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The Distance Teacher as Reflective Practitioner

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Advances in telecommunications technology have greatly expanded the possibilities for providing and accessing instruction. For example, fiber-optics, satellite, and digital technologies facilitate electronic text transfer and video teleconferencing. Through Integrated Services Digital Network (ISDN), Telephone systems can be linked together to form networks capable of simultaneously carrying voice, data, and video transmissions. What years ago began as correspondence study has become a growth industry in higher education. Following the lead of institutions such as the University of Wisconsin-Madison and Oklahoma State University, distance education is in its ascendancy as a legitimate and widespread means of delivering and accessing postsecondary education (Willis, 1994).

It is increasingly likely that a college professor will be responsible for teaching in a distance education program. This article considers distance teaching as an instance of professional practice which is similar to yet different enough from the norm to warrant considerable reflection on the part of the practitioner. It describes some of the challenges of distance teaching and learning, and provides a framework and practical suggestions for thinking about one's practice.

Reflective Practice

In response to "the crisis of confidence" in the professions, Donald Schön (1983) wrote about the nature of professional knowledge. Noting that the practice of professionals is characterized increasingly by "complexity, uncertainty, instability, uniqueness, and value conflicts" (p. 14), he contrasted the types of knowledge professionals are called upon to apply in stable and unstable situations of practice. In a stable situation, the problem presented is a recognizable one that fits the traditional patterns of practice and knowledge. In an unstable situation, however, established knowledge and behaviors may prove inadequate; the professional is faced with tasks for which he or she has not been prepared. Knowledge other than that typically applied to stable situations is required if professionals are to adapt to the divergent situation.

Schön proposed that, in addition to applying the specialized theory and techniques of their discipline, professionals must draw on the knowledge that is implicit in their

actions. He describes this *knowing-inaction* as "ordinarily tacit, implicit in our patterns of action and in our feel for the stuff with which we are dealing" (p. 49). Although much of what professionals know is expressed in their actions, they often cannot articulate the rules and procedures that underlie their practice. Yet, professionals think about what they are doing, often while they are doing it; in Schön's terms, they reflect on and in action. Adapting to uncertain, unstable situations calls for professionals to tapping into their base of tacit knowledge-to reflect on their practice.

The reflective practitioner examines and questions the understandings that are at the foundation of his or her practice.

He may reflect on the tacit norms and appreciations which underlie a judgement, or on the strategies and theories implicit in a pattern of behavior. He may reflect on the feeling for a situation which has led him to adopt a particular course of action, on the way in which he has framed the problem he is trying to solve, or on the role he had constructed for himself within a larger institutional context. (p. 63)

In reflecting, the practitioner tries to make sense out of an uncertain or divergent situation by questioning assumptions, reframing the problem, and constructing and testing new approaches.

Distance Education: An Unstable Situation of Practice

Distance education presents such a divergent situation. In many ways, distance teaching is similar to teaching face-to-face. Yet, the experiences of teaching and learning at a distance are different because participants are separated from one another, and their communication is mediated, typically by electronic means. These conditions change the role of the teacher (Beaudoin, 1990) and the nature of the transactions between the teacher and the learners (Dewal, 1988; Rumble, 1989). In audioconferencing, for example, the difference is readily apparent, since the visual channel that typically carries much of the instructional and interpersonal messages is absent or significantly modified. The alteration of communication channels results in the loss of information and rapport ordinarily derived from sources such as proximity, the gestures and facial expressions of the participants, and one's surroundings. The opportunities to both convey messages and to relate interpersonally are strained when the participants cannot see one another or respond in real time. Ironically, the delivery mode intended to actuate communication across distances can itself set up obstacles to communication. More in this environment than in a face-to-face setting, there is the potential for increased interpersonal distance, reduction in the amount and frequency of interaction, loss of feedback, and interference in the transfer of messages.

Increased interpersonal distance. Interpersonal distance refers to perceived closeness among participants. Feelings of psychological closeness decrease as one moves from an information-rich environment (such as face-to-face conversation) to an information lean environment where sensory channels are reduced (Wellens, 1986). Lacking both physical proximity and, sometimes, a visual reference, participants find it difficult to establish rapport. Greater interpersonal distance is a threat to identifying and

communicating with one's peers. Learning alone or in a small group, distant students may feel isolated and lack a sense of belonging to the larger group. This is particularly true when, in addition to students distributed among a number of remote site's, there are some students present with the teacher at the origination site.

Reduction in the amount and frequency of interaction. It is common for teachers to notice less interaction when teaching distance courses than in face-to-face classes (Gilcher & Johnstone, 1988). Increased interpersonal distance contributes to less spontaneous interaction (Wellens, 1986), while the necessity of communicating through telecommunications technology can impede free-flowing conversation. Various devices such as push-to-talk microphones can make the act of communicating awkward or one-sided. Unaccustomed to using the communication technologies for instruction, participants often feel intimidated and self-conscious, as did students in Burge and Howard's study (1990).

