#### NINE MYTHS OF ON-LINE TEACHING

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Teaching is not a lost art, but the regard for it is a lost tradition Jacques Barzun (1955).

Have you noticed there is a push for on-line courses at Oklahoma colleges and universities? Many of us have been urged to transform our courses into web-enhanced or totally on-line courses. Like anything else, some people are doing it badly while others have learned a great deal, and we can benefit from their knowledge.

#### WHY SUCH AN EMPHASIS ON ON-LINE TEACHING?

Since numerous studies have shown no significant difference between the effectiveness of on-line teaching and traditional teaching, (Gay, Schuchert and Stokes 2000; Orr 2002) college and university administrators around the world realize that they can reach and teach students practically anywhere. They are no longer competing for students in their immediate geographic area but can offer students around the world their courses. This means every school is no longer limited by space and time as previously, but anyone eligible to attend college and has access to the Internet, is a potential on-line student.

In 1999, the Oklahoma State Regents for Higher Education committed to Brain Gain 2010, an effort to increase the number of college graduates in the state to the national average or above, by the year 2010. In order to accomplish this, the Regents adopted the Learning Site Policy April 1999, which designated twenty-five state colleges and universities, two higher education centers, and an additional pilot site in Ponca City as "Learning Sites." In both FY 1999 and FY 2000, \$2.6 million was allocated as an incentive to build the infrastructure necessary to import courses at the learning sites. More than 1,100 courses were imported under the learning site initiative in the two academic years. Every institution in the state system now offers courses and/or programs using electronic media including on-line and instructional television courses and telecourses. The comprehensive universities accounted for 11 percent of the total offerings, regional universities 47 percent, and community colleges 42 percent. The growth in distance learning offerings has increased dramatically. From 1997-98 to 1999-2000, there has been more than 185 percent increase in the number of courses offered using electronic media (Oklahoma State Regents 1998). Currently there is a wide variety of courses taught using electronic media, everything from Agriculture to Vocational Trade and beyond. For a complete listing of Oklahoma institutions, courses, delivery method, and cost, see http:// www.okcollegeonline.org/ (On-line College 2002).

On-line courses especially appeal to Oklahoma college students. It is worth noting that "on-line" currently refers to courses taught over the Internet including web-enhanced courses, a combination of Internet teaching and face-to-face classes. Student enrollment in on-line courses increased 57 percent from 1999-2000 at Oklahoma state funded colleges and universities (Oklahoma State Regents 1998). Oklahoma City Community College had 833 students enrolled for on-line courses for the 1999-2000 school year but this number has exploded to 4,580 in only two years—a 449 percent increase (K. Wullstein, Coordinator of Instructional Technology/On-line Learning, Oklahoma City Community College, email to author July 3, 2002). Tulsa Community College lists a 243 percent increase from 1998-2001 for all distance education enrollment including telecourses, instructional television and on-line courses (R. Dominguez, Dean of Distance Learning, Tulsa Community College, email to author June 6, 2002). Rogers State University reports a 110 percent increase from 358 to 754 in on-line enrollments from 1999-2001 (P. Williams, Distance Learning, Rogers State Distance Learning, email to author June 6, 2002). On-line courses have also impacted private colleges in the state. Southern Nazarene University, unlike its counterparts, is showing an enrollment increase that it attributes to on-line classes and efforts to appeal to nontraditional students (Hinton 2002). In light of this statewide technology push, how are college professors being affected? Many of us have been approached to teach our courses on-line. For some, the prospect of technology teaching may be overwhelming while others may see it as a quick method of teaching. In reality, it is neither quick nor inherently overwhelming. One way to gain an advantage for your on-line course design is to be acquainted with the following myths:

# MYTH #1 IN THE FUTURE, ALL COLLEGE TEACHING WILL BE DONE ON-LINE

One size does not fit all for learning. Numerous learning styles and learning strategies among students have been well documented. According to these variations, some students perform better with faceto-face classes, some with on-line, and others prefer a combination (Conti 2000; Shindler 2002). To assert that only one teaching method will work for the entire population is ludicrous.

# MYTH #2 SO, YOU'RE TEACHING ON-LINE. YOU JUST STICK YOUR LECTURE NOTES ON THE WEB, RIGHT?

Teachers who have attempted to "stick their lecture notes online" have found it tantamount to expecting students to learn the material by simply reading the textbook. Since telling is not teaching, this practice is not recommended. However, this misconception is quite common. Richard Hall, an associate professor of psychology at the University of Missouri at Rolla, says that many on-line courses are not much more than lecture notes on a web site (Carnevale 2000b).

