CHANGING INSTRUCTOR’S ROLES IN VIRTUAL WORLDS

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Berge’s Instructor’s Roles Model categorized the instructor’s roles as pedagogical, social, managerial, and technical. Developed more than a decade ago, this model described changing roles for instructors as they transitioned from in-person classrooms to teaching online. Today, as virtual worlds emerge and are being used as educational platforms, these same roles are valid, but again the emphases for teaching in virtual worlds are different than those in online or in-person classrooms.

It certainly is no longer unusual for instructors to teach online in either real-time or asynchronous learning environments. Over the past decade and a half, thousands of online courses have become mainstream at universities and in the workplace. One phenomenon observed during this time was the changes in student expectations for their instructors as teaching and learning moved from in-person classrooms to online. These new dimensions of the learning environment and student expectations usually required changes in how teachers needed to promote student motivation, and in how the online classroom is managed (Berge, 2007). Thus, changing student expectations led to a demand for different instructor’s roles within different learning environments.

Recently, a few instructors and students have moved into 3D, virtual worlds for at least some of their teaching and learning experiences. To date, this is fairly unusual. This paper discusses some of the changes this type of learning environment demand of the instructor. Over a decade and a half ago, during the transition to online teaching from in-person classrooms, Berge’s (1995) Instructor Roles Model described the changing roles of instructors. It will be used here for the framework in describing the new transition. Second Life, a popular multiuser virtual environment (MUVE), will be used as an example of a popular virtual world for discussing these changing instructor roles.
SECOND LIFE

Multiuser virtual environments (MUVEs), such as Second Life, are metaverses where students can create their avatars and in that process, change appearance, gender, or clothing to pretty much anything they can imagine. They can teleport, walk, run, ride, or fly to where they want to go in the virtual world. Networked, three-dimensional (3D), virtual worlds, are quickly emerging as a favorite venue for social networking, collaboration, and learning. Used for entertainment, professional, and educational purposes, millions of people live their fantasies and a “second life” in a metaverse where imagination is thought by some people to be the only limitation. In a MUVE, the user is represented by an avatar that moves about the virtual world, communicating and interacting with the environment and other users.

In general, these worlds offer at least three important elements: a 3D space or environment, avatars that represent the individual user, and interactive chat, either using text or voice or both (Dickey, 2005). Helmer and Learning Light (2007) described Second Life as:

- a sandbox, a playground; a place where all conceivable types of human interaction can be tried out, with limited repercussions in the real world when things go wrong; a place to fail safely, and in relative anonymity; a place to make discoveries about the self and others. It has both public spaces and private spaces, allows both highly structured linear experiences and more free-form, open-ended ones … and all points in between. It is in some senses, an ideal space for learning. (p. 4)

Virtual worlds often replicate real life, with its uncertainty, irrationality, and chaos at times. The characteristics of virtual worlds, as a medium, promote learning that is informal and collaborative, with content and context that is user-created. Along with being highly social, the media-rich environment often promotes quite intense engagement. All this leads to certain changes in student expectations and therefore a demand for changes in instructors’ roles.

CHANGING STUDENTS

As emerging technologies allow students to connect with each other and to knowledge sources, traditional training and educational models are called into question concerning whether or not they meet the needs of these millennial learners (Siemens, 2008). Prensky (2001) argues that students born after 1980, who he calls digital natives, have been so immersed in technology their whole lives that most find it impossible to relate to the linear logic of the traditional, in-person classroom or have patience with an educational system that has changed little for the last 150 years (Berge, 1999). Similarly, the online classroom will not appeal to students either, unless opportunities are presented that permit them to make connections in online networks.

According to Murray (2007), digital natives are adept at, and enjoy multitasking, working in groups, and absorbing information rapidly with greater access to information and resources. Learners often have multiple paths to content and they want learning that is fast-paced, multimedia, and interactive (Richter, Anderson-Inman & Frisbee, 2007). These changes involving students, the Internet, and the communication technologies that bring connectedness to the millennial generation, have implications for instructors and teaching.

INSTRUCTOR’S ROLES MODEL

As learners assume more responsibility for their own learning than they have in the past, it changes the role they have in their learning. The role of the instructor changes, too. As access to information becomes more readily available to students, the faculty member’s role shifts from expert and perhaps the sole or major information source, to facilitator, coach, or mentor—in other words, to one who, first and foremost,
provides leadership and wisdom in guiding student learning. Over the years, numerous roles and functions that the instructor assumes, both in-person and online, have been listed, including: chair, host, tutor, mediator, provocateur, network administrator, concierge, curator, observer, colearner, community organizer, and even lecturer (Berge, 1992, 1994; Berge & Collins, 1993; Brochet, 1989; Feenberg, 1989; Morris, 1993; Paulsen, 1995; Siemens, 2008). These various functions led to the Instructor’s Roles Model (Berge, 1995).

