by me. I will never comment on your observations; I only check to see if you've completed the assignment.
      Length: 1-2 paragraphs
      Due: Every Friday by midnight EST (graded pass/fail, i.e., either you did it or not)

- Set clear expectations with regard to student performance/activity. Help students understand expectations for the course and encourage them to ask questions. One way to help students understand course expectations is to post examples of model assignments. You can post examples of model assignments from other webpages or upload sample papers. Most online course software programs allow you to easily upload files, such as MS Word and Excel documents.

- Remind students frequently of course expectations.
    - ◊ *Tip: During the semester, one instructor posted reminders to keep students up-to-date with the course material. Following is an example of one such reminder:*

      Have you read your James McBride?
      If you haven't started reading ***The Color of Water****, you better get reading! It's almost Monday and the weekly exercise is due Wednesday. Look for the threaded discussion posting on Monday morning.*
      Hope you had a great weekend! I look forward to getting your response papers on Monday night!

- Explain the time-frame in which emails will be answered. For example, on Monday, Wednesday, and Friday only, or within 2 business days of receipt.

- Emphasize courtesy to fellow students. Because students can not see verbal or visual clues from other speakers, encourage them to be tactful in their responses or include parenthetical clues for humor (<that was a joke!>) or emotion (<sigh>).
    - ◊ *Tip: One instructor describes courtesy to her students with the following explanation:*

      Our online discussions will be class discussions, meaning the same respect we would show each other in an actual classroom, we will also show in a virtual classroom. In fact, because the online environment is primarily a verbal environment where we communicate through writing, it lacks the physical and auditory clues that accompany face-to-face discussion, which may lead to more misunderstandings, particularly when a person is using humor. But being polite and respectful does not mean that you can't disagree or question each other's interpretations of our texts. But be sure to do so in a polite way, rather than "I think you're wrong and here's why" write instead, "Sally, I think you are saying Y [paraphrase what person wrote], but I wonder if there isn't another way to look at that same incident. The way I see it, X really happened . . ." etc.

Example:

Pre/Post Survey

Many Online Fellows find it helpful to assess student computer experience at the beginning of the semester. By ascertaining what students know about computers and their use, you can tailor course expectations accordingly.

Computer Diagnostic Survey

1. Do you already know how to use word processing software on a computer?
2. Do you already know how to use email?
3. Do you currently have an email account?
4. If so, what is your email address?
5. Do you already know how to browse the World Wide Web?
   If yes, what browser do you use?
6. Do you own or have access to a computer at your current residence?
7. If so, can you use the Internet from your current residence?
8. Do you know how to use a Mac?
9. Do you know how to use a PC?
10. Which system do you prefer?

Adapted from "Student Ed Tech Survey," Teaching Effectiveness Program, University of Oregon

Pre-Course Survey

In addition to questions about computer experience, you can also ask questions such as:

1. Is this your first online course?
   If so, what are your expectations about learning online?
   If not, what other courses have you taken online? What did you like best/least about that experience?
2. Why did you choose to take an online course?
3. What are you looking forward to the most?

Common Questions

Class Size

Many sources stress that quality teaching online requires smaller student/faculty ratios than in traditional classes.

How do I plan a course?
It is important to give yourself plenty of start-up time for your online course. Allow yourself time to experiment with different syllabi. Consider asking a colleague if you can "lurk" in their online course, so you can witness first-hand how an online course develops over the semester. *Chapter 3: Teaching and Learning Challenges* includes advice from the Online Fellows on planning your course.

What support will I need?
Each campus employs an instructional technologist. See *Chapter 5: Resources* for more information about contacting the campus instructional technology specialist.

How do I determine the ideal enrollment for my course?
When determining the ideal enrollment for your course, consider what you realistically can accomplish given your subject matter, the nature of assignments, and types of assessment. Many sources stress that quality teaching online requires smaller student/faculty ratios than in traditional classes. For example, a typical literature course with an enrollment of 24 might be limited to 15-18 in an online course. According to the faculty report from the University of Illinois:

> Online, attentiveness must be tangible, and may involve more effort than in a face-to-face setting. These considerations imply an inherent limitation of online class size; size is determined by the amount of effort required to form a "community of learners."
>
> *"Teaching at an Internet Distance: the Pedagogy of Online Teaching and Learning." The Report of a 1998-1999 University of Illinois Faculty Seminar. http://www.vpaa.uillinois.edu/tid/report/tid_report.html*

Chapter Appendix*: Student Guide to Conventions of Online Communication*

Introduction

In order to participate in this course, you must obtain access to a computer with a connection to the World Wide Web.

Communication

General

- Realize that typed messages lack the vocal and nonverbal cues that normally carry a lot of meaning in a face-to-face conversation. Without this supporting context, satire or sarcasm can come across as meanness. Try using "emoticons" (also called “Smileys”) to make your emotional intent more obvious (e.g., make it clear when you're joking ;-).
- Avoid criticizing people's spelling. Typos are more accepted on the Internet, so sending a message pointing out all the spelling errors or grammatical mistakes in someone's messages may be counterproductive.
- Even so, spell-check your own messages and quickly review them for punctuation and grammar.
- DON'T USE ALL CAPITAL LETTERS! Occasional capitals are OK for emphasis, but typing in all caps is the Internet equivalent of shouting (plus messages in all caps are hard to read).
- Avoid using all lowercase letters. It's viewed as mumbling.
- Avoid using text features like boldface, italics, underlining, or diacritical marks---many online systems won't display them.
- _Underscored Text_ indicates underline or italic.
- *asterisks* are used in place of bold text.
- Be brief and to the point. People expect brevity and won't read lengthy messages. Plus, it's harder to read words on a computer monitor than on paper.
- Have backup copies of files and email messages.

