Adapting on ground teaching strategies to the WWW: The Odyssey Continues

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Abstract: As the Internet continues an increasingly pervasive form of communication and data transfer, faculty must make adaptations to on-the-ground teaching strategies that more appropriately align with virtual settings. Modifications to traditional teaching strategies have become a virtual *necessity* (pun intended). Caution must be exercised, however, in transitioning from on-ground teaching and learning environments to virtual ones. Instructors cannot simply take traditional lectures and place these on the Web. What may marginally work in a traditional classroom will probably not translate to successful instruction over the Web. This paper aims to review the literature and offer an expandable list of strategies regarding best practice in online instruction. These modified on-ground teaching strategies can help the instructor more readily achieve effective instruction in an online setting.

Introduction

The new literacy for the twenty-first century and beyond is clearly the ability to use appropriate technological tools in an Information Age (Evans, 1999). In today's technologically-oriented learning environments, spanning pre-school to graduate school, students are expected to cooperate and collaborate; exhibit critical thinking skills; demonstrate problem-solving skills; and demonstrate competence in basic computer literacy (Evans, 2004). Today, then, students have a virtual cornucopia of distributed learning options from which to choose (traditional, hybrid, online, etc.), and invariably, they pursue higher education most responsive to their needs. Accordingly, technology has changed the way institutions of higher education operate and deliver instruction (Plotnik, 1999). In many ways, technology has become the great equalizer, as the Internet helps to facilitate and increase communication between faculty, students, and staff (Hancock, 2001).

Digital communication technology, particularly computer-mediated distance education, continues to expand teaching and learning environments beyond traditional face-to-face modes (Floyd, 2003; Kozeracki, 1999; Hara & King, 1999), thereby enabling colleges and universities to broaden access to diverse groups around the clock. To be sure, technology continues to transform the delivery of education in profound ways (DeNeui & Dodge, 2006; Sheard & Lynch, 2003). As Lever-Duffy and Lemke (1996) put it, "distance education [is] in the right place, at the right time." For many institutions, then, some more reactive than proactive, one can see a tendency to provide more substantive

training and professional development for the faculty. This training is vital for those who teach in the online setting. Online facilitators of instruction often represent the student's most frequent point of contact in the educational experience.

Specific to online teaching and learning, Harper (2005, p. 30) aptly described the seemingly omnipotent presence of the World Wide Web: "The Web is no longer a novel ingredient in the learning experience; it is intrinsic and constant." As the Internet continues an increasingly pervasive form of communication and data transfer, faculty must make adaptations to on-the-ground teaching strategies that more appropriately align with virtual settings (Phillips, 2005). These modifications to traditional teaching strategies have become a *virtual* necessity (pun intended). Many institutions, recognizing the ubiquitous nature of technology have begun to require structured and substantive training and professional development for online faculty. In online environments, both faculty and learner success are inextricably linked to administrative vision, resources, commitment, technical support, program development, and authentic measurement (Hons, 2002).

Technology's Impact

"The current higher education infrastructure cannot accommodate the growing college-aged population and enrollments, making more distance education programs necessary" (Howell, Williams, & Lindsay, 2003, para. 6). Thus, the wired campus has become the norm, decidedly more the rule than the exception, in the college and university experience (Meyers, Bennett, Brown, & Henderson, 2004). Colleges and universities are using computer-mediated services in administrative practices to meet the growing demands and needs of students, the workforce, and the broader community. Concurrently, institutions of higher learning have begun to implement significant changes in instructional practice to embrace distance education and the technological revolution (Cohen & Brawer, 1996; Kosak et al., 2004). Multiple factors have coalesced to ensure that information technology infrastructures are more reality than dreams (Ercegovac, 1998). These factors include cost-effectiveness, widespread availability, systems' capabilities, and funding support.

According to Milliron and Prentice (2004), "In today's higher education world, asynchronous learning is the power tool" (p. 1). Moreover, technology-rich learning environments offer the potential to prepare students who can more readily respond to the demands and advancements of a global economy (Harvey, 2004, p. 73; Kozma, 2003). It is not surprising, then, that the Sloan Consortium (Sloan-C), institutions and organizations committed to quality online education, reported that nearly 3.2 million students were taking at least one online course during the fall 2005 term. That statistic represented a substantial increase over the 2.3 million students in the previous year. Further, Sloan-C stated that: "There has been no leveling of the growth rate of online enrollments; institutions of higher education [continue to] report record online enrollment growth on both a numeric and a percentage basis." According to Beer, Slack, and Armitt (2005, p. 29):

The use of a virtual learning environment (VLE) implies that students will have the experience that they are both located in an environment where they can find

resources, including other students and tutors, to support their learning and that they are actually present in that environment. The first experience is known as 'immersion' and the second as 'presence'.

