The Turtle is Moving . . .

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Over the last year since the last Syllabus conference, I believe we see evidence of a subtle, yet significant, shift from our current models of teaching and learning to models more suited to the information age. The shift is reflected, I think, in four key elements of teaching and learning. It is also significant that no one new model is evolving; rather many new models are taking shape. It is as if the earth is shifting beneath us and yet we deny that we are changing. Maybe the earth is really on the back of a turtle, after all.

Maybe we can track the shifts by looking at these four major elements of our teaching and learning models:

· The learner or the Who is Learning

· The teacher, or the Who is Teaching

· The What to be learned and

· The Where of the act of learning

Each of these elements is shifting. The Who is Learning is shifting. Learner demographics show shifts from full time to part time, from younger to more mature, from inexperienced with technology to very comfortable with technology. In fact, the learner may well be more experienced than the teacher in the effective use of the tools of learning.

This "Who is Learning" shift is causing a ripple effect in the knowledge balance between the teacher and the learner. Although the teacher is still the expert in the content to be learned, the student, in turn, may be a guide to the teacher in the use of the tools of learning. In some institutions, it is the learners who are developing web sites and identifying good resources for learning experiences.

This contributes to an important shift in the interaction equation between teacher and learner. The teacher's role is shifting from being in control of the content delivery to being a facilitator, a guide, a mentor. The teacher also assists learners in translating and integrating experiences brought to the learning situation from surprising and remote sources. Difficult concepts are often learned through complex, experiential simulations.

"Who is teaching" is also shifting. The teacher is often being cloned or extended. In some places, the lone teacher is changing into a team of two or more teachers-who teach courses of six, nine, or even twelve credits. Or the master teacher is assisted by graduate assistants or tutors. Many faculty are shifting from being full time to part time and from mature to very mature. I suspect the ranks of the committed teacher/researcher may
be starting to shrink. If the total number of teacher/researchers is not shrinking, it is likely that the percentage of faculty in this dedicated role is shifting.

Concurrent with this shift in the models of learning is a shift to unbundling of the responsibility of design, development, and delivery of a curriculum. Flexible models of learning have used this division of labor with correspondence courses for decades. The new interactive tools and push toward greater productivity are causing a reexamination of this model for traditional institutions. How will faculty unbundle these responsibilities in our traditional courses? In recent years, there seemed to be more tools encouraging and supporting faculty to build multimedia components of courses. We have shifted, I think, to a team approach, due to a new appreciation of the time, talent and resources needed to build these components.

The teacher is also being extended by the students themselves. The movement of collaborative learning places the students in the role of being teachers and students to each other. The teacher's role is to create the learning environment and the experiences in which the students can teach each other.

The "What to be learned" is also shifting. The role of facts is less primary. Every subject area, every discipline is more complex and more interdisciplinary. Every discipline has a core set of concepts to be learned, but more and more of what is to be learned, is how to stay abreast of the changing knowledge base. So the percentage of the factual content to be learned may be a shrinking percentage of the course content. Processes, relationships, and interactions are coming to the fore; while facts are receding. Learners need to become familiar with the knowledge bases of the disciplines, how to access these knowledge bases, and how to analyze and use the information.

The Where of the act of learning is also changing. Less and less time is in the classroom. And more and more time is on the Web. Teachers and learners are spending more time in virtual spaces, virtual worlds, virtual cafes. The teacher is shifting from the front of the classroom to being in front of a camera, and in front of a computer, to "invisible" in the packaged resources. The Where of learning now can be anywhere the teacher or the learner is-at home, in the car, in the workplace, in the dorm. One college in the Southeast U.S. offers classes in the dorm, not just so students will attend class and be on time, but also to build community. Other classes are shifting to places of work, where the learning is practical, similar to apprenticeships, and to internships, etc.

The Where of learning often used to be a physical place such as a library-a place where courses resources were organized, accessed, "checked out" Now these resources are digital and organized for more felicitious searching and retrieval-to those of us fortunate enough to have the passwords, and the proper domain names on our Internet addresses.

The Where is probably the most obvious example of how the ground is shifting. And like the others it demands a response. So how do we keep our bearings? How do we keep an orientation when the landscape shifts? The Who shifts require a certain stance on part of faculty-open, collaborative, working as part of a team-using available resources and keeping our "heads up" to the process. The What requires that we not only pass along the orienting maps to students, but to help them create their own, to learn how to learn. As the fabled hare found out, even turtles deserve attention.

My last reflection is that the number of tools to assist faculty in their work of teaching and preparing the curriculum is exploding. Last year in the exhibition hall, there were few vendors offering Web templates for delivering and managing Web courses. This year, vendors were offering a
profusion of new choices to assist in the design, development and delivery of whole courses. In previous years, there were more tools encouraging and supporting faculty to build multimedia components of courses. We have shifted, I think, due to a new appreciation of the time and talent needed to build learning resources. So we are now looking for more tools that enable teachers to use, access and integrate their own courses—using the rich, complex resources that have been developed by others.