Subject Lines

- Keep subject lines short.
- Make subject lines informative (e.g., don't title messages “FYI,” “Important,” or anything else that doesn't indicate the content of the message).

Quoting

- Quote the original message when you reply. It may not be apparent to everyone else who you're replying to or what you're replying about.
- Lines of text with brackets
  > preceding them are used to denote a
  > quote from a previous message.

Email

- Unless you are explicitly given permission, don't publicly post email sent to you in private.
- Recognize that instant delivery of email does not guarantee an instant response. Don't “dun” people for responses before an acceptable amount of time has elapsed.
- If you are sending information from another source, pay attention to whether the material is copyrighted (copyright laws apply to email, too). Cite sources.
- If a message is particularly important, you might want to compose several drafts of it in a word processor and spell-check it.
- Avoid leaving your email account open when you leave your computer. Anyone could sit down at your keyboard and send out any libelous, offensive, or embarrassing message under your name.

"Spam"

- Do not "spam" (send unsolicited generic email).
- Do not reply to spam, even to demand that they stop emailing you.
- If you really must distribute a message to many people, do not paste all the names into the "CC" field of your email program (where people can see everyone else's email addresses). Always use "BCC" (blind carbon copy) instead.

Attachments

- Do not send huge attachments.
- When you're replying to a message that has an attachment, do not include the attachment again.
- Avoid sending attached files that lack filename extensions (that's because some computers won't be able to open them).
- If you're not sure whether your audience has the correct software to open an attachment, try converting it to an HTML document so it can be opened in a browser. If the document is large, you could post the document on the Web in HTML format and email the URL instead of the file.

Flaming

- Do not flame! Flaming refers to derogatory, abusive, threatening, sarcastic, rude, or otherwise mean-spirited messages directed at people.
- If a message provokes a negative emotional response, put it away for a while, then reread it and see if you're misinterpreting it. If you don't understand a particular item, ask the sender for clarification before replying to an incorrect conclusion.
- Messages are not secure. Remember, it's very easy for someone else to forward messages you thought were confidential. Think of email and bulletin board messages as postcards rather than letters.
- Apologize. If there's been a misunderstanding or miscommunication, you can often nip a flame war in the bud by a brief apology.

Discussions

- Lurk before you leap. Lurking is visiting without participating. While it's rude to make a habit of lurking, a little lurking can acquaint you with rules and procedures, help you get the "lay of the land," and prevent embarrassment.
- Avoid posting non-informative messages on bulletin boards. Chat is more like a telephone, so saying "Me, too!" or "I don't know" is accepted. But on bulletin boards, people don't like to read postings that aren't substantive.

Chat

- Remember that chat rooms are "logged" (i.e., a record is kept of conversations).
- Do not disrupt chat rooms by pasting large blocks of text into the input box (thus causing the screen to scroll faster than other users are able to type) or otherwise act in a manner that negatively affects other users' ability to engage in real time exchanges.
- If you are having a conversation that is off the main topic, please move to another chat room.
- If you are a fast typist, please pause occasionally to let slower typists contribute to the discussion.

Excerpted from Bramucci, Robert. Cal State Fullerton. http://fdc.fullerton.edu/learning/student_web_site_handout.htm

3
Teaching and Learning Challenges

Contents:

Experienced online instructors often emphasize that the issues addressed in an online environment are similar to those faced by instructors in traditional classes. However, given the unfamiliar learning environment and the particular obstacles that face instructors developing virtual classes, some pedagogical challenges are made particularly difficult.

Three primary challenges are associated with online teaching:

Major Pedagogical Challenges

1. Effectively structuring online courses
2. Creating community in virtual classrooms
3. Facilitating and encouraging online discussions

As you read through the following recommendations for addressing each of these three themes, you will notice the variety of ways they relate to the *Principles of Good Practice* described in Chapter 2.

Structuring an Online Course

- *Course Planning*
- *Course Organization*
- *Communication*

Experienced online instructors and students alike emphasize the need to have a clearly structured and well-planned course when teaching and learning online. Structuring the course effectively means planning the course well in advance of when it is being taught, thinking through the organizational structures and qualities that will help students learn, and understanding that the online environment presents a number of communication challenges.

Course Planning

Designing a course always takes a great deal of time and thought. That is no different with online courses. At the same time, the online environment offers particular obstacles and opportunities for both instructors and students. As you think through the course elements, pay particular attention to the course components that may serve as stumbling blocks to student learning online. One particular tension that emerges is the need to have a clear and organized structure, while allowing flexibility for making adaptations mid-stream.

- **Develop your course before the semester begins**
  Often new faculty discover that developing online courses is time-consuming and that transitioning a successful traditional course to an online setting can be difficult. Experienced online instructors suggest developing your course well in advance and with a clear, concise objectives statement. The better prepared you are, the better your online teaching experience will be.

- **Allow flexibility in your course design**
  Although it is important to make course expectations and due dates clear, it is also important to build in flexibility to your schedule. Building flexibility into your course structure will allow you to compensate for unexpected technological problems as well as give you opportunities to respond to student feedback.

Course Organization

Students in online courses are in particular need of a clear organizational structure. Keep in mind that each student is experiencing the course on his or her own – without the opportunity to turn immediately to a neighbor if confused or unclear about something in the course. In addition, students in online courses do not have the imposed structure of attending class at a consistent time and place each week they do not have the traditional "markers" of handing in papers in class or coming to the classroom to take a test. For all these reasons, it's important to think carefully about how to appropriately organize your course to encourage student participation and facilitate student learning.

Teaching Tip: 24-Hour Goal

Provide feedback to students within 24 hours, excluding weekends and holidays. Timely feedback makes students feel that the instructor is attentive.

