

## Transitioning Instructor Skills to the Virtual Classroom

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### Introduction

In recent years, the traditional classroom model for instruction has been challenged by the advent of Web-based training (WBT) and distance education, which have significantly gained in popularity due to their technological advances and potential as cost-effective training solutions. Based on these changes, instruction, feedback, and testing are taking place more frequently outside of the classroom, with increasing demands for traditional instructors to teach outside of their regular environment.

However, classroom instructors may not be truly ready to make this transition. For example, in a WBT environment, the instructor and student are in separate locations, in many instances attending “class” at different times. In this and other similar distance-based environments, the instructor can no longer rely on face-to-face interaction with its visual cues and readily apparent immediate feedback. Since many instructors find this separation from the learner to be the most challenging adjustment in the transition to the virtual classroom (Smith, 2001), this article will focus on distance education and the various strategies that instructors can utilize to transition into various distance-based settings.

### Distance Education

Willis (1993) describes distance education as instruction that “takes place when the teacher and student are separated by physical distance, and technology (i.e., voice, video, data, and print) is used to bridge the instructional gap” (p. 4) including both synchronous and asynchronous environments. Synchronous (or live e-learning) instruction occurs in “real time” with the students and the instructor interacting concurrently, combining the characteristics of instructor-led training with the flexibility of a virtual classroom (Gartland, 2001; Hofmann; 2001). In comparison, with asynchronous instruction the instructor and students communicate at different

times, with all participants interacting online at their convenience, offering more flexibility in terms of time and location.

Web-based instruction can utilize both of these formats to deliver a variety of educational materials over the Internet. In fact, Galagan (2000) predicts that more than 70% of all corporate training programs in the United States will be delivered using Web-based technology by 2003, with universities and colleges also creating distance-based courses and, in some cases, virtual campuses. In order to prepare and take part in this “revolution,” instructors need to transfer their skill sets to the virtual classroom (Mantyla & Gividen, 1997) in order to be successful in this new generation of e-learning (see Table 1).

### Shifting Instructor Roles

Instructors moving from the traditional classroom to a virtual environment face a variety of challenges, including the need to become expert moderators of communication and interaction among students. In addition, there is new technology to assess, evaluate, and select; new instructional design and development tools to master; and more demands on their time for developing, preparing, and delivering training. With all of these changes, distance education, including Web-based instruction, has begun to shift the focus of learning from a teacher-centered methodology to a learner-centered environment.

Web-based teaching, for example, is less about information dissemination and more about organizing students’ interaction with each other and the materials (Beer, 2000). Distance-based educators need supplemental resources, including more planning time, more instructional support, and additional training to modify their courses for distance learning delivery (Cyr, 1997). The transition to an online classroom can also be made more successful if attention is paid to the building of a learning community, including the establishment of flexible guidelines and procedures that focus on maximum participation and collaborative learning (Palloff & Pratt, 2001).

In the distance-learning environment, the role of the instructor has shifted “to one of a facilitator, broker and interpreter of information and education” (White &

Bridwell, 1998, p. 389, 394), with facilitating interaction among students being central to the role of the distance-learning instructor. According to Valerie Beer (2000, p. 138), “Web teaching is less about information dissemination and more about organizing the students’ interaction with each other and the material.” Berge and Collins (1996) describe the transition of roles from the traditional classroom to a virtual one as the instructor moving from the center of the learning experience to a facilitating role, encouraging learners to direct their own learning.

### Technology Issues

The selection of the specific technology used to deliver online learning is important, because it helps to determine the instructional features and, to some extent, the overall design of a specific course (Meyen & Lian, 1997). For example, learning styles of the intended audience should be considered with respect to the technology choice, with auditory learners possibly preferring to listen to a brief explanation of a concept rather than reading about it, and visual learners preferring graphic-rich environments. In addition, Palloff and Pratt (2001) suggest that the technology choice can help students connect with each other and form learning communities.