Essentially, the Instructor’s Roles Model identifies the functions of instructors in four categories: pedagogical, social, managerial, and technical. As may be suspected, some functions and roles overlap or can be placed in more than one category. Not all of these roles need to be carried out in their entirety by the same person. In fact, it may be rare that they are in most classrooms, either in-person or in elearning. But it is the instructor’s job to make sure all the roles are successful. Whether teaching online or in-person, the four functions in the model are equally appropriate. However, compared to strategies used for in-person teaching, the emphasis sometimes shifts when discussing online classrooms. Following are the four categories of the Instructor’s Roles Model as described in 1995 describing a shift from in-person to online instruction.

**Pedagogical Role**

Many of the most important roles of online instructors revolve around their duties as educational facilitators. The instructor uses questions and probes for student responses in ways that focus discussions on critical concepts, principles, and skills. A main role of the instructor is to model effective learning and accept “the responsibility of keeping discussions on track, contributing special knowledge and insights, weaving together various discus-

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**Figure 1**

Model of Instructor’s Roles
sion threads and course components, and maintaining group harmony” (Rohfeld & Hiemstra, 1995, p. 91).

Social Role

Creating a friendly, social environment where learning is encouraged is also important for successful learning. In online learning, this suggests promoting human relationships, developing group cohesiveness, maintaining the group as a unit, and in other ways helping members work together for their mutual benefit are all helpful to the success of any online learning activities.

Managerial Role

This role involves setting the agenda for the course: the objectives of the discussion, the timetable, procedural rules, and decision-making norms. With online teaching, managing the interactions with strong leadership and direction is considered a sine qua non of success.

Technical Role

The online facilitator must make learners as comfortable as possible with the ICT (information and communication technology) hardware and software that is being used for the online learning environment. The ultimate technical goal is to make the technology transparent to the user. The closer that this goal is reached, the more the learner may concentrate on the academic task and activities necessary for successful learning. It is important to note that as online education grows and matures, more of this role is handled by support staff and not the instructor. Still, the instructor is often the first person who students call on for help when a technical issue interferes with their learning.

CHANGING ROLES OF THE INSTRUCTOR IN VIRTUAL WORLDS

A decade ago, when a great deal of instruction started to move online, it was noted that instructors had to change their roles from what they knew in their in-person classrooms:

Enthusiastic faculty, experienced in face-to-face teaching, who adopt computer conferencing are sometimes dismayed when their on-line classrooms go awry. Feenberg (1986; Feenberg, 1987) suggests this is because potential moderators are unable to overcome the initial difficulty of transposing leadership skills developed in contexts that are rich in social signaling (e.g. the tacit signs of approval like smiles, heads nodding in agreement; frowns that indicate puzzlement or disagreement) to the “artificial” setting of a computer conference where the very context of communication and meaning-making must be explicitly stated and negotiated. Berge (1997) speculates that those instructors who are philosophically oriented to student-centered teaching may make an easier transition to on-line teaching as they are already oriented to discussion and interaction. (Collins & Berge, 1997)

Today, due to the nature and different characteristics of virtual worlds, other changes in teaching roles are needed. In virtual worlds such as Second Life, the major goals are often for students to build things or explore ideas and other’s role-plays, demonstrations, or simulations. While the same four roles (pedagogical, social, managerial, and technical) need to be addressed, there is a different focus than for either in-person or online teaching and learning. The following list of selected changes to instructor roles for teaching in virtual worlds came from personal experience, discussions with instructors in virtual worlds, and a review of the literature (Antonacci & Modaress, 2005; Bainbridge, 2007; Bellman, 2005; Berge, 2008; Brown, 2005; Cheal, 2007; Deubel, 2007; Dieterle & Clarke, in press; Eliens, Feldberg, Konijn, & Compter, 2007; Graetz, 2006; Helmer & Learning Light, 2007; Karlsudd & Tågerud, 2008; Kemp & Livingstone, 2006; Lancefield, 2006; Nicholson, 2006; Villano, 2008).
Changes in the Pedagogical Instructor’s Role in Virtual Worlds

• Students should mainly be building or exploring in virtual worlds. Often, pre-existing tools for building allow for less expensive and more efficient-to-develop learning objects and contexts than could be the case outside of the virtual world. Another thing this may mean is a list of resources for students to explore. Activities for building things need to accommodate the student’s skill level and the goals of the course.

• When an instructor starts planning a PowerPoint presentation or a lecture in Second Life, that is pretty much going to end up as something that could be done more effectively in another medium and not in-world.

