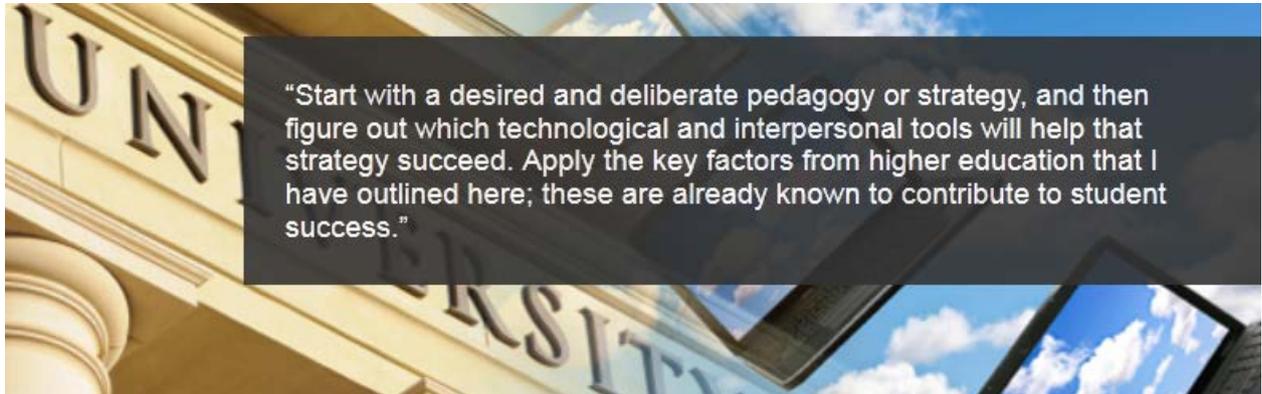


# What Can We Learn from Higher Education? (Aug 11)

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(Yes, this is a trick question.)

My focus the past 20 years has been internal corporate instructional design with an emphasis on eLearning. Recently I had occasion to come up for air and I saw some fascinating developments in higher education with respect to eLearning. After scouring some of the literature, I believe our colleagues in higher education have identified some instructional strategies and critical success factors that may be helpful for those in the corporate world.

## Definitions

For the sake of this article, I'd like to establish the way I'll be using some key terms.

I'll use "**online learning**" to mean a course that is delivered and mediated at least 80% by computer.

I'll use "**eLearning**" to describe a broader set of elements delivered or facilitated by computer, some of which may even be human-mediated such as online discussions. Other elements that I'll include under the eLearning label could include delivery and tracking of assignments, course schedules, and online stand-alone quizzes and tests. I'll treat eLearning and **distance learning** as synonyms.

"**Course**" has two meanings:

- If the context is a corporate setting, then a "course" generally means a one-time, often contiguous activity that may last from 15 minutes to several days.
- If the context is higher education, then "course" generally means a semester-long series of classes. A course may have been converted from a "traditional" course (classroom lecture) to an "eLearning" (or "distance learning") course with components like those described above.

Academia uses the word **pedagogy** much more commonly than corporate circles do. It is the study of teaching and of being a teacher, especially the strategies involved. (Wikipedia, 2011) A major thrust of this article is the relationship between technologies and pedagogies, or instructional strategies.

## What is the corporate eLearning baseline?

Before I discuss some higher education trends, I'd like to look at the current landscape of corporate eLearning, especially concerning stand-alone online courses. Here are some of the challenges that folks in the corporate world wrestle with:

- The learner's interaction is almost exclusively with a computer and not with fellow learners or the instructor.
- It can be difficult to capture and hold the learner's attention.
- The training may be perceived as simplistic even when branching or simulations are used.

In my opinion, two defining elements of corporate online learning are the nature of the objectives (pragmatic; how do I perform a task?) and the nature of the value proposition, namely cost saving. Rarely is our objective to raise the learner's cognitive skills to the top of Bloom's taxonomy, and savings in travel cost and time are often the key factor in choosing online delivery. This is not meant as an indictment; it's merely the nature of corporate job training.

### **What's happening in higher education?**

So what is it about higher education that caught my attention? First and foremost are the striking things that you can do in a semester-long course vis-à-vis a short, one-time course. Whereas corporate training falls mostly in the category of online learning (a one-time, short course), higher education seems to embrace the full concept of eLearning across an entire semester with a variety of activities to promote richer engagement and deeper understanding.

This longer-term opportunity offers a fascinating chance to focus on effective pedagogies and then apply technology to match the desired teaching strategy. When the converse is done, that is, if we start by folding in technologies without understanding their purpose, learning effectiveness generally suffers.