Both asynchronous and synchronous technology options should be considered when designing instructional sequences. With asynchronous technology, students can interact with each other and access course content at times that are most convenient to their schedules. Synchronous communication, on the other hand, allows immediate interactions among the students and the instructor, but requires participants to be in front of their computers at a specific day and time, possibly detracting from the convenience of distance learning (Smith, Tyler, & Benscoter, 2000).

Instructors need adequate training in both of these technologies, as well as overall technical support with respect to hardware, software, and troubleshooting (American Federation of Teachers, 2000). Valerie Beer (2000), for example, suggests creating an instructor's guide to support teachers in their use of the Web as an asynchronous learning tool. This guide might include items such as a course overview and objectives, content outlines, instructor lecture notes, learner activities and assessments, media requirements and directions, approximate timing, a list of

learning materials, and tips on how to help learners. For synchronous instruction, Jennifer Hofmann (2001) encourages using a leader's guide that can act as a script to guide the teacher through a live instructional event and coordinate any production tasks requiring special timing by the instructor.

Finally, regardless of the technology used, it is a good idea to have a backup plan in case the technology breaks down during a critical moment. According to Lawrence Ragan (1997), “among the most important components in the design of distance education programs are those that establish the organizational and administrative infrastructures to ensure that such programs can be efficiently and effectively developed, managed and executed” (p. 6). Alternative e-mail addresses, phone numbers, fax numbers, and convenient access to technical support all contribute to supporting the instructor in a successful instructional event, particularly if something unforeseen occurs.

### Development Considerations

As might be expected, preparing an online course often involves more design and development time than traditional classroom instruction, since these instructors need to become proficient in specific distance-based strategies and the technology used for delivering their courses. In addition, while traditional instructors can relatively easily make adjustments in assignments, exam dates, and course content, these same changes in a virtual classroom can be quite cumbersome, potentially interfering with student learning. Since online instruction is difficult to change once a course has begun, the development phase has been described as the most critical (Meyen & Lian, 1997).

One of the first steps in online course development involves gathering the information necessary to meet both course and student needs (Smith *et al.*, 2000). Many potential instructors have the subject matter expertise for building an online course, but may be missing the content and course management skills (Smith, 2001) required for this type of instruction.

In addition, the overall preparation time for a distance learning course can be much greater than for a classroom-based one, particularly the first time a course is

being offered. Based on a survey of instructors from nine different institutions, an online class is between one-and-one-half to three times the amount of work for an instructor as compared to a face-to-face class (Hyslop, 1999). Similar data provided by the American Federation of Teachers (2000) reports that preparation time for online courses is from 66 % to 500% higher than for traditional courses.

One of the primary reasons for this longer development cycle is the need for online course materials to be developed well in advance of actual course delivery (Smith *et al.*, 2000). In addition, the course syllabus needs to be much more specific and detailed in online environments, since this document becomes a critical communication tool through its descriptions of student expectations, deadlines, and grading criteria. The syllabus must also provide answers to anticipated questions, replacing the common ad hoc questions and concerns raised in person within a traditional classroom setting (Kuchinke, Aragon, & Bartlett, 2001).

Finally, it is crucial for the instructor to rehearse instructional timing and smooth transitions from one topic to the next in order to prepare for online teaching. A range of learning strategies should also be considered, including independent and group projects, online research, peer-edited assignments, electronic chat, and class discussions.

### Platform Skills

One of the most important instructional challenges facing distance education professionals is the need to develop a rich level of personal interchange, not only between instructor and student, but also among the students themselves. In a traditional classroom, course dynamics are generally teacher-centered, with the instructor seen as the subject matter expert and the “gatekeeper” of the information. Within this environment, teachers can respond to a student's body language or visual cues immediately, adapting instruction and providing feedback to a student question or problem (Wilson & Whitelock, 1997).

With online delivery, however, it is often the learner, not the instructor, who controls the pace and the sequence of various learning experiences, requiring a shift from an instructor-centered to a learner-centered model. With this type of instruction,

the instructor and student are separated by distance and/or time and the visual cues are removed from the instruction, thereby making it much more difficult to include common forms of interaction, such as a nod of approval (Collison, Elbaum, Haavind, & Tinker, 2000). An online instructor, for example, cannot readily see which students understand a particular concept or determine whether a student has a question or problem without waiting for a student to initiate contact or specifically asking for questions. Instructors obviously need to be willing to give up some control of the instructional process in order to empower students in building a learning community.

