

eLearning at UNM-Los Alamos Faculty Guide

DRAFT Section #1: Overview of Teaching Online

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Online v. Face to Face Teaching

Online learning is growing rapidly. According to the findings of the Sloan Consortium Survey of Online Learning, "nearly twenty percent of all U.S. higher education students were taking at least one online course in the fall of 2006."¹ As a result of this trend, there has also been a growing interest among faculty in teaching online.

Before making a commitment to teaching in an online environment, it is important to be aware of the differences between teaching a ground course and teaching a course online. Online courses offer both advantages and disadvantages.

Advantages of online classrooms include:

- Expands availability of courses, both times and places
- Limits transportation costs due to fewer visits to campus
- Expands accessibility of education for students with professional, family or location constraints.
- Provides opportunities for asynchronous, long-distance, cross-cultural communication and collaboration
- Enhances number and types of modes of presentation
- Enables access to rich sources of information, experts, expertise, demonstrations, and examples from the internet
- Promotes increased involvement from all students, including those tending to be withdrawn in more traditional classrooms
- Promotes constructivist learning through active engagement of students

Disadvantages of online classrooms include:

- Increased time for class preparation and teaching, especially the first time you offer a course online
- Increased dominance of text-based communication
- Lack of face to face interactions limits ability to gauge student reaction
- Limitations and challenges imposed by instructor's technical skills and college's available support services (not 7x24)

¹ Quoted in "Getting Started Online" from the Minnesota State Colleges and Universities, http://vfc.project.mnscu.edu/index.asp?Type=B_BASIC&SEC={AD3B4F77-C078-4A67-961C-111FBEF8D7B7}, last accessed 30 June 2009.

- Extensive reading and writing of instructions and guidebook-like materials are required
- Limitations of and/or lack of access to adequate technology
- Underprepared students are at a greater disadvantage in online than in face to face classes

For more information

- For more information about the strengths and weaknesses of online learning, see the webpage on this topic at the Illinois Online Network:

<http://www.ion.uillinois.edu/resources/tutorials/overview/strengthAndWeak.asp>

- More information about the differences between online and face to face courses is available in this article:

Smith, G., Ferguson, D., Caris, A. (2001) "Teaching College Courses Online vs. Face-to-Face," *The Journal: Transforming Education through Technology*.

<http://thejournal.com/Articles/2001/04/01/Teaching-College-Courses-Online-vs-FacetoFace.aspx?Page=3&p=1>

- More information about the differences between online students and traditional lecture students is available in this article:

Dutton, J., Dutton, M., and Perry, J. (2002) "How do Online Students Differ from Lecture Students?" *JALN* 6, 1-20.

http://www.sloan-c.org/publications/jaln/v6n1/pdf/v6n1_dutton.pdf

Readiness for Teaching Online

Are you ready to teach an online course? Succeeding in an online course requires that you understand that it requires certain attitudes and commitments. In particular, you will need to be:

- motivated to teach the specific course in an online environment.
- willing to adapt materials to an online environment and to create new materials specifically for the online environment.
- willing to learn and work with the learning content management system (LCMS); at UNM, the LCMS is WebCT.
- able to troubleshoot or get help in troubleshooting computer, internet and WebCT problems.
- willing to substitute online interactions for face-to-face interactions.
- able to fully plan and mount your course before the semester in which it will be delivered.
- able to provide clear written instructions and supporting documents for all student learning activities.
- willing to provide regular and frequent interactions, feedback, updates and troubleshooting with students and the course.
- comfortable working with computers, internet, and some emerging instructional and web technologies.
- patient, with your students, your computer, and yourself.

For more information

- If you would like to complete a self-evaluation quiz for assessing your potential for online teaching, you may find one at:

<http://www.onlinelearning.net/InstructorCommunity/selfevaluation.html?s=420.j020q091n.076q423s90>

- You might also wish to consider some of the ways in which technology can support good principles of university instruction. You may read about this in:

Arthur W. Chickering and Stephen C. Ehrmann, "Implementing the Seven Principles: Technology as Lever," *AAHE Bulletin*, October, pp. 3-6, available at

<http://www.tltgroup.org/programs/seven.html>

Experience and preparation

There are several ways that you can acquire experience and preparation for teaching online before you actually set up and teach your own fully-online course.