- **Chunk the syllabus into sections**
  Divide the course syllabus into discrete segments, organized by topic. Self-contained segments can be used to assess student mastery of that unit before moving forward in the course.
  - ◊ *Tip: Use an "Assignments" page for course assignments. On that page, outline each assignment in a paragraph, explaining its purpose in helping students, and provide explanations and guidelines for evaluation. See the sample course homepage in this chapter for an example of organizing your course this way.*

  - ◊ *Tip: Another way to divide the course is by time. One instructor uses the following organization, in which each unit is labeled by week and author, for her literature course. The following figures shows the first two weeks of her course:*

Course Home
Syllabus
Calendar
Lounge
Questions

Week 1: Kyoko Mori
Who is Kyoko Mori?
Reading Notes
Weekly Exercise
Journal
Threaded Discussion

Week 2: Esmeralda Santiago
Who is Esmeralda Santiago?
Reading Notes
Weekly Exercise
Journal
Threaded Discussion

- **Break assignments into chunks with "touch points"**
  Because students work at their own pace (and procrastinate) in an online course, it works best to develop guidelines that require students to come back to the course website often. Chunking assignments helps students keep up with the work.

  In addition, use "touch points" at which point students do something–write in a journal, send an email, enter into a discussion–to help chunk course content and give the course more structure.
  ◊ *Tip: A literature instructor chunked one unit as follows:*

  ***ASSIGNMENTS FOR* THEIR EYES WERE WATCHING GOD**

  1) BACKGROUND INFORMATION: Before you begin to read Their Eyes Were Watching God *(TEWWG), please read the background information that I have provided.*
  2) READ CHAPTERS 1-10 (pp. 1-99) and write a two-page, single-spaced reading response that you will put in your Journal on the course homepage journal link. This response will be more informal than an essay, and is due by MIDNIGHT, JULY 23.
  3) FINISH READING THE BOOK and POST at least twice TO YOUR GROUP DISCUSSION BOARD 8 p.m. July 25.
  4) RESPOND TO YOUR GROUP DISCUSSION BOARD SEVERAL TIMES (more than two) by noon, July 26.

- **Provide due dates for assignments**
  Each assignment should have a clear due date and time (for example, "midnight EST on July 8"). In addition, multiple due dates every week keep students on track with course requirements.

- **Provide multiple opportunities for graded activities**
  Assess students on writing assignments, standard test formats, and class participation. The online course format offers a number of opportunities for graded written assignments, including threaded discussions, papers, web research, and online exercises. Multiple measurement points will stimulate students to become involved in multiple activities and keep them participating in class.

- **Give credit for participating in online discussions**
  Give students credit for the substantive learning that students provide for each other through online discussions. In many online courses, these discussions are essential for advancing the course goals. By assigning credit for participation in online discussions, instructors can deter "lurking," where students listen to the conversation but do not participate.

Communication

In considering how you communicate with students about course goals and your expectations, it is again important to remember that students experience your course on their own and will come to the course with varying levels of technical expertise. Place important information in a variety of places, and repeat it often, in order to enhance the chances that students will pay attention to it.

Teaching Tip: Rules for Online Discussions

Structure online discussion groups to make them more productive and focused. Assign students to a group and identify each group with a name and location online. Within each group, identify a group leader. Be explicit about what each group should discuss and in what medium (email, threaded discussion, or offline) they should work.

Give students a clear overall understanding of the course structure
Students need a clear message of the "vision" of the course so provide them a sense of the overall landscape of the course.

- ◊ *Tip: Use a Table of Contents layout design to help first time online students understand the structure of the course. The Table of Contents style is similar to printed material. See the sample course homepage in this chapter for an example of how to provide a sense of the overall landscape of a course.*

- **Post course syllabus, policies, expectations, and objectives on the course website**
  You will most likely not be available to respond immediately when students email questions regarding assignments or due dates, so posting your syllabus on the course homepage will eliminate confusion.
  - ◊ *Tip: Students will access the course homepage at any time of the day or night. You can't always be online to answer questions, so make the assignments easy to find and easy to understand.*

- **Setup a housekeeping clearinghouse section on your webpage**
  To cut down on the number of individual questions, set-up a housekeeping clearinghouse section (sometimes called "Frequently Asked Questions") on your webpage where students can post a question and get answers about general course information (e.g., how do I download the article, when is the next paper due, etc.) Encourage students to go to this section of the course before asking the instructor.

- **Use printed materials if a student requests**
  Have a printed workbook of course syllabus and other critical course information available for students who request printed copies.
  - ◊ *Tip: For engineering courses with heavy math content, provide detailed lecture notes, solutions, and other course materials in PDF format **before** the lecture date or online access date. This will allow students to download and print course material in advance.*

- **Structure online discussions**
  Structure the course to capitalize on the threaded discussion format. Use existing textbook material or website readings for "lecture" and guide students through activities and threaded postings for active learning.

- **Remind students frequently of due dates**
  Use a technique like “Nag Notes” to remind students of due dates and other requirements.
  - ◊ *Tip: One Communication professor uses “nag notes” to remind his students of due dates. For example:*