In a traditional face-to-face environment, classroom instructors also generally engage in a high level of interaction with their students, with significant verbal and interpersonal skills being necessary in order to effectively communicate. In these situations, extroverted teachers perform very well since the above characteristics are quite effective in environments where all of the instruction occurs in a given physical space.

These same instructors, who are used to quickly establishing rapport through face-to-face contact, may find it difficult to connect with students in an online environment because of the distance between instructors and their students. In these online situations, introverted instructors may actually perform better than their extroverted counterparts (Pratt, 1996). According to Palloff and Pratt (1999), "People who are introverts are more adept at creating virtual environments because they can process information internally and are less outgoing socially. It is more comfortable for an introvert to spend time thinking about information before responding to it" (p. 22).

### Communication

Appropriate communication among all of the instructional participants is another key aspect of successful online learning. Learners in this environment expect the instructor to be available on a regular basis, reinforcing a positive and effective learning environment (Smith, 2001). Effective discussions among instructors and students increase the likelihood of an online course being completed -- and knowledge being retained (Osberg, 2001). Building collaborative components of e-

learning into an online instructional solution can foster interactions and feedback, and dropout rates often decrease when students are engaged with others learning the same subject.

There are also several advantages for online communication that do not generally exist in face-to-face instruction. Online students, for example, tend to be less self-conscious and therefore more likely to ask questions that they might otherwise be afraid to ask (Collison *et al.*, 2000; Wilson & Whitelock, 1997). Questions can also be asked and answered at any time of day or night in asynchronous forms of distance education, providing more time for reflection and often leading to more meaningful questions and answers. In addition, online communication is provided in a text-based format, providing a physical record that can be reviewed, unlike traditional classroom settings where past dialogue typically disappears when the class is over.

Finally, communication tends to be much more open and multi-directional in an online setting, since the responsibility for learning opportunities comes from the instructor as well as from all of the participants. “An open Web-based instruction (WBI) environment that promotes communication and collaboration can result in learners becoming part owners in the instruction, greatly enhancing their sense of online community” (Shotsberger, 1997, p. 105). This sense of community can greatly facilitate information exchange among all of the individuals -- students and faculty -- in a virtual classroom.

### Participation

A class with appropriate levels of participation is one of the hallmarks of effective education and training, and similar levels of participation are also essential to online learning. In the traditional classroom, the absence of one or more participants may be barely noticed, but in an online course, a single student's non-participation may significantly affect the quality of the learning (Palloff & Pratt, 2001).

One way to increase online participation is to create an atmosphere that encourages questions and promotes a sense of community among the participants. In

the traditional classroom, students have the opportunity to meet in person and interact before, during, and after class. In an online environment, however, the opportunities for social interaction must be designed into the actual course (Palloff & Pratt, 2001). The need for “icebreakers” (activities used to introduce the class and establish a comfort level in the group) are even more important in an online environment, since all class members need to be introduced as well as made aware of all the other participants. Using an interactive activity at the beginning of a class can also increase the likelihood of higher levels of participation throughout the course.

An effective online course should also provide clear guidelines for participation, as well as information for students about course expectations and procedures. According to Palloff and Pratt (2001), setting expectations about participation in an online course should include:

- Clear communication about how much time the course will require of students and faculty;
- Opportunities for students to learn how to participate in an online course;
- Examples of postings expected from students, including frequency and an appropriate sample;
- Instructor contact with and monitoring of students; and
- An atmosphere that encourages participation.