Similarly, *Distance Education Report* (2005) suggested that student behavior in an online course varies in relation to multiple factors. These include motivation, maturity, learning styles, technical proficiency, and experience as an online learner. It is incumbent upon online faculty, then, to know what to expect from students as student readiness to learn in an online setting can have important implications for course design and management. Online educators must engage in deliberate planning and make concerted efforts to ensure that *best practice* on-ground strategies are identified, adapted, modified, and incorporated in online instruction.

Changing Teaching and Learning Environments

Table 1 provides a comparative view of historical traditional teaching and learning environments with twenty-first century instructional settings (International Society of Technology in Education [ISTE], 2001, www.iste.org):

Traditional Learning Environments	New Learning Environments
Teacher-centered instruction	Student-centered learning
Single-sense stimulation	Multi-sensory stimulation
Single-path progression	Multi-path progression
Single media	Multimedia
Isolated work	Collaborative work
Information delivery	Information exchange
Passive learning	Active/exploratory/inquiry-based learning
Factual, knowledge-based learning	Critical thinking and informed decision-
	making
Reactive response	Proactive/planned action
Isolated, artificial context	Authentic, real-world context

Table I. Traditional and New Learning Environments

Table I depicts a stark contrast between the traditional face-to-face classroom, all too often steeped in lecture mode, and today's evolving classroom, particularly the virtual one. Hara (1999) asserted, "This enthusiastic attitude toward technology is not entirely new." Caution must be exercised, then, in transitioning from on-ground teaching and learning environments to virtual ones. Instructors cannot simply take traditional lectures and place these on the Web. What may marginally work in a traditional classroom will probably not translate to successful instruction over the Web (Jansak, 2000; Zaslavsky & Stewart, 2002). Jansak emphatically explained:

Internalize the fact that the web site is NOT the face-2-face classroom. This means making an effort to avoid thinking of this new online media in terms of the old media it resembles or replaces. The traditional media of

teaching are print and lecture. However, simply loading printed material onto a web site does not constitute effective online teaching.

Thus, today's Information Age no longer supports the perception of faculty—whether they are teaching in traditional or online environments—as sole arbiters of knowledge. Likewise, learners, whether participants in "face-to-face" (F2F) or in virtual learning settings, can no longer be perceived as empty vessels waiting to be filled. Diekelmann and Mendias (2005, p. 395) charge faculty to structure online learning environments that "enable students to know and connect in ways other than face-to-face encounters."

Accordingly, faculty must make adaptations to "on the ground" teaching strategies as they transition instruction from traditional to virtual settings (Phillips, 2005). To motivate learners in online environments, and to subsequently initiate, to stimulate, and to sustain engaging discussions, faculty, who teach in these settings, must concurrently demonstrate competency in facilitating structured opportunities for students to learn. Phillips refers to these opportunities as "online active learning strategies," which change the role of the learner from a passive one to that which is more self-directed and accountable.

Moore and Marra (2005) explained that the proliferation of online instruction brings with it the expectation that students will reflect upon personal and professional experiences, discuss meanings, and construct new knowledge through written dialogue within discussion forums. These scholars referred to the online discussion forum as critical to achieving higher order learning outcomes. Wolcott (as cited in DuCharme-Hansen & Dupin-Bryant, 2005, p. 31) suggested that students should be able to function independently, think critically, and participate actively in the learning process.

Many best practices used in on-ground teaching can and should be carried over into the virtual world of online learning. For example, the instructional design behind effective online courses is often tied to the three areas of interaction that are typically identified as meaningful: 1) learner-content interaction; 2) learner-instructor interaction, and; 3) learner-learner interaction (Kirby, 1999; Moore & Kearsley, 1996). Online faculty must pay close attention to planning for each of these interactions. In so doing, many best practices used in on-ground teaching can and should be transferred into the virtual world of online learning.

Adapting on ground teaching strategies to the WWW

The diversity in online learners and their background experiences challenge faculty to let go of the reins of instruction and relinquish some measure of participatory authority to learners.

As Shovein, Huston, Fox & Damazo (2005, p. 342) write:

The presence of the computer in the curriculum helps teachers relinquish the gatekeeper role and strengthens the role of dialogue as central to the

teaching-learning paradigm. Technology moves the teacher into a mediating role, coaching and encouraging learners and helping them construct knowledge in an active and person way.

Continuing in this vein of thought, Shovein et al., suggest the following: "... the teacher must recognize a new role as guide, rather than gatekeeper, when it comes to information. The teacher cannot control the flow in information that reaches the learner."

Perhaps one of the greatest challenges facing online faculty is how to translate best practices that work well in on-ground teaching to the Web. At a minimum, when adapting on-ground teaching strategies to the Web, instructors should clearly express grading requirements; encourage and facilitate introductions at the start of the course; follow-up with those students who are not actively participating; identify and reiterate course goals throughout the course; make expectations for course participation and interaction clear; post discussion topics and questions that are interesting and thought-provoking; provide opportunities for students to ask questions; provide students with individualized feedback; and respond to students as promptly as possible. While best practices abound in on-ground teaching strategies, these do not guarantee immediacy of transfer to a virtual setting. Often, faculty must modify and translate these techniques, which work well in face-to-face settings, to the alternate venue of online teaching and learning.