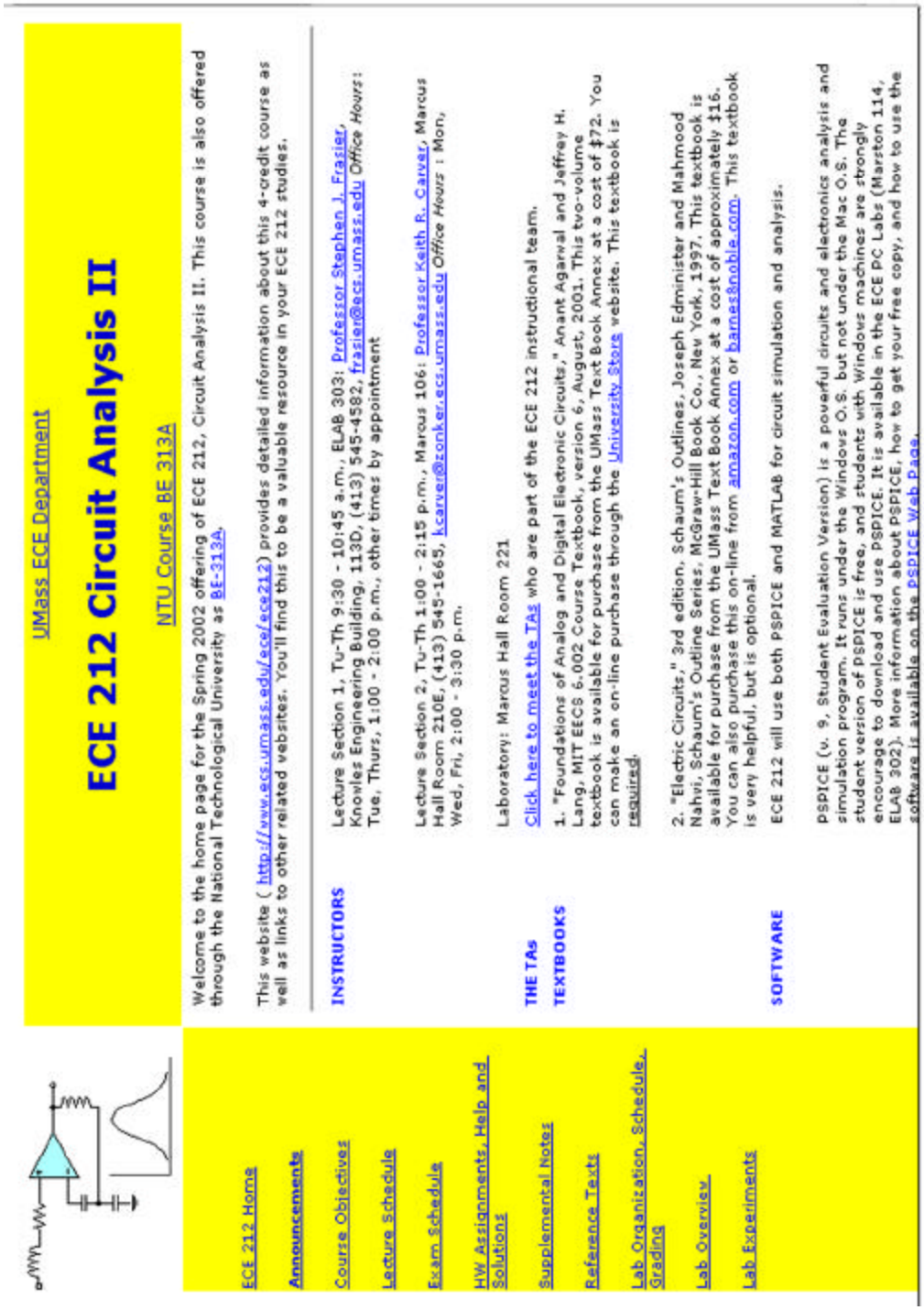
    I've posted the topics proposed thus far. Browse to PROJECTS/PAPER #1. Reminders:
    - For Wednesday, Read the Birkerts piece, “Into the Electronic Millennium.”
    - For Monday, Read Postman's Chapter 1 and do the IT/HC in the News Discussion Forum assignment.

Example:

Course Homepage

The following syllabus is taken from a UMass online course. This syllabus illustrates many of the best practices explained in this chapter:

- The Table of Contents layout design helps first time online students by providing them a schema similar to print media.
- Information is chunked into discrete units.
- There are multiple points of entry to information.



UMass ECE Department

ECE 212 Circuit Analysis II

NTU Course EE 313A

Welcome to the home page for the Spring 2002 offering of ECE 212, Circuit Analysis II. This course is also offered through the National Technological University as EE-313A.

This website (http://www.ecs.umass.edu/ece/ece212) provides detailed information about this 4-credit course as well as links to other related websites. You'll find this to be a valuable resource in your ECE 212 studies.

ECE 212 Home

Announcements

Course Objectives

Lecture Schedule

Exam Schedule

HW Assignments, Help and Solutions

Supplemental Notes

Reference Texts

Lab Organization, Schedule, Grading

Lab Overview

Lab Experiments

INSTRUCTORS

Lecture Section 1, Tu-Th 9:30 - 10:45 a.m., ELAB 303: Professor Stephen J. Frasier, Knowles Engineering Building, 113D, (413) 545-4582, frasier@ecs.umass.edu *Office Hours*: Tue, Thurs, 1:00 - 2:00 p.m., other times by appointment

Lecture Section 2, Tu-Th 1:00 - 2:15 p.m., Marcus 106: Professor Keith R. Carver, Marcus Hall Room 210E, (413) 545-1665, kcarver@zonker.ecs.umass.edu *Office Hours* : Mon, Wed, Fri, 2:00 - 3:30 p.m.

THE TAs

Laboratory: Marcus Hall Room 221

Click here to meet the TAs who are part of the ECE 212 instructional team.

TEXTBOOKS

1. "Foundations of Analog and Digital Electronic Circuits," Anant Agarwal and Jeffrey H. Lang, MIT EECS 6.002 Course Textbook, version 6, August, 2001. This two-volume textbook is available for purchase from the UMass Text Book Annex at a cost of $72. You can make an on-line purchase through the University Store website. This textbook is required.

2. "Electric Circuits," 3rd edition, Schaum's Outlines, Joseph Edminister and Mahmood Nahvi, Schaum's Outline Series, McGraw-Hill Book Co., New York, 1997. This textbook is available for purchase from the UMass Text Book Annex at a cost of approximately $16. You can also purchase this on-line from amazon.com or barnesandnoble.com. This textbook is very helpful, but is optional.

SOFTWARE

ECE 212 will use both PSPICE and MATLAB for circuit simulation and analysis.