Students' reticence threatens spontaneity and lessens the amount and frequency of interaction between the teacher and among the students themselves. Indeed, Sponder (1990) cites student-to-student interaction as the least utilized pattern of communication in audioconferencing. With less spontaneous interaction, teachers have a tendency to fill air time with lecture, pausing infrequently to ask or allow questions. Students are inclined to react passively, reluctant to interrupt with questions.

Loss of feedback. Coincident with the reduction in interaction is the loss of feedback resulting primarily from the absence or reduction of nonverbal communication. In teaching, faculty members traditionally rely on nonverbal means such as eye contact, facial expressions, and body language to gauge the reactions of the students: a puzzled look prompts them to rephrase, clarify, or make connections more explicit, while a nod of the head lets them know the point (probably) has gotten across. By indicating the degree of success in the transmission of the message, these nonverbal cues help regulate the pace and contribute to both the success and spontaneity of the instructional transaction.

Without feedback, communication is inhibited. Sponder (1990) observed that audioconferencing compounded miscommunication by impeding participants' ability to predict and gauge the success of their messages and by providing fewer opportunities to correct mistaken messages if, in fact, a mistake is recognized. Even when video is a component of the distance delivery, visual feedback is reduced, dependent on the image that falls within the range of the camera's lens.

The immediacy of written feedback is also affected in distance education when students at remote locations must rely on mail or courier services for submitting assignments and for receiving grades and commentary on their performance. Distant learners, too, often have fewer opportunities for feedback from their peers and for casual interchange with their professor. While facsimile (fax) and electronic mail transmissions can speed the exchange of written communication, such technology can not make up for the loss of impromptu feedback from which students who have face-to-face access to faculty members can benefit.

Interference in message transfer. Considering that over 80% of what people learn comes from what they see (Heinich, Molenda, & Russell, 1989), learning which

emphasizes listening and excludes or diminishes visual communication taxes the learner's capacity to attend to the instructional message. Students' success in learning in an audioconference environment, for example, is often defined by the proficiency of their listening skills as well as by their ability to learn independently in interaction with the written materials. Without nonverbal cues and with feedback diminished, there is a greater likelihood that messages may be misinterpreted (Neumann, 1986). Comprehension can be threatened when messages are limited in their form, frequency, and immediacy (Garrison, 1989). Moreover, it has been suggested that technology-based instruction might be unsuitable for fostering creative thinking (Heinzen & Alberico, 1990) and may, in fact, be a hindrance to cognitive growth due to the demands placed on attention and to the loss of contact, respectively (Wiesener, 1983).

Reflecting on the Practice of Distance Teaching

As a departure from the familiar, distance teaching presents new problems which challenge one's routine approach to teaching. What has worked in the past may not be adequate for dealing with the unique situation presented; customary classroom practices applied in the distant teaching and learning environment may fail to effectively bridge the distance. Solving problems posed by distance teaching requires more than experience with face-to-face teaching (Sparkes, 1983). Distance teaching prompts reflection.

Reflecting on the practice of teaching requires scrutiny of one's underlying philosophies of education and teaching—examining assumptions and questioning preconceptions about learners; about one's role, approach, and methods; and about the teaching and learning process itself. In preparing to teach in distance education systems, teachers should reflect on the context, the learners, and the methods and procedures they employ.

Reflecting on Context. Altered by the separation of participants and mediated by the use of telecommunications technology, the teaching environment takes on a new complexion. Within this environment of microphones, telephones, cameras, and computers, there exists both the facilitation of communication and the potential to inhibit it. While telecommunication technologies provide a means of linking a widely dispersed group of students, such technologies exert an influence on the teaching and learning process. After interviewing numerous distance teachers nationwide, Gilcher and Johnstone (1988) found that the technology of distance teaching impacted course content, the method of instruction, the degree of interactivity among participants, and the quality of both the instructor's and the students' performance.

To teach effectively, teachers have to acknowledge a changed environment and its contextual influences. Specifically, they have to work within the capabilities of the medium and adapt to the limitations it imposes on their approach to instruction. Faculty can acquire a feel for the context and experience of distance teaching and learning by:

- talking with distance teachers and reading about others' experiences;
- observing distance education classes, particularly from the students' point of view;

- learning about the capabilities and limitations of the equipment and practicing with it;
- talking with administrative staff, technical personnel, and site facilitators to become familiar with the routines and procedures; and
- talking with distant students to identify their needs and concerns.

In reflecting on the context, distance teachers should ask themselves questions such as the following:

- What are my expectations of this delivery medium?
- What can I count on to be the same and what will be different about teaching and learning in this environment?
- Can the objectives I have for this course be adequately met in this context?
- What are the influences, both positive and negative, on learning in this setting?
- How do I make maximum use of this medium while minimizing its limitations?