# MYTH #3 HE'S GOT ALL OF HIS COURSE MATERIALS ON-LINE, SO HE'S DONE

Similar to the traditional class lecture, little learning takes place when students do not interact with the instructor in an on-line course. A teacher who imparts the "closeness" of an intense face-to-face interaction in their on-line course greatly improves the richness of their course (Bourne, McMaster, Rieger, and Campbell 1997). Of course this increases the amount of time a teacher devotes to each student. often more than what they would spend interacting in a traditional course. When students rate on-line courses, they look for some of the same elements found in traditional courses such as a knowledgeable professor who interacts with the students, and features which create a sense of community in the course. The Alley study also shows that some aspects of distance-education instruction, which were considered novelties a few years ago, are now thought of as essentials for a good course. These include regular interaction between instructors and students, a student-centered approach, and built-in opportunities for students to learn on their own (Carnevale 2000c). Another professor, who has seen both sides of such courses by taking them as a student as well as teaching on-line, also concluded that a sense of presence or awareness for others in the course is vital to its success. While not physically present, all participants should be committed to ongoing and high level interactivity. Course information and subject content must be carefully organized and all students need to contribute. This has to be established first in an on-line course if students are will fully benefit from the resources made available. Also essential is that the present moment in asynchronous environments always has to be felt even though stakeholders are accessing information or participating in activity at different times. Collectively, learners and professors have to help sustain a sense of presence by way of their participation in on-line activities (Dringus 2001).

# MYTH #4 YOU CAN TEACH MORE STUDENTS ON-LINE THAN YOU CAN TEACH IN A TRADITIONAL COURSE

As described above, a key element of successful on-line teaching is teacher interaction with students. Oklahoma State Regents surveyed students to determine their assessment of on-line courses. Students suggested improvement in student-faculty interaction, and timely assessment and return of student work (Oklahoma State Regents 1998). In order to meet these student needs, teachers must increase their time with each student. This takes time. This issue of on-line class size was addressed in a documentary by a panel of veteran professors from the fields of on-line teaching and education technology from Oklahoma State University. The participants included OSU Professors of Education Lynna Ausburn, Ph.D., Bruce Petty, Ph.D., and Kay Bull, Ph.D. Below is an excerpt from that documentary:

Ausburn: Well I can tell you right now in my distance ed class, I have 25 and I'm busy. . .I'm real busy. There's a very common myth "Oh, you've got all your stuff stuck on-line, and you can have 500 students ....."

**Petty:** That's an administrator talking...that's a department head and a dean...

Ausburn: Teaching at a distance. . .the operational word here is teaching. It's not just stickin' stuff on-line and saying I've 500 students and they're out there on their own doing whatever it is they do.

Petty: That's a real danger.

Ausburn: It is very much a danger. . . .

**Petty:** Administrators, and I've been one of those. . .administrators in today's environment feel the need to do things like that. We'll put you on-line, you've got 50-60 students, I can count all of those, I get student credit hour production, it's only costing me your salary again. . .I invest a little money in some hardware and software and I'm in business. . . and from their perspective that's exactly right.

**Bull:** Well. . . if you don't want interaction with the students. . . I can set up a class for ten thousand. . . (group laughs) it's either broadcast . . . or it's paper or it's paper on-line. . . we make it a correspondence course, and they do all of the responding on machine scorable sheets and I never come into contact with the student and you could run as many students as you want. . . . I would not take that course.

Moderator: That sounds like independent study.

Bull: It is.

Ausburn: Exactly. . . and when you look at the interaction that you have with your students. . . when you get a cry for help. . . they need

help now not in three days or two weeks. . .they need help now. I am busier with 25 at a distance than I am with twice that many (face-to-face).

Petty: Absolutely.

(Jones 2000)

### MYTH #5 I ANSWERED THE STUDENT'S QUESTION THROUGH EMAIL. THAT'S ALL SHE NEEDS, RIGHT?

It depends. Some professors are unintentionally blunt with their emails. This can be perceived as uncaring disinterest. As with all teaching, care should be taken to not only impart knowledge, but encourage the student. Email communication can be quite ambiguous. On-line text communication requires a strong ability to be extremely articulate in written form. Students often ask questions that are vague, and an instructor responds in a way that he or she thinks is helpful. Often, if a student does not receive a satisfactory answer to his question, he will give up rather than ask again (Carnevale 2000a).

# MYTH #6 COMMUNICATION IS SIMPLE AND STRAIGHTFORWARD WITH ON-LINE TEACHING

Actually, a strong case can be made for a combination of on-line and face-to-face teaching, known as "web-enhanced." For those who have never taught on-line, this could be viewed as a half-step between face-to-face teaching and on-line teaching. This method allows teachers to ease into on-line teaching by continuing to maintain the traditional classroom yet have an on-line element such as quizzes, threaded discussion or website readings. The biggest advantage to this method is that since much of human communication is inherently ambiguous, people can often adequately resolve key ambiguities when they are face-toface. When the primary communication medium is written text, resolving ambiguities may be more difficult for many people (Hara & Kling 2000). In one case-study at Indiana University, researchers found that the students' frustrations about receiving "prompt unambiguous feedback" continued throughout their course, and that such communication is much more difficult in text-based asynchronous courses than in face-to-face conditions. Part of the complexity comes from trying to anticipate the level of detail and phrasing that will be sufficiently helpful to others. Students were often unsure what meta-communication would be appropriate in their on-line conversations. A teacher, to confirm understanding, may value email which represents the nodded head of a face-to-face group, or it may instead be dreaded by him as yet more of an email glut (Hara & Kling 2000).