PSPICE (v. 9, Student Evaluation Version) is a powerful circuits and electronics analysis and simulation program. It runs under the Windows O.S. but not under the Mac O.S. The student version of PSPICE is free, and students with Windows machines are strongly encourage to download and use PSPICE. It is available in the ECE PC Labs (Marston 114, ELAB 302). More information about PSPICE, how to get your free copy, and how to use the software is available on the PSPICE Web Page.

Creating Community

- *Student-to-Student Interaction*
- *Faculty-to-Student Interaction*
- *Tone*

> *When learners interact with one another, with an instructor, and with ideas, new information is acquired, interpreted, and made meaningful. Such interactions form the foundation of a community of learners. If students feel they are part of a community if learners, they are more apt to be motivated to seek solutions to their problems and succeed. The challenge for distance educators is to develop strategies and techniques for establishing and maintaining 'learning communities' among learners separated by space and/or time.*
>
> *- An Emerging Set of Guiding Principles and Practices for the Design and Development of Distance Education. Available at www.outreach.psu.edu/de/ide*

In an environment where instructors do not necessarily meet students face-to-face and where students may never have an opportunity to meet their peers in a physical classroom, developing a sense of community can be particularly challenging. At the same time, a sense of a community–where students are able to work cooperatively with peers on course material, have the opportunity for positive interaction with the instructor, and where the learning environment is respectful and motivates students to do their best–is key to a positive and successful learning experience.

This section provides a number of solutions for creating community in the online classroom. The Online Fellows are quick to point out, however, that creating community is a challenge, and classroom dynamics must be monitored throughout the semester to ensure that students continue to engage thoughtfully in course content and continue to work together productively.

Student-to-Student Interaction

As the *Principles of Good Practice in Undergraduate Education* make clear, student learning in any classroom is enhanced when students have the opportunity to connect with each other about their academic work. For the online instructor, facilitating student-to-student interaction is made particularly challenging because students do not naturally have a chance to get to know each other before class or in face-to-face conversations. Therefore, it is important to structure opportunities where students "have" to interact with each other. It is also important, however, that the instructor develop methods for monitoring the success of these interactions. The Online Fellows offer the following recommendations:

"A sense of group and community among electronically assembled individuals can be created by a combination of facilitation skills, team-building activities, and conferences for specific groups and tasks."

- "Teaching at an Internet Distance: the Pedagogy of Online Teaching and Learning."

- **Limit the size of discussion groups**
  Rather than having an entire class talk in one large group, break the class into smaller discussion groups of four or five students. That way, students can get to know each other in a more intimate way.

- **Allow students to post student-to-student communication (as well as student-to-teacher) to get answers to questions**
  Encourage students to discuss among themselves. Do not respond to every comment—interject and guide the discussion. Encourage students to introduce themselves to the group at the beginning of the semester.

- **Pair each student with a "buddy" in the course**
  The buddy system gives students a source of support in the online classroom. Some instructors match students with varying technological experience. Other instructors prefer to match students who possess similar technological skills. Pair students according to the goals of your course or the assignment.

- **Encourage peer response**
  Post student papers online and ask each student to select a partner to critique each other's work. Be sure that students know their paper will be posted.

- **Structure opportunities for personal interaction**
  Incorporate opportunities for students to tell you something about themselves in a "student lounge" or meeting place. A "student lounge" can also be a place where students can share with each other, meet each other virtually, and learn more about each other without your presence. See the "Student Conference Center" at the end of this chapter for an example of how to set up such a location on your course website.

Faculty-to-Student Interaction

The *Principles of Good Practice* highlight the importance of faculty-student interaction in promoting learning. The online environment is not necessarily conducive to this goal, because neither the instructor nor the student can rely on regular face-to-face interactions to reinforce one's willingness to be helpful and approachable. Experienced online instructors, however, have identified the following ways to help enhance faculty-student interactions:

- **In your written communication, present yourself as accessible to students**
  Students in an online course must feel that you are approachable. Often the demands on teachers are greater in online courses, so it is important to explore the variety of ways you can send a message of availability. One way to bridge the distance between faculty and student is to address students by name. Praise student-initiated contact.
    - ◊ *Tip: To make yourself seem approachable to students, try using a more informal tone. For example, "Today, as you all are well aware, our class officially begins. Please begin working on the assignments for July 15-21. You have a couple of assignments due tonight (and kudos to those of you who have already posted!)"*

- **Schedule an in-person meeting of the entire class**
  If possible, meet with students in person for one session at the beginning of the semester. Meeting in person helps students associate names with faces and can be an effective, timely way to accomplish many of the administrative tasks central to your course.

- **Generate frequent communication**
  Students need to have a sense the instructor is really "there," not "missing in action." This means responding in a timely manner to individual questions or issues that are raised in discussion groups. It also means making your presence known by participating in online discussions, giving students regular feedback on their work and their comments, and being flexible enough to make changes to the course mid-stream based on student feedback.

- **Assign discussion group leaders or project team leaders to facilitate group work**
  Assigning team leaders is one way to ensure that students receive ample feedback. Make sure that the team leader disseminates information to every member of the team. Part of the responsibility of the team leader should be to report to you frequently on the progress of the team.

Tone

Remember that in the virtual classroom, neither the instructor nor the student has the visual cues of face-to-face communication. This also means students have fewer methods for determining whether their efforts are comparable to those of their peers and for assessing how they are doing in the class. Students will use the cues that are available (virtually all of them in writing) to help them understand the classroom climate. Therefore, how the instructor shapes the course climate through written comments and the tone of communications to students is particularly important.

"Word selection is quite important. There's a big difference between 'ok' and 'GOOD JOB!'"

- Jenna, student in UMass online course

- **"Humanize" the course**
  Remember that although you are teaching online, you are still teaching real people, so it helps if you and students can put names with faces. Develop a portion of the course website to post pictures and brief bios of students.