Enroll in an online class

One of the best ways of becoming prepared for teaching online is to yourself become a student in an online course. Taking an online course will make you familiar with the online classroom environment and help you understand the overall procedures involved in online learning. In addition, being in the role of student in an online classroom can help make you aware of some of the challenges and frustrations involved in online learning.

There is a huge variety of courses available online, and many are free. Enrolling in even a brief online course can provide you with a wealth of useful experience and preparation for becoming an online instructor.

You can also enroll in the WebCT training class that is offered online through main campus. Taking this training class will help familiarize you with the WebCT course environment while providing you with experience as an online student in a WebCT class. To enroll in this course, email webct@unm.edu indicating your interest and contact information, including your UNM NetID.

Create an online component for your face to face class

There are many ways in which you can incorporate online elements into your face to face class. Adding online elements to your traditional class enables you to become familiar with different elements of WebCT and allows you to increase the online component of your course gradually. It provides a more tiered approach to developing materials from your face to face course to an online format.

There are two basic course "types" that allow you to add online elements to your traditional class. These are:

- **Web-enhanced classes**
In web-enhanced classes, you generally hold the same number of face to face meetings as a traditional class. However, certain activities, such as quizzes, discussions, chats, or video viewings, are done online. In this format, you can vary the online elements from semester to semester and gradually become familiar and comfortable with the range of tools that are available in an online class.

- **Hybrid classes**

Hybrid classes generally combine traditional and online classroom methods in comparable or near-comparable proportions. Hybrid classes allow instructors to place online those elements of their class which they feel would be best suited to the online learning environment. The remainder of the course is taught in a traditional face to face setting in order to take advantage of the interaction provided by the live format. Many consider the hybrid course to offer the best of both worlds, as it can utilize both online and face to face learning tools for the elements most appropriate to each format. However, it is not a solution for students who cannot come to campus to take the course.

In hybrid courses, the class normally meets face to face for half of the required class meetings. The remainder of the meeting time is used by students to work in an online environment, completing additional assignments or engaging with online materials.

Creating web-enhanced and hybrid courses forces you to consider which activities and content elements are best suited to the online format. This experience will help you if and when you choose to design a fully online course.

For more information

More information about hybrid courses is given in the following readings:

Carla Garnham, C., and Kaleta, R. (2002) "Introduction to Hybrid Courses," in *Teaching with Technology*, 8.

<http://www.uwsa.edu/ttt/articles/garnham.htm>

Young, J. (2002) "Hybrid Teaching Seeks to End the Divide Between Traditional and Online Instruction," *Chronicle of Higher Education*, March 22..

<http://chronicle.com/free/v48/i28/28a03301.htm>

WebCT-Enhanced and Hybrid Courses

Enhancing your face to face course with online components means more than merely putting your lecture notes or assignments online for students to access. While improved availability of these materials can improve organization for students and faculty alike, the real advantages of enhanced and hybrid courses lie in the rich resources and new course elements that instructors can develop and use.

Online sources and new web tools offer a dazzling and growing array of materials for use in the online classroom. These materials and resources can stimulate student interest and broaden learning experiences. Designing a successful hybrid or enhanced course requires selecting those online sources, activities and tools that are most appropriate to your subject matter, teaching style, learning objectives and the needs of your students. Successfully matching online resources with these parameters can help ensure a successful hybrid or enhanced course.

Because each instructor will have a unique approach to content and will construct differing learning goals for students, there is no set way to determine which elements of your course to put online or which online tools and resources you should use. However, you might consider the following suggestions and guidelines:

Start small

Commit to putting a single video clip or assignment online before determining to mount an entire series of films or several weeks' worth of homework. One well-chosen clip or carefully designed assignment can often be more successful than a series of films or list of assignments. It will also help you to incorporate feedback into subsequent course design if your initial efforts are limited.