• Any activities that can be designed for students to work on outside of the classroom (i.e., asynchronously) should be given every consideration to be design as such.

• Learning in virtual worlds may be better at meeting the expectations of the “digital natives” generation described above.

Changes in the Social Instructor’s Role in Virtual Worlds

• How the instructor presents himself or herself to the class is important. How the instructor’s avatar looks is often as important as what the instructor says. A derogatory, cute, or off-color name for the instructor’s avatar is unprofessional and will speak volumes before the instructor even starts the class. Class rules for students’ names and avatar appearance set expectations, too.

• Remember that every avatar has a real person behind it. Instructors must take a proactive approach to acculturating students into the learning environment of the virtual world.

• Instructors should consider group work when it makes sense to the instructional goals of the course. Virtual worlds are social networking platforms by their nature.

• Expect that “grieving” may occur. Grieving is the virtual world equivalent of flaming in online courses. Participants may breach etiquette and respond with harsh or vulgar language. If this problem should occur, the instructor needs to react and remind people (privately) about classroom etiquette.

Changes in the Managerial Instructor’s Role in Virtual Worlds

• Arranging the meeting space needs to be thought through and planned in virtual worlds. In a learning management system such as Blackboard, or an in-person classroom, choices are limited. But in a virtual world such as Second Life, an instructor can meet in a lecture hall, a traditional classroom, in a laboratory, at the Sistine Chapel, a sandbox, a skybox, around a swimming pool, at the beach, in a woodland, or any place else the instructor can imagine and build or have built.

• Most virtual worlds are not complete learning management systems. For instance, Second Life is pretty poorly designed for such things as being a repository for articles or submitting student papers. Generally, some other system can be used in conjunction with the virtual world for asynchronous discussion, course document storage, and other functions better suited than Second Life. E-mail can be encouraged for group communication on projects.

• Vary the participants’ amount of contribution. If there is a participant who appears overly outspoken, ask that person (privately) to wait for a few others’ responses before contributing. Similarly, at some point, it may be appropriate to ask less-outspoken individuals to participate more actively.

• It is perfectly reasonable to design elements of most instruction so that students take turns as leaders in the class. This needs to be determined by the content of the class,
and the skill, knowledge, and attitude of the students. But again, the instructor does not necessarily need to solely execute all these roles and tasks.

- Instructors find that planning, developing, and distributing course materials needs a substantially greater preparation time for than may be anticipated at first.

**Changes in the Technical Instructor’s Role in Virtual Worlds**

- At the current state of virtual worlds, technical glitches frequently occur (e.g., reboots, downtime, and re-installation fixes). The instructor should have a back-up plan if certain things are not working exactly right. For example, what if the system is offline at class time, or goes down during class? What if a student(s) talk feature does not work even if it in every previous class? What if a student misses a class or part of a class due to technical difficulties?

- Having technical support lined up, beyond what the instructor knows, is an important element of teaching in virtual worlds. At this time, *Second Life* instructors will find their role has a relatively larger technical emphasis compared with what it will be when more students become familiar with virtual worlds as time passes. It is reminiscent of teaching on the Web in its infancy.

- Given the steep learning curve, instructors should consider job aids for builds and any process that is more than a few easy steps. In many cases, it may make sense for students to make these checklists and job aids, for themselves and classmates.

- Consideration should be given to system requirements and Internet connection speeds available to students and teachers. High-speed processors, a lot of RAM, and good graphics cards are needed.

- Think of new, efficient, and effective methods of indicating feedback to students in virtual worlds. Instructors need to develop standards for feedback to students’ work.

Certainly some feedback techniques may draw from those used for in-person classrooms, and some may draw from feedback to students’ work done online.

**CONCLUSIONS**

Historically, in-person formal education was instructor-centered. The instructor’s roles changed focus as online, asynchronous education become commonplace, with a more student-centered approach and an especially strong emphasis on discussion-based activities and flexibility regarding the time for accessing the course. Learning in virtual worlds is driven by a move toward informal, collaborative, reflective learning, with user-generated content.

Virtual worlds, as engaging learning environments, can contain problems and contexts that are very similar to those in the sometimes messy, real world, yet they are a safe place to test ideas, fail, and learn. MUVEs such as *Second Life* are places to collaborate, to build, to explore, and places where students have control and freedom, which is critical to 21st century lifelong learning. Immersive metaverses let students interact as “if actually there, suspending their attention to the real world and transferring that attention to the virtual world” (Richter, Anderson-Inman, & Frisbee, 2007, n.p.). We can continuously improve the effectiveness, cost, efficiency, and quality of the learning environment and the learners’ experience. It may be that MUVEs help instructors hone new roles as learning improves.

**REFERENCES**