- **Avoid general broadcast questions**
  An online course is not a collective but many individuals all reading messages separately. So, a broadcast message like "Are you doing the reading?" is hard for a student sitting at his/her own computer to interpret.

- **Consider the tone of your own responses to students**
  Attitude comes through in writing. Are you sounding impatient? Supportive? Praise and model appropriate tone.

- **Use private email for sensitive communications**
  Use threaded discussions for group conversations. Use private emails to comment on individual student contributions and criticism.

Example:

Student Conference Center

Purpose: Since interaction in the online environment is not as easily guaranteed as would likely be the case in a face-to-face environment, a virtual conference center provides a space for students to meet in a group setting.

How to: Students click on a icon, such as the following, to enter the conference center:

In the conference center, students post comments and findings after completing activities related to the course content. Just as a conference center has different rooms, segmented areas are created for students to post messages related to the different topics of the course.

Results: At the end of the course, feedback from students consistently suggests three positive outcomes of this forum:

- The conference room reduces student isolation.
- The conference room helps students keep on task. The structure, and the expectation of posting dialogue decrease student procrastination.
- Student learning is enhanced through the interaction between students and students as well as students and instructor. Moreover, the written record of the dialogue becomes a treasure chest of content and examples for future iterations of the course.

Pedagogical Focus: Facilitating Discussions

One of the ways many instructors work to engage students in their learning and develop a sense of community is to encourage student discussion online. While discussions can be a useful tool, they need careful thought and organization. Among the things you need to consider when facilitating online discussions is how to do the following:

- Motivate students to participate
- Encourage substantive and relevant responses
- Determine the role of the instructor in guiding, moderating, and evaluating the quality of student participation.

Structure discussions so that they are meaningful to students
Discussions in which students are simply asked to repeat course material do not engage student response. Consequently, students come to see repetitive discussions as unimportant to the learning experience. Engaging topics for online discussions include:

- Reacting to a controversial reading
- Feedback from an exercise performed at home
- A debate
- A case study

Make discussion participation "count" in grading policies
By assigning a portion of the final class grade for "discussion," you can provide students an incentive to actively participate in online discussions.

Use controversial topics to facilitate discussion
Controversial topics encourage greater student participation. The controversial topic elicits divergent opinions and promotes critical thinking.

Divide students into discussion groups and change the discussion groups during the semester
By dividing students into small discussion groups, the class will feel more intimate. Students do not need to read all postings in order to participate effectively in online discussions. By changing the composition of the groups over the semester, students will get to know many members of the class overtime, get varied perspectives, and learn how to navigate varied online conversation styles.

Make opportunities for interaction exciting
Invite guests (experts and other professionals) to participate in threaded discussions or chat-rooms. Adding new insights will stimulate more discussion.

Ask students to facilitate online discussions
If a student asks a question, ask other students to respond. By assigning students as discussion facilitators, more students will be involved in the discussion.

Teaching Tip: Controversial Topics

Controversial topics encourage greater student participation in online discussions. One Online Fellow, a psychology professor, uses the following controversial question:

"Should a person who is diagnosed with manic depression but who is successfully medicated and symptom-less be allowed to be President of the United States?"

4
Assessing Student Learning

Contents:

What is Assessment?

Assessment is the systematic collection and analysis of information to improve student learning.

The word "assessment" has taken on a variety of meanings within higher education. The term can refer to:

- standardized measures imposed on institutions as part of increased pressure for external accountability,
- the process faculty use to grade students' course assignments, or
- activities designed to collect information on the success of a course, a program, or a university curriculum.

The suggestions in this chapter focus on the latter two components of assessment:

What is Assessment?

1. **Testing/evaluating student performance** and providing feedback to students for grading purposes
2. **Assessing whether the course itself is "working" for student learning**: what is going well, what isn't, and how do you know?

This second definition of assessment – determining what's "working" in the classroom – is particularly important in the early stages of innovative course design (like online courses) because assessment makes it possible to:

- Make informed improvements to current practices
- Document success to share with funding agencies, department chairs, etc.

At its best, assessment should be valuable to the teaching/learning process and not another add-on or "make work" of little use to instructors. In fact, assessment activities can be helpful in promoting all of the *Principles of Good Practice* (as you look through the recommendations in this section, note how many of them directly address the principles discussed in Chapter 2).

Evaluating Student Performance for Grading Purposes

"I have learned that providing a range of assessment opportunities beyond traditional tests permits students to feel that their strengths are being assessed."

- Robert Feldman, Professor of Psychology

In assessing online learning, it is important to create a "mix" of assignments that cover the multiple dimensions of learning that online courses can employ. Traditional tests become a smaller part of the grade as you move towards encouraging student interaction on group projects and other activities.

Different forms of assessment include:

- End of semester paper
- Weekly tests
- Group projects
- Case study analysis
- Journals
- Reading responses
- Chatroom responses
- Threaded discussions participation

Communicate expectations

As was suggested in the previous chapter, students in online courses are in particular need of clear information about course requirements and instructor expectations. Therefore, develop specific grading guidelines for course assignments and activities ahead of time so students know in advance what is expected of them. For example, articulate what are appropriate responses to questions in online discussions, what is a substantive answer versus a superficial response, etc. Providing students with specific examples of the kinds of work you are looking for is also helpful.

Teaching Tip: Immediate Feedback

In online discussions, you can offer immediate feedback. A simple "good job, Scott" or "I haven't heard from you recently, Scott" is helpful for students.

Keep track of student performance

The gradebook option in online software packages makes it possible to store all information about students' performance in one place. Many also make it possible for students to look up their own progress on assignments.

Give prompt feedback

- At the start of the semester, clarify the type of feedback you will be giving (regarding discussion participation, writing assignments, group work, etc.) so students have a clearer sense of what to expect from you.