Mechanize

If there is a component of your material that benefits from being routinized, consider using one of the mechanized functions of WebCT for implementing this aspect of your course. Courses that require practice and drill for mastery, such as some foreign language classes, may be well suited for online quizzes or self-checking exercises such as those allowed in WebCT and Respondus.

Add media

If there is a component of your material that is highly visual or aural, consider using web-based images, recordings, film, performance or interactive media to allow students to engage this content more fully. If there is an element of your course content that is particularly difficult to convey in the face to face setting, consider whether this element might be suitable to online delivery. American students studying Chinese, for example, might, in some locales, have difficulty finding native speakers with whom to practice their conversational skills. These students would benefit from interactive language programs available online or the asynchronous cross cultural dialogs possible in the international online community.

Reinforce learning with an online component

If there is an element of your face to face class that needs reinforcing, consider developing an online component to enhance this part of the course. If you need more classroom discussion, add an online discussion forum. If students need to use and apply new information after class in order to enhance understanding and retention, create an online review exercise based on the use of these new concepts and skills.

Use online components to align with learning outcomes

Examine the learning outcomes for your course and consider which one might be most naturally aligned with online learning resources and tools. Develop a sequence of content materials, activities and assignments that support this learning outcome in an online environment. Gradually introduce these elements into your face to face course.

For more information

An introduction to hybrid classes is given here:

Carla Garnham, C., and Kaleta, R. (2002) "Introduction to Hybrid Courses," in *Teaching with Technology*, 8.

<http://www.uwsa.edu/ttt/articles/garnham.htm>

An entire issue of *Teaching with Technology Today* devoted to hybrid courses is available at:

<http://www.uwsa.edu/ttt/articles/garnham.htm>

For instructions on how to add a WebCT component to your face to face course, go to:

http://webctinfo.unm.edu/faculty/change_schedule_type/

Computer Skills and Setup

Computer skills

Because you spend a lot of time working with a computer when you teach an online course, you will be much more likely to succeed if you begin by having a basic set of computer skills, including those listed in Table 1.

*** Table 1. Some Basic Computer Skills Needed for Online Teaching

Hardware	<ul style="list-style-type: none"> • Connecting components
Data entry	<ul style="list-style-type: none"> • Basic data entry functions, typing, mousing
Browser	<ul style="list-style-type: none"> • Basic browser functions
Search	<ul style="list-style-type: none"> • Using a search engine such as Google to find information on the internet
File Management	<ul style="list-style-type: none"> • Manage and organize files on your computer • Upload and download files to and from a remote server • Synchronize files in two or more places (on your computer, on the WebCT server)
Window Management	<ul style="list-style-type: none"> • Manage multiple windows
Word Processor	<ul style="list-style-type: none"> • Basic word processor functions
Spreadsheet	<ul style="list-style-type: none"> • Basic spreadsheet functions (especially for keeping track of grades)
Email	<ul style="list-style-type: none"> • Send, reply to, and forward messages, including attachments • Manage multiple email accounts (one inside WebCT, one external)
Forms	<ul style="list-style-type: none"> • Completing and submitting online forms (filling in fields, selecting buttons and check-boxes)
Administration	<ul style="list-style-type: none"> • Back-up your files • Download and install software • Securing your computer against malware (viruses, bots, trojans) - both protecting your computer and preventing your computer from infecting others
WebCT	<ul style="list-style-type: none"> • Sufficient expertise to conduct your course - (for training, see below)
HTML	<ul style="list-style-type: none"> • A nodding acquaintance with HTML isn't necessary, but it is extremely helpful when the HTML editor in WebCT and other programs isn't giving you what you think you need.

