



# Course Delivery in the Digital Era: eLearning Comes of Age

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Making the transition from the offline to online classroom is a challenging proposition for most educators. Perhaps the most basic requirement is that the educator be able to see beyond the technology itself, and seek to understand the needs of students who are learning old material in a new way.

But this does not imply that the technology should be downplayed. On the contrary; it is the technology that allows for courses to be delivered through electronic means. While educators do not need to be information technicians or computer programmers, a moderate level of proficiency is needed in order to be effective in this learning environment.

While there are various forms of distance learning, elearning is generally assumed to be courses that are delivered via the Internet. While certain elements of other course delivery methods may be used (e.g., texts, mail, telephone, etc.), the emphasis is on the majority of course material and/or structure being delivered via web applications.

The purpose of this paper is to present some of the key issues and opportunities faced by educators as they move into the online classroom. Included in this discussion are the following:

- how to use the technology to advantage, rather than being used by the technology
- how to create interesting course content that capitalizes on the strengths of the medium
- how to structure the online course, and keep students motivated
- how to think creatively and “outside the box” that the traditional classroom has imposed

- how to work efficiently in this new environment
- finding new ways to do old things, and new ways to do new things

## Why Teach Online?

Traditionalists wonder why the classroom is being forsaken in favor of an impersonal medium. The old adage, “If it ain’t broke, don’t fix it!” is often used, since there is nothing wrong with traditional classroom instruction.

However, modern culture, technology, and the workforce have changed considerably in recent years. While it is not sufficient to offer online courses simply because the technology allows us to do so, it is sufficient to recognize how technology can be exploited to meet the evolving needs of students.

The following factors have contributed to the need for new ways to learn:

- time poverty
- need for ongoing training and retraining
- 60% of US households have a PC; most US citizens have access to a PC either at home, work, or other public locations
- dual career families, with one or both persons needing advanced training
- inflexible work schedules and family obligations

Online courses help meet these needs because they can bring the right product to the right place at the right time. But “right place” and “right time” can be virtually anywhere and anytime, since courses can be completed at any hour of the day as long as the student has access to a computer and Internet connection.

## Thinking in New Ways

The most difficult aspect of teaching online is visualizing how the course will appear and operate. It means removing oneself from the three-dimensional traditional classroom, and thinking instead in the two-dimensional array of a monitor screen. But it also requires thinking into a more abstract dimension, the one of asynchronicity. Rather than everything being done in real-time, as in a traditional classroom, much if not all of the online course is completed in discrete time units (by professors and instructors alike).

Another challenge faced by online educators is how to present their course material in a way that retains the integrity of the course. This requires the educator to take advantage of the technology, while simultaneously overcoming the limits of the technology.

While the technology exists for streaming audio and video, most users are still relying on very slow dial-up connections. Thus, this is not a good use of technology at this time. When broadband connections become commonplace, audio and video will become viable tools.

Until then, we must program for the masses, which means relying on text and pictures, as well as outside readings and visits to related web sites. While this may seem like a serious limitation, it is in fact not true. *By using the online course as a springboard to information accessible throughout the world wide web, students can be exposed to far more information than could ever be delivered in a traditional classroom.*

The use of one's time is also in need of reconsideration. Traditional office hours are replaced by email, bulletin boards, and perhaps chat rooms. Of these three, only chat rooms are synchronous; the others occur at all hours of the day, with substantial gaps in response time possible.

Since one of the primary benefits of online courses is their 24-hour nature, it follows that students will often be completing their coursework at "non-traditional" hours. It is quite common for students to do these courses after their children have gone to bed, or early in the morning before work, or during lunch hours. Thus, professors need to anticipate when students will be online. While it is impossible to stage 24-hour non-stop office hours, it is possible to schedule one's availability to better coincide with proven student traffic patterns.

Educators should not feel constrained by their course content or area of expertise. While some topics lend themselves nicely and easily to online course, like Marketing and Management, others may take a little more work and creativity. Math and statistics courses can be taught online; in fact, about the only things that cannot be done well online are courses with required public speaking, or laboratory or studio experience.

But as soon as we have broadband connections for everyone, and webcams at home, many of these limitations will be dropped.