Reflecting on Learners. Since distance teaching is different from conventional classroom teaching, learning at a distance is likewise different for students participating in the instructional experience by electronic means. Students in distance education programs experience learning differently and thus have a different perspective from students who are not separated from the locus of instruction.

To begin to effectively bridge the gaps between classroom and distance teaching, faculty need to look at distance teaching and learning from the students' point of view. They need to be aware of and sensitive to the psychological, social, and technical obstacles that distant learners face. For example, separated by distance, students often suffer what Thiagarajan (1978) refers to as "the loneliness of the long-distance learner." Such students have fewer opportunities for contact with their instructor, both formally in classes or more casually outside of class meetings. Geographically dispersed, distant students lack contact with students at other locations and often the support of a peer learning group (Kember, 1995). Students can feel isolated from or second class citizens to students present with the teacher at the origination site.

Under the weight of quasi-independent learning, students encounter cognitive challenges as well; they are challenged to be self-motivated and self-disciplined. Students have to assert themselves as active participants in the learning process. A constant danger is that students-unseen-may become invisible to the instructor. Projecting oneself into the students' frame of reference can help to identify with students' needs and concerns. Experiencing distance learning from the other side of the microphone can provide suggestions for drawing students together as a learning community.

Since the distant learners in higher education are typically adults, teachers should give consideration to the characteristics of adults as learners. As Knowles (1984) contends, adult learners differ from the more traditional college students in several unique ways. They are characterized as self-directed and intrinsically motivated, endowed with a wealth of experience, and inclined toward practical and immediate application of the information they acquired. Distance education speaks to adults because of its convenience and economy; their needs, motivations and learning attributes become paramount in planning distance instruction (Kember, 1995). To guide reflecting on learners, ask yourself:

- What are students needs and what do they expect from this course?
- What do I know (and how can I find out) about the students' entry skills, cognitive styles and background?
- What do students find motivating about instruction?
- How can I build on students' experiences and provide instruction that is relevant and applicable?
- How can I guide and support students in their learning?
- How do I assure the students a quality learning experience?

Reflecting on Methods. A growing body of research identifies teacher behaviors and instructional strategies that make a difference in student achievement (see Brophy & Good, 1986). A major conclusion of the teacher effects research holds that "what constitutes effective instruction varies with context" (p. 370). In distance teaching, then, it is not safe to assume that a teacher who is good at teaching in a face-to-face setting is equally as good at teaching in distance settings. Nor is it safe to automatically apply preferred face-to-face techniques. Distance teachers must adapt to an instructional environment for which customary instructional practice may be inadequate.

In planning instruction, faculty in higher education emphasize the selection of content (Stark *et al.*, 1988). Beyond considering what to cover, teachers should also reflect on methods by analyzing the rationale behind their choices and by assessing the effectiveness of the instructional strategies they employ. They should think about the desired outcomes and the expectations they hold of their students, and ask questions such as the following. What are the optimal means of fulfilling goals and expectations? Is there congruence between goals and the means through which they are achieved? If, for example, one expects to develop critical thinkers, it is inappropriate to test primarily for comprehension and recall?

Distance educators caution against simply replicating traditional methods used in a face-to-face setting (e.g., Haughey, 1983; Knapper, 1988). Considering Sparkes' (1983) admonition that successful face-to-face teaching methods do not readily translate to the distance teaching mode" (p.183), it becomes especially important for prospective distance teachers to explore alternative strategies for teaching within a distance framework. In planning instruction ask:

- Am I considering methods familiar and comfortable?
- Are the methods under consideration those which utilize the medium to its best advantage, or are they attempts to reproduce face-to-face instruction?
- What strategies would optimally achieve expectations in light of the variables of students, content, and context?
- What adjustments are required to accommodate instructional activities and visuals to distance delivery?
- Are the methods and techniques likely to encourage participation and interaction?

Conclusion

Distance education raises new issues and places new demands on teachers and learners. Indeed, the medium introduces obstacles that in teaching and learning face-to-face one does not necessarily encounter. As Haughey (1983) cautions, teaching in a distance

education program "causes one to re-examine one's dearly held views on teaching and learning" (p. 12). Reflecting on the nature of and interaction among the context, the learners and methods in a distance education environment is requisite to further planning. Moreover, reflection on distance practice has been found to reciprocally benefit on-campus teaching (Gilcher & Johnstone, 1988, Wolcott, 1991). Answers to questions such as those posed above are the foundation for designing a course that anticipates and accommodates the challenges of distance education. From reflection, specific strategies can be devised for reducing interpersonal distance, nurturing interaction, increasing feedback, and enhancing learning and message transfer.

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