- Students want feedback on assignments, but it is often difficult to provide much feedback when you use a number of varied assignments throughout the semester. One instructor uses a ✓,✓+,✓- system to provide a quick response to students.

- A number of gradebook features have a comment section where the instructor can give specific feedback to a student on an assignment that can only be seen by the instructor and that student.

Teaching Tip: Collaborative Assessment

The online classroom provides a great opportunity for students to complete research projects and even tests collaboratively. Collaborative assessment reduces the sense of isolation in online courses.

Design effective tests

- Be clear from the start about what is allowed and what is not permitted when students take a test online (e.g., is the test "open book," are there time limits on how long they can take to complete the test, etc.).

- Because it is difficult to ensure that students taking an online exam are not using their books, some faculty encourage open book exams but place a time limit on how long students have to complete the test. These instructors believe that if a student knows where to go in the text book to get the information they need in a timely fashion then that student has clearly done the reading, and the issue of memorizing the information is less important. Some online course software allows you to limit the time that students may view test questions and post test answers.

- Unlike many traditional classes where students never see their completed exams after they hand them in, students in online courses can usually go back and look at the exam questions at a later date. While this can be a useful learning tool for students, it can lead to additional questions from students about exam content or the wording of a question.

Encourage active learning

- Help students become more reflective learners by asking them to set their goals for the course at the beginning of the semester. At the end of the course, ask them to return to their goals to reflect upon what they've accomplished.

- The majority of students focus their academic effort on those elements of the course that will affect their grade in the course. Be sure that your grading policies reinforce the activities and assignments you value and that you take advantage of learning activities that are particularly suited for an online course. For example, if you want students to meaningfully participate in online discussions, be sure to include participation as part of the grading scheme.

Evaluate participation in threaded discussions

- Require students to participate in specific numbers of threaded discussions.

- Have interactive learning activities (e.g., threaded discussion) account for a high percentage of the course grade.

- Identify the qualities you look for in discussions and grade students according to those criteria (See sample rubric on next page).

Assessing Effectiveness of Student Participation in Online Discussions

Student Name:

Category	1	2	3	4	Points
Promptness and Initiative	Does not respond to most postings; rarely participates freely	Responds to most postings several days after initial discussion; limited initiative	Responds to most postings within a 24 hour period; requires occasional prompting to post	Consistently responds to postings in less than 24 hours; demonstrates good self-initiative	
Relevance of Post	Posts topics which do not relate to the discussion content; makes short or irrelevant remarks	Occasionally posts off topic; most posts are short in length and offer no further insight into the topic	Frequently posts topics that are related to discussion content; prompts further discussion of topic	Consistently posts topics related to discussion topic; cites additional references related to topic	
Expression Within the Post	Does not express opinions or ideas clearly; no connection to topic	Unclear connection to topic evidenced in minimal expression of opinions or ideas	Opinions and ideas are stated clearly with occasional lack of connection to topic	Expresses opinions and ideas in a clear and concise manner with obvious connection to topic	
Contribution to the Learning Community	Does not make effort to participate in learning community as it develops; seems indifferent	Occasionally makes meaningful reflection on group'' efforts; marginal effort to become involved in the group	Frequently attempts to direct the discussion and to present relevant viewpoints for consideration by group; interacts freely	Aware of needs of community; frequently attempts to motivate the group discussion; presents creative approaches to topic	
				Total:	

Adapted from Edelstein, Susan and Jason Edwards. "If You Build It, They Will Come: Building Learning Communities Through Threaded Discussions." Available at http://www.westga.edu/~distance/ojdla/spring51/edelstein51.html.

Assessing whether the course is "working"

Assessing whether your course is "working" provides feedback to understand what is useful to students. Josh Bersin in "Measuring E-Learning Effectiveness: A Five-Step Program for Success" offers a helpful framework for thinking about the kinds of information you can use to determine your course's success. Below we also provide some specific assessment techniques.

Five Steps to Measure Effectiveness

1. **Enrollment**
   Is the audience showing up?
   If students are not enrolling in your course, then they might not know about the course or do not know how to enroll in the course. If the course is an elective course, the course may be named poorly or not located correctly in the catalog.

For more information on minute papers and muddiest points, as well as other assessment ideas, see the Office of Academic Planning and Assessment's ***Course-Based Review and Assessment Handbook*** at http://www.umass.edu/oapa/top_assessr.

2. **Activity**
   Are they making progress?
   Typically, if the content is appropriate for the audience, students will progress at a reasonable rate. You may find that students move quickly and then stop at a particular point. Such information is valuable to help you assess the usability, relevance and performance of the course content.
   - ◊ *Tip:Use minute papers or muddiest point exercises to provide feedback. Minute papers and muddiest point exercises work even better in an online environment because students can share them with each other, so students see what other students are thinking about.*
3. **Completion**
   Did they finish?
   Students who truly complete the course can provide valuable feedback. However, many course software will "flag" a student "complete" even if that student has not completed all the course assignments. Make sure that you can accurately track which students have completed all the course work.
4. **Scores**
   How well did a student score?
   In online learning environments, you often can not gauge why a student has scored highly on a quiz or assignment. Did they really learn the material or copy from someone else? Multiple assessments will allow you measure incremental progress towards the final learning goal, so you can measure what exactly a student scored well on and where they have fallen short.
5. **Feedback/Surveys**
   Did they like it?
   Feedback is a vital part of online learning. Regular feedback will provide you important details about the course content, assessments, and technology.
   - ◊ *Tip: Collect mid-semester feedback and alter the course according to student suggestions.*
   - ◊ *Tip: Survey students at the end of class about their progress. What worked in the course and what didn't?*

Adapted from Bersin, Josh. "Measuring E-Learning's Effectiveness: A Five-Step Program for Success." E-Learning. March 2002.