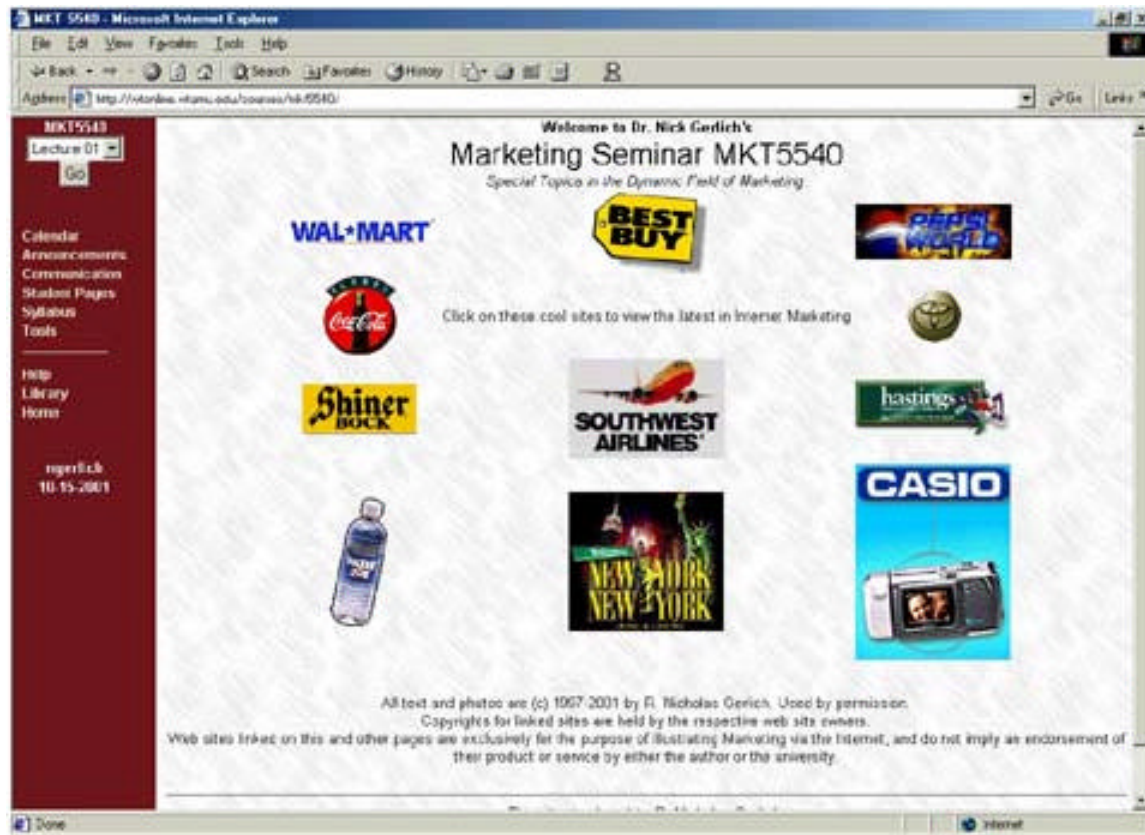
## Building the Course

The following two images are the homepages for my online courses. They are basically the doorway to my electronic classroom. As such, they need to be upbeat and attractive, not to mention inviting.

More than anything, the online course is like the professor's very own broadcast medium, where the professor is the "star." Just like the classroom becomes the prof's stage, the web page is a stage of a different sort. In some ways, the online stage is more powerful and lasting than the classroom stage, and allows for a different type of creativity.

The screenshot shows a Microsoft Internet Explorer browser window. The address bar displays the URL: <http://wtxuonline.wtxu.edu/courses/mkt340/>. The main content area features a prominent red banner with the text "Principals of Marketing MKT 340" in yellow, followed by "By R. Nicholas Gerlich" in white. Below this is a photograph of a modern university building with a large glass facade, surrounded by greenery. Underneath the photo, the text reads "West Texas A&M University" and "The Official University of the Texas Panhandle". The page contains several paragraphs of introductory text about the course and its focus on marketing in a free society. A sidebar on the left side of the page, set against a dark red background, contains navigation links such as "Calendar", "Announcements", "Communication", "Student Pages", "Syllabus", "Tools", "Help", "Library", and "Home". At the bottom of the sidebar, the author's name "rgerlich" and the date "10-15-2001" are visible. The browser's status bar at the bottom shows "Done" and "Internet".

The Principles of Marketing course is a “natural” for online delivery. Marketing is a very visual subject; marketing is pervasive in western culture, and every student has participated in marketing from the day they were born (as a consumer and/or purchaser). Random photos of the University help give distant students a sense of “place,” while at the same time promoting the school. Bright colors and photographs help break up text, and invite the student to “open the book.”



Again, it is important that the instructor think outside the box, for a great deal of creativity is needed in order to be effective in the online medium. I found that it is useful to try to develop a fully self-contained course so that everything a student needs is either included, or linked appropriately to external web sites and materials (e.g., books, articles, etc.). In other words, both of my courses are “Everything I ever wanted you to know about Marketing,” a textbook without pages.

It is important to remember to exploit the advantages of the web. At every opportunity the course developer should provide links to external sites that support the point being made. This can be done by linking to companies, magazine and journal sites, news sites, and research articles. The web is rich with resources, and it is up to the instructor to take advantage of this fact. For example, each of those images on the MKT5540 Welcome page is a direct link to that company’s site. And every time I reference a company in my lectures, it is also a direct link. Remember, the web platform is a springboard.