In addition, instructors can increase their levels of participation by acting as "guides on the side," who assist in the learning process without hindering the students' increased knowledge and understanding of the material. Collison *et al.* (2000) describe this type of facilitation as particularly beneficial, since it permits instructors to remain in a moderating role, with participants taking on more responsibility for responding to each other's questions and comments. Although online instructors can be quite helpful through these mentoring roles, too much participation by the instructor can actually lead to a reduction in interaction among their students and an over-reliance on the instructor, as evidenced by too many questions directed at the instructor rather than the other students in the class.

## Evaluation

Monitoring the progress and achievement of the learning goals in an online environment can be more challenging than in a traditional classroom. In addition to the lack of face-to-face interaction and various visual cues, learners can become “lost” in an online course without the person-to-person interaction common in traditional classrooms (Dereshiwsky & Moan, 2000). In keeping with a learner-centered approach, “online evaluation and assessment should be part of the learning-teaching process, embedded in student activities and in the interactions between learners and between learners and teachers” (Harasim, Hiltz, Teles, & Turoff, 1996, p. 167).

Specifically, instructors should provide students with the means to express their opinions about a course, the way it is proceeding, and how well it is meeting their learning objectives (Palloff & Pratt, 2001). At the University of Northern Arizona, for example, students enrolled in online Web courses are required to submit monthly progress reports that provide information about what is working well in a course, any student problems or concerns, and thoughts (in partnership with the instructor) on how the course can be improved. These e-mail updates make up 20 percent of the student’s grade and serve to provide the instructor with ongoing interaction and communication with each student. By embedding this type of “pulse check” into the curriculum, students provide feedback and problem solving strategies to the instructor, thus allowing the instructor to gather formative evaluation data throughout the course (Dereshiwsky & Moan, 2000).

Finally, instructors should develop appropriate strategies for constructing assessment tools at a variety of intellectual levels and for a variety of instructional purposes. Instructors should also establish protocols for asking and answering questions, activities for encouraging student participation, and methods for providing positive feedback (Cyr, 1997). For compressed video formats, Mantyla and Gividen (1997) suggest developing creative and engaging interactive activities that can be utilized every five to seven minutes, including interactive strategies such as presenting, personalizing, showing, participating, and questioning.

## Conclusion

During the past several years, distance education has continued to gain in popularity in both academic and corporate environments. The need for learning in a knowledge-based society is also more important than ever, including traditional classroom teaching, online learning, and/or blended learning solutions that combine both of these formats into some type of integrated learning experience.

Successful instructors are adaptable, flexible, and able to think on their feet when an unexpected situation occurs; they are also able to multitask and turn a potentially bad situation into a positive learning experience. These characteristics, and many others, are important for both traditional classrooms and online instructors and will continue to be critical in all instructional environments. However, as has been described above, there are also an increasing number of online situations in which classroom instructors need to leave their comfort zones and take on new roles as moderators, mentors, and coaches. In taking on these new challenges, these instructors can themselves become students in an e-learning world.

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Table 1

Strategies for the Successful Transition to a Virtual Classroom

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Instructor Roles

- Support for student communication and interaction
- Time management related to developing, preparing, and delivering materials
- Facilitation of information transfer to students

Technology Issues

- Choice between synchronous and asynchronous delivery
- Training and support for use of various technologies
- Creation of instructor's and/or leader's guide
- Development of a backup plan for technology problems

Development Considerations

- Need for additional design and development time
- Development of a detailed course syllabus
- Rehearsal of instructional timing and transitions
- Consideration of a wide range of learning strategies

Platform Skills

- Development and use of rich personal interchange among all participants
- Empowerment of students in building a learning community
- Potential use of non-traditional faculty (e.g., introverted instructors)

Communication

- Availability of the instructor on a regular basis
- Development and use of collaborative instructional activities
- Use of print-based instructional record not available in face-to-face instruction

Participation

- Creation of atmosphere that encourages questions and a sense of community
- Use of "icebreakers" to introduce the class and establish a comfort level
- Provision of clear course guidelines, course expectations, and procedures
- Instructors as "guides on the side" to assist the learning process

Evaluation

Embedding evaluation into various online course activities

Student expression of opinions about course processes and meeting objectives

Use of assessment tools for various purposes at a variety of intellectual levels