Course structures vary from university to university and course to course, but there seem to be two nearly universal components: online discussion among students, and much more individual and group interaction between students and the professor. In a very real sense, eLearning enables the course to extend beyond the times and walls of scheduled classroom sessions, immersing the student in the learning. This does not come without a price. Another universal trait is that eLearning tends to be harder and more time consuming than traditional classroom teaching for instructor and students alike. As a result, some students drop out.

### **What is the trend?**

Given the increased opportunity, along with greater difficulty, just what is the eLearning trend in higher education these days? Here are some recent statistics.

#### **Usage:**

- Over 5.6 million students were taking at least one online course during the fall 2009 term. This is an increase of nearly one million students over fall 2008.
- The 21% growth rate for online enrollments far exceeds the less than 2% growth of the overall higher education student population.
- Opinions differ whether this is likely to continue at the same pace.

#### **Quality:**

- Over three-fourths of academic leaders at public institutions report that online is as good as or better than face-to-face instruction.

#### **Effect of the economy:**

- Three-quarters of institutions report that the economic downturn has increased demand for online courses and programs. (Allen and Seaman, 2010)

## What do students themselves say?

- In a study, at an American university, of undergraduate students enrolled in both traditional and online courses, students preferred online courses to the traditional classroom. Students said that they learned more in these classes, spent more time on these classes, and found these classes to be more difficult yet of higher quality than traditional classes (Hannay & Newwine, 2006).

Another study examined students' attitudes to online teaching and learning. It involved 400 responses from students enrolled in 72 online courses offered by 15 different institutions. Students cited the importance of flexibility, good communication, and interaction. They tended to differ in their attitudes toward asynchronous communications. Some students were highly appreciative of the time that online learning offers for thoughtful communication and the ability for all to voice opinions, whereas others missed the face-to-face communication. (More on this when I address learning styles.)

The technology can be used to help or hinder transformative learning, but it all comes down to a teacher/instructional designer combination who understands how to use the technology to create an effective learning experience, and students who can thrive in that environment. Other success factors were the teacher's ability to be present, to project a personality through cyberspace, and to convey a sense of humor. (Goldsmith, 2001)

What are the implications of eLearning for administrators and faculty? Students value timely feedback, active participation in the online discussions, and quick responses to e-mail. These factors all require faculty to structure their "teaching" time differently from the traditional elements of preparation, class time, and office hours.

## Learning styles

One thing that can be done with a semester-long course is to increase both the number and variety of interactions in hopes that this variety will reach students having diverse learning styles. Sometimes you hear this when designing online courses, and people make the argument to provide both text and audio in order to accommodate aural and visual learners.

One interesting study compared specific learning styles in parallel classroom and online versions of the same course. After considering different learning style instruments, the authors chose the Grasha-Reichmann Student Learning Style Scales (GRSLSS) because they designed it for their target audience, namely high school seniors and college students, and it focuses on how students interact with the instructor, other students, and with learning in general. (Diaz and Cartnal, 1999)

The authors measured the six GRSLSS social learning styles among students who chose either the eLearning or classroom version of the course. Whereas all students exhibit some of each learning style, students usually have one or two predominant styles. A look at the styles and their brief descriptions instantly suggests why some students may prefer classroom learning and others the online version of a course. Here is a brief description of each social learning style:

- **Independent learners** prefer independent, self-paced instruction, and they generally prefer to work alone.
- **Dependent learners** view the teacher and fellow students as sources of structure and direction.
- **Competitive learners** strive to outperform their peers and want recognition for their academic achievements.
- **Collaborative learners** prefer to share and cooperate with teachers and peers. They like lectures and small group discussions.
- **Avoidant learners** do not care to attend class, and they are often uninterested and overwhelmed by class activities – unless the instructor can find a way to pique these learners' interest.
- **Participant learners** enjoy a class activities and discussion and do as much class work as possible. They are keenly attuned to the teacher's expectations. (Diaz and Cartnal, 1999)

In college courses where there are both classroom and eLearning versions, it seems likely that students may intuitively self-select the version that best matches their individual preferred learning styles. But such a choice is generally not feasible in the corporate environment, and may be too expensive to offer in higher education, too, so the challenge is how to design one eLearning course that will accommodate all of these learning styles.

The study authors found a strong difference between the groups in the independent and dependent categories. Students with independent learning styles favored the eLearning version, whereas students with dependent learning style tended to favor classroom.