Other factors to consider when building the course:

- a. **Original Material.** I think that it is important for the instructor to provide some original material, lest this become nothing more than an electronic correspondence course. While it certainly take a lot of time to write lectures and exercises, they can be re-used many times. Students like the

- original content, and it is a great way to set your course apart from that of others. The online course provides the perfect opportunity to set to print all those words we've been saying in the classroom for years. *Does this mean that you should not use a text?* No! It depends on the course. But if the course has only required readings and nothing original from the professor...well, simply put, it degrades your presence.
- b. **Interactivity.** In some courses, it is helpful for there to be interactive learning. While this is usually beyond the programming capabilities of most professors, the support staff welcomes the opportunity to develop a specific application. I have added self-test quiz questions for review that provide feedback for both right and wrong answers. An Accounting course could contain exercises that are "graded" online and feedback provided. The hardest part is in visualizing how your traditional exercises can be put into an electronic format.
  - c. **Homework.** The online class requires that students be self-motivated. But this does not always happen. Thus, I have found that it is important to provide regular "reality checks" that require students to submit basic homework exercises. Regardless of whether your course is totally asynchronous (devoid of a calendar), or lock-step, this keeps students on their toes more, and keeps them from totally straying from the course.
  - d. **Study Aids.** Since we do not have the traditional face-to-face contact or classroom discussions, it is often helpful to provide a structured review for exams. These can be as simple as providing study guide questions for chapters in the text.
  - e. **Resources.** This can include text readings, assigned articles, other links to relevant sites, and even CD-ROMs of supporting material that the instructor has developed. As bandwidth increases in the years ahead, I expect there to be a lot of streaming audio and video that will supplement everything else in the course.

## Engaging the Student

It is the instructor's responsibility to create an environment in which it is relatively easy to keep momentum with the course. Naturally, it is ultimately up to the student to maintain it, but the instructor must first make it easy to do so.

Students need to engage themselves in the course. Since there is no face-to-face communication, alternatives must be considered. These options include:

- a. **Chat Room.** Chat rooms add an element of synchronicity to the course, since two or more people will be connected at the same time, by design. I have found that, for effective Chat Room discussions, there should be no more than 15 people in the "room," with 10 being an ideal number. Any more, and it becomes too easy to hid; any less, and individuals have to carry too much of the load. In my earliest online teaching experiences, I had some remarkable Chat Room sessions, because students opened up

- and acted in ways they might be inhibited to do in a classroom. Even the shyest wallflower feels empowered by the keyboard. There's no blushing to worry about, or insecurities. Problems with Chat Rooms occur when there are too many people, and when there is a wide variance in the user's connection speed. A slow connection could put someone way behind the discussion, and cause them to submit a remark when in fact the discussion has turned to something else already.
- b. **Online Bulletin Board ("Forum").** This is my preferred means of "class discussion." It is totally asynchronous. It lasts as long as people would like to contribute to the thread. I generally open a discussion by providing a link to an external article or corporate web site, and then ask for comments. I often add one or two of my own questions, and then I wait for the discussion to ensue. Some students are more "talkative" than others, but generally the response is good.
  - c. **E-Mail.** This is the primary means of student-to-professor communication. Yes, email can gobble up a large amount of time, but if you stay on top of it, it won't get you down. I also use mass emailings to the entire class to make broadcast announcements. The key to successful use of email is to provide prompt, speedy replies.

What about "traditional" means of communication like phone calls or office visits? Although I will certainly entertain office visits and phone calls, I do not encourage them, because it defeats the purpose of the medium. Many of our current students are actually on-campus and online students simultaneously, so office encounters and phone calls will certainly occur. But for those at a true distance, these methods are not always the best.

I have structured some of my "office hours" to coincide with proven traffic patterns for my courses. I have analyzed student web habits for both on-campus and online students, and found that the most common time to be online doing coursework is from 10pm to midnight. Thus, I try to be at my computer during those times so that they can drop an email and get a quick response. Another "heavy traffic" time is from 6-8am before people go to work. A smaller spike occurs during the lunch hour. The rest of the day is very light in traffic. The main point is to be available when the students are using the course, and try to provide fast turnaround times on their messages.

## Summary

Online teaching is certainly not without its detractors, as well as its shortcomings. However, there are numerous strengths that are often overlooked by educators.

The biggest challenge for professors is to think in new ways beyond the pedagogy of the traditional classroom. An entirely new pedagogy is required, for this is a new paradigm of teaching.

Essentially, the instructor must first step back from the task, and consider the objectives of the course. Next, the instructor must try to visualize how this can be done, incorporating both “old” technologies like texts and articles, as well as new technologies. This is perhaps the biggest stumbling block. Finally, the instructor must resolve to exploit the resources at hand. The web is a powerful medium, and offers many learning methods not available in the classroom. Furthermore, the programming capabilities of the support staff should never be under-utilized, for they can help turn a static course into a dynamic course.