# MYTH #7 IF I TEACH ON-LINE, I HAVE TO INCLUDE NUMEROUS MULTIMEDIA COMPONENTS

Not necessarily. Most on-line courses are text-only because of the large bandwidth required by the student end-user to download complex interactive animation, photographs or video. Depending on the subject and amount of movement in a video, bandwidth between 500-650 kilobytes per second is needed for good visual quality (Rule 1999). Most students taking courses on-line use home computers. Currently, the vast majority of home computers in the U.S., 76 percent, are connected to small bandwidth modems 28-56kbps (PC World.Com 2001). For these reasons, most on-line teachers save themselves and their students a lot of frustration by simply teaching text-only courses with simple graphics.

### MYTH #8 SO AN ON-LINE COURSE SHOULD BE TEXT-ONLY

On the contrary, simple graphics, simple animation and color can be quite effective in on-line courses. Numerous studies indicate a large portion of the population are visual learners. In fact, some research indicates that on-line students prefer visual information (Ouellette 2001). Robert P. Ouellette, director of technology-management programs at the University of Maryland-University College, has conducted studies about student experiences in on-line education courses. From these studies he has concluded:

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One of the things that is very clear to me is that the distanceeducation students tend to be very visual. The phrase "a picture is worth a thousand words" is very true. They prefer pictures much more than verbal communication. They understand graphics and pictures better than text. So when you're on-line, which is so very largely a textual format where people just put notes and words, it's very important to have a lot of graphics (Ouellette 2001).

According to a University of Michigan study, 69 percent of students are visual learners though most college professors predominately attempt to teach by lecturing. The study continues by noting that the use of multimedia engages students actively in their learning, and exposes students to the subject matter in exciting ways that traditional learning methods cannot. Using multimedia allows students to take an active role in the educational process, in that it frees them from being passive recipients of information (Montgomery 1995). But always consider the download time for the graphics by the student on a 28-56 kbps modem.

### MYTH #9 THERE'S NO SUCH THING AS TOO MUCH MATERIAL IN AN ON-LINE COURSE

Actually, text in an on-line course can be overwhelming according to one study from Vanderbilt University. Researchers concluded that some courses studied contained too much material. Having encyclopedic knowledge at their fingertips did not impress students. They simply wanted to know the information for which they would be held responsible (Bourne, *et al* 1997).

# CONSIDERATIONS FOR ON-LINE COURSE PRODUCTION

Lee R. Alley, Manager of instructional-technology projects at Montgomery College, Rockville, Maryland has just completed a survey of thousands of colleges and universities across the country, and interviewed faculty members who have used innovative techniques to make their on-line courses better. Alley has concluded that distance courses should not follow the lecture approach of a traditional course, or simply offer students on-line content to read. He says knowledge is constructed and not something that is "handed to someone over a high-bandwidth cable" (Carnevale 2000c). Some effective on-line teaching may include:

• Threaded discussion (an on-line discussion conducted *asynchronously* by the teacher at one time, and answered by the students at various times, as opposed to "chat" which is done *synchronously*—at the same time).

• Assigned reading of on-line documents in addition to websites, texts, and novels.

• Timely response to student emails, usually within 24 hours.

Timelines and deadlines on the syllabus

• Timely response from technical support team (Ausburn 2000; Bull 2000).

William Winn, Director of Human Interface Technology Lab Learning Center, University of Washington, also warns that simply posting course notes on-line is not instruction. He advises taking deliberate steps to support knowledge construction, provide a context for learning, and provide a learning community within the course. Without these, Winn believes such courses fail (Winn 1998). Effective on-line courses I have taken and those I have taught have also included:

· Problem-based learning.

• Practical examples of how the new knowledge is valuable and fits with a student's existing knowledge.

• Encouraging student-to-student communication to reduce feelings of isolation.

· Optional student information pages.

#### CONCLUSION

Just as most American technology is continually changing, on-line teaching is in a constant state of flux. This is one of the fascinating elements of teaching today. Experimenting with new components and methods of communicating knowledge to our students can be quite rewarding. When a teacher takes the necessary time needed to create, produce, and tend an on-line course, it can be mutually beneficial to the teacher and the student. However, we must protect our students by not allowing an on-line course to be overloaded with students, or the quality of the course deteriorates. We must also take care and time to be encouraging to students, especially through email. If possible, we need to take advantage of face-to-face meetings because these can eliminate many misunderstandings which are created on-line. However, this may be impossible for some long-distance students such as those from other states. In these cases, other arrangements such as phone calls or videoconferences may be viable alternatives (K. Bull, personal interview, April 17, 2002). Even with all the "bells and whistles" at our disposal today, good teaching is still simply a competent and caring teacher communicating beneficial knowledge to students, regardless of the medium.

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