Computer setup

Your computer must be set up to have a minimum set of hardware and software, described in Table 2. You will need to have reliable access to the internet every day. If you require students to view videos or listen to audios or access very large files, you and they will need access to a high-speed (broadband) internet connection, using either cable, DSL, satellite, or wireless technologies. Because you will most likely be uploading and downloading large amounts of materials, you will find it much easier if you have high-speed internet access, even if your students don't need it. If you don't have high-speed internet access at home, it is available on the UNM-LA campus, in many libraries, and some coffee shops and restaurants.

*** Table 2. Computer Environment Needed for WebCT & Online Learning

REQUIRED
<ul style="list-style-type: none">• A computer with a hard drive, at least 400 MHz CPU and 256 MB RAM, a mouse or other cursor control device, and a 56K modem or Ethernet card for internet access
<ul style="list-style-type: none">• An internet connection
<ul style="list-style-type: none">• A web browser: For Windows, the supported browsers are Firefox 2, Internet Explorer 6 and IE 7. For a Mac, the supported browsers are Firefox 1, Safari 2 and Safari 3. A list of supported browsers can be found on the vendor website here: http://www2.blackboard.com/tuneup/viewpage?name=tuneup_browsers_vista42_ce62. [NOTE: Firefox 3 is now officially supported even if it's not listed.]
<ul style="list-style-type: none">• Java Runtime Environment - Java 6 Update 7 (1.6.0_07) or later. A free download is available here: http://www.java.com/en/download/index.jsp. Some earlier versions are supported.
<ul style="list-style-type: none">• A word processing program, such as MS Word or Word Perfect. A free, basic word processing program that is compatible with MS Word is available online at http://docs.google.com. Use of this program requires that you obtain a free gmail account, available here: http://gmail.google.com.
<ul style="list-style-type: none">• Adobe Reader (free download from http://www.adobe.com/products/acrobat/readstep2.html) - you will use this to read .pdf files.
<ul style="list-style-type: none">• <i>Disable</i> the popup window blocker in your browser for this site: http://vista.unm.edu
<ul style="list-style-type: none">• Enable Javascript in your browser (usually found in browser Options settings).
RECOMMENDED (depends on what you require of your students - you need it too)
<ul style="list-style-type: none">• An internal speaker, external speakers, or a cheap headset that plugs into your computer
<ul style="list-style-type: none">• A microphone for screencasts, Skype, web conferences, and a webcam for videos that you record
<ul style="list-style-type: none">• Additional free software, for watching video clips<ul style="list-style-type: none">○ Windows Media Player 9.0 or later (free download from http://www.microsoft.com/windows/windowsmedia/player/10/default.aspx)○ Real Player (free download from http://www.realplayer.com/)○ QuickTime 6.4 or later (free download from http://www.apple.com/quicktime/download/)○ Adobe Flash Player 8 or later (free download from http://www.adobe.com/shockwave/download/download.cgi?P1_Prod_Version=ShockwaveFlash)○ Miro - video player and podcast client (free download from http://www.getmiro.com/)○ Adobe Shockwave Player (free download from http://get.adobe.com/shockwave/)

- MS Word 2007 Viewer, PowerPoint 2007 Viewer (if MS Office is not loaded on your computer) (free downloads from <http://office.microsoft.com/en-us/downloads/HA010449811033.aspx>) (Many students have Office 2007, and will submit files in this format)
- Adobe Acrobat or a free pdf writer. You will probably also want the ability to create pdf files to upload to your WebCT classroom. MS Office 2007 provides the ability to create pdf files, you can download free programs, such as <http://www.cutepdf.com/Products/CutePDF/writer.asp>.
- Computer security programs, including a virus detection program, a firewall, and programs that protect your computer from spyware and malware. These are especially important if you are running Windows. Free and effective versions of all of these are readily available. Be aware that students' computers often lack these protections, so you are advised to bullet-proof your own.

Browser Check: When you first login to WebCT, the program will run a browser check. If your web browser needs to be configured (e.g., to allow cookies, popup windows and Javascript) or updated, follow the instructions on that screen and on the links that the browser check provides.

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