5
Resources

Contents:

Troubleshooting Student Issues

What do I need to do after I receive my course list?
Send students an email so students know how to contact you. A brief “Welcome” email helps reduce the distance between you and your students.

What do I do about students who fall behind?
Decide prior to the start of the semester if students should progress through the course material together or at their own pace. If a student deviates from your deadlines, contact that student individually to determine what is causing the difficulty.

Troubleshooting Technological Issues

Have a backup plan
Because technology can fail, provide a contingency plan in case students cannot access course materials. For example, provide printed copies of course material and 24-hour technical support, if available.

Provide technical support
Be able to answer common technological problems about your online course. In addition, know where to direct students for more complicated questions. Always assume that students have never participated in an online class before. Consider new users of threaded discussions or online quizzing. Include simple, step-by-step directions the first time you ask students to complete a task.

Avoid overemphasis of graphics to convey content
Use graphics to supplement text. Minimize use of large graphics so that the webpage does not take a long time to load for users with older computers.

Make sure all website links work correctly
Before your class begins, test all the links on your homepage to ensure that they all link correctly.

Teach students how to recover lost files and backup their work
Emphasize to students the importance of backing-up their work on multiple locations (e.g., floppy disk and hard drive, zip drive and hard drive, etc.).

Make sure screen color combinations are legible
A simple light colored background with dark text is usually best for readability. In addition, sans serif fonts, such as Arial, are more readable online.

Avoid over-use of special effects
Special effects (plug-ins, such as java applets) vary considerably across Internet browsers. Some students' computers may not have the capability to download special effects.

Electronic Resources and References

A wealth of information about online teaching and learning is available on the Internet. Some sources include the following:

Berge, Zane L. (2002, April 2). The Role of the Online Instructor/Facilitator. Available at *http://www.emoderators.com/moderators/teach_online.html*.

Bersin, Josh. (2002, March). Measuring E-Learning's Effectiveness: A Five-Step Program for Success. *E-Learning*.

Bramucci, Robert, Cal State Fullerton. Available at *http://fdc.fullerton.edu/learning/student_web_site_handout.htm*.

De Vry, Janet R. and David G. Brown. (2000). A Framework for Redesigning a Course. In Brown, D.G. (Ed.) *Teaching with Technology*. Bolton, MA: Anker Publishing Company.

Edelstein, Susan and Jason Edwards. If You Build It, They Will Come: Building Learning Communities Through Threaded Discussions. Available at *http://www.westga.edu/~distance/ojdla/spring51/edelstein51.html.*

Feenberg, A. (1998). "The Written World: On the Theory and Practice of Computer Conferencing." In Mason, R. and Kaye A. (Eds), *Mindweave: Communication, Computers, and Distance Education*. Oxford: Permagon Press. (Excerpted at *www.emoderators.com/moderators/feenberg.html*)

An Emerging Set of Guiding Principles and Practices for the Design and Development of Distance Education. Innovations in Distance Education. *A Report of the Faculty Initiative*. Pennsylvania State University in collaboration with Lincoln University and Cheyney University. Available at *www.outreach.psu.edu/de/ide*.

Gamson, Z. and Chickering (1987, March), A. Seven Principles for Good Practice in Undergraduate Education. *AAHE Bulletin*, pp. 5-10.

Ladon, E. H. (2002, April 18). High Touch in a High Tech World: Strategies for Individualizing Online Learning. *eNewsletter*. eCollege.com. Available at *http://www.ecollege.com/educator/Resources_edvoice.html.*

Mark, Tony. Web based Learning Primer. Available at *http://www.c2t2.ca/landonline/primer.html.*

Massy, William (2002, May). Distance Education: Guidelines for Good Practice. *AFT*, pp. 9, 16.

Mersotis, Jamie P. and Ronald A. Phipps. (1999, May/June). What's the Difference? Outcomes of Distance vs. Traditional Classroom-Based Learning. *Change*, p. 13-17.

Ragan, L.C. (1998). Good Teaching is Good Teaching: An Emerging Set of Guiding Principles and Practices for the Design and Development of Distance Education. *DEOSNEWS* (8), 12.

Teaching at an Internet Distance: the Pedagogy of Online Teaching and Learning. *The Report of a 1998-1999 University of Illinois Faculty Seminar*. Available at *http://www.vpaa.uillinois.edu/tid/report/tid_report.html.*

Teaching Effectiveness Program. "Student Ed Tech Survey." University of Oregon. Available at *http://darkwing.uoregon.edu/~tep/technology/diagnostic.html.*

UMass Resources

UMassOnline
(617) 287-7160
info@umassonline.net
http://www.umassonline.net

Current Online Courses
For a listing of current UMass online courses:
http://www.umassonline.net/courses

Campus Distance Learning Divisions

Amherst

Division of Continuing Education
358 North Pleasant St.
(413) 545-0530
contined@admin.umass.edu
http://www.umass.edu/contined

Boston

Corporate, Continuing, and Distance Education
203 Wheatley Hall
(617) 287-7900
continuing.education@umb.edu
http://www.conted.umb.edu/dl

Dartmouth

UMass Dartmouth Online
(508) 999-8575 or (508) 999-9181
support@mail.umassd.edu
http://cybered.umassd.edu

Lowell

Continuing Studies and Corporate Education
(800) 480-3190
onlinelearning@uml.edu
http://www.continuinged.uml.edu/online

Office of Academic Planning and Assessment
362 Whitmore Administration Building
Martha L. A. Stassen, Director of Assessment
(413) 545-5146
mstassen@acad.umass.edu
http://www.umass.edu/oapa

Center For Teaching
301 Goodell Hall
Mei-Yau Shih, Coordinator of Teaching Technologies
(413) 545-1225
cfteach@acad.umass.edu
http://www.umass.edu/cft