An important conclusion from this study is that faculty should avoid the temptation to merely mimic their traditional course when converting it to the eLearning format. Not only are the physical and cognitive characteristics different, but if allowed to self-select for classroom or eLearning, the composite learning styles of the respective target audiences may be quite different. And, if you're only offering the eLearning version, then you should design it to accommodate all learning styles. This is a topic for further research.

From several studies, some important considerations for the online discussion component have emerged. Online discussion can occur in one of two ways, either synchronous (with everyone online at the same time) or asynchronous (e.g., e-mail, blogs, and other online discussion forums that involve time delays between input and response).

*Synchronous* discussions tend to be spontaneous with lively, real-time interaction among participants, even if they are text-based. *Asynchronous* discussions tend to lead to more thoughtful and literate contributions. One researcher noted that in constructivist eLearning courses, asynchronous discussions were preferred because they led to higher-order thinking, resulting in what the researcher described as "writing oneself into understanding." (Lapadat, 2002)

### **Some principles of good practice**

It comes back to pedagogy. How exactly can a seasoned classroom instructor modify the course originally designed for eLearning delivery? The following seven principles of good practice are a solid starting point.

#### **Principle 1: Encourage student-faculty contact**

Provide clear guidelines for how students can use discussion forums, e-mail, and phone to connect with their instructor.

#### **Principle 2: Encourage cooperation among the students**

Give students written guidelines for Internet and discussion group etiquette.

#### **Principle 3: Encourage active learning**

Give students several opportunities to present and discuss their findings with the rest of the class. Provide case studies and problem-based scenarios. [Note: be sure these are meaningful so learners will not perceive them as mere busywork.]

#### **Principle 4: Give prompt feedback**

Instructors should strive to respond to individual students in a timely manner and be "present" in the course. Caution: instructors should facilitate but not dominate discussions, else student participation is sure to shut down.

#### **Principle 5: Emphasize time-on-task**

At the beginning of the course, give students a complete calendar of all activities, assignments, and due dates.

## **Principle 6: Communicate high expectations**

## **Principle 7: Respect diverse talents and ways of learning**

Be mindful of the learning styles described previously, and encourage students to submit ideas or topics that have practical meaning for them. Consider using a learning style assessment to better enable you to adapt the course to the learners.

### **Can some of these findings be adapted for corporate use?**

After reviewing some contemporary literature on the state of *effective* eLearning in higher education, two elements stand out. I think these would be beneficial, albeit challenging, for online learning in the corporate setting. Those elements are 1) fostering a relationship between the student and a human instructor, and 2) meaningful and supportive interaction between students. Research shows that both of these elements increase the effectiveness of eLearning courses. Surely there is more opportunity to design both of these elements into semester-long courses, but I wonder if designers could strengthen them even around shorter, stand-alone online courses that typify corporate online learning.

Here are some possibilities:

In a medium size company, most employees and managers often know the training staff. Therefore, rather than building a strong student/instructor relationship around an individual course, I have seen instructors assigned to particular business areas within the company where they build a supportive, long-term business relationship. Strengthen this relationship by communicating with learners at key junctures in their professional development journey, for example, by sending a welcome note when an employee registers for a particular online or classroom course. Besides hoping to set expectations in advance, such a personal touch can strengthen the instructor/student bond.

Start with a desired and deliberate pedagogy or strategy, and then figure out which technological and interpersonal tools will help that strategy succeed. Apply the key factors from higher education that I have outlined here; these are already known to contribute to student success.

One final area of interest is online testing. Given the instructor's (and even the institution's) lack of control over the testing environment for online and eLearning courses, test security and academic honesty present one more challenge to design and administer. This is a topic for a future article.

### **References:**

Allen, I.E. & Seaman, J. (2010). *Class differences: Online education in the United States, 2010*. The Sloan Consortium.

Chickering, A. W., & Gamson, Z. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 40(7), 3-7.

Diaz, D.P. & Cartnal, R.B. (1999). Students' learning styles in two classes: online distance learning and equivalent on-campus. *College Teaching* 47(4), 130-135.

Goldsmith, D. (2001) Communication, Humor and Personality: Student's attitudes to learning online, *Academic Quarterly Exchange*, Summer 2001.

Hannay, M. & Newwine, T. (2006, March). Perceptions of distance learning: A comparison of online and traditional learning. *Journal of Online Learning and Teaching*, 2 (1).

Lapadat, J.C., Written Interaction: A Key Component in Online Learning. *Journal of Computer-Mediated Communication*, 7 (4), July 2002. <http://jcmc.indiana.edu/vol7/issue4/lapadat.html>

"Pedagogy," downloaded Aug. 16, 2011 from <http://en.wikipedia.org/wiki/Pedagogy>