It is also helpful to construct some methodical system and timetable (short-term and long-range) for checking/responding to new posts on the discussion board. Identification of a list of common mistakes may also prove useful to the online learner. Learned information can and should be borrowed from prior archival courses and need not be perceived as "canned" responses. For example, when teaching the same course, there will likely be a list of *frequently asked questions* (FAQs) and *frequently provided answers*. The latter can be used to share common errors with the virtual community of learners.

Online faculty should incorporate "active, collaborative, and constructivist learning strategies for their online classes rather than taking a traditional lecture model" (Im & Lee, 2003; Schrum & Hong, 2002, p. 66). With appropriate modifications, the use of best practice "on-ground" teaching strategies can help the online instructor more readily achieve effective instruction in a virtual setting.

Using survey methodology with 14 experienced online educators, Schrum and Hong (p. 66) offered the following recommendations, suggestions, tactics, and successful approaches in online learning:

 Encourage students to post a short autobiography at the beginning of the course so make them feel they know each other. Ideally, an initial face-to-face meeting or even some informal gatherings during the course establish a sense of community and thus facilitate an active participation.

- Interact with students on a one-to-one and regular basis, especially for those who fall behind. If needed, give support over the phone as well as a site visit.
- Have students work collaboratively on their assignments. Further, encourage students to share their individual work with other students and benefit from feedback.
- Establish minimum levels of participation in a discussion and thus promote ongoing contributions to reciprocal knowledge building.
- Provide readings that are up to date and interesting but at the same time challenging.
- Create some places in an online environment where students can ask each other for help and also create an open forum where students can ask questions directly to a teacher.
- Be flexible in terms of course topics and procedures, and allow these topics to be predominantly generated by students. Even allow students to set up their individual learning goals and negotiate with them.
- Design an online environment using a technologically minimalist approach, reducing technological requirements and potential difficulties.

Consistent with the findings of Schrum and Song from a study of experienced online educators, Table II offers an expandable list of additional and related strategies, along with the traditional classroom counterparts, that speak to adaptation of on-ground teaching strategies to the WWW.

Table 2. Transitioning to the Web

Instructor Initiated Classroom Activity	Instructor Initiated Classroom Activity Engage to Force (F2F)
Online (Web) 1. Send welcome letter or E-message to the	Face-to-Face (F2F) Greet students at the classroom door.
class announcing course availability.	Greet students at the classroom door.
2. Require the student to respond to an	Require the student to complete a contact
outgoing message from instructor so that E-	card or data information sheet.
mail address can be confirmed.	
3. Assess learner readiness through a pretest on course content and technology.	Assess learner readiness through a pre-test on course content.
4. Use an online practice quiz or scavenger	Discuss the syllabus on the first day of
hunt based on information contained in the	class.
course syllabus.	
5. Use a discussion board to facilitate	Use a first-day icebreaker and initiate class
learner introductions and/or statement of	introductions, when class size permits.
learner profiles.	
6. Request student feedback through	Implement course evaluations.
formative evaluations (beginning, midterm, end of course).	
7 Use E-portfolios, E-pages, and/or require	Incorporate student presentations in the
peer review of student work on the	classroom.
discussion board.	Classiconi.
8. Upload a formalized statement of rules	Discuss classroom expectations, protocols,
of netiquette and virtual classroom protocol.	and rules of conduct.
9. Announce scheduled virtual office hours	Post office hours on the syllabus and the
and/or live chats.	office door.
10. Schedule synchronous chats and/or	Facilitate review sessions for students.
conference in the virtual classroom.	
11. Post announcement in the virtual	Make classroom announcements.
classroom.	X1 (C 1 (1 (1 1
12. Construct a set of external links and/or	Identify supplemental materials through an
webliography related to the course.	instructor's reading list.

Summary

Online faculty who attempt to transfer the familiar face-to-face classroom persona of "sage on the stage" to the virtual classroom perform a great disservice to learners. That paradigm, which offers up the online instructor as a "talking head," is increasingly anachronistic in today's rapidly changing, and information-based society. For those instructors who are challenged by the transition to virtual environments, they often seek to become the "sage on the cyberspace page," in an unrelenting effort to control the classroom and learning.

To effectively transition from on ground teaching to online facilitation, faculty must assess learner- and self-readiness to begin the journey. Preliminary actions that can support interactions in the cyberspace arena include, but are not limited to, the following: pre-assessment of learner profiles; scheduling of grading time; and identification of common "what if's." Knowing one's audience is crucial in online teaching and learning environments. Faculty must be aware of student readiness to learn, learner goals, and learner expectations as well. Moreover, faculty should schedule time, shortly after the due date of a specific assignment or assessment, to begin the process of review/grading.

Technology is an increasingly pervasive form of rapid communication and data transfer. As such, educational administrators and faculty continue to seek meaningful ways in which to harness the power of technology, the Internet, the World Wide Web, and associated technological innovation. Specific to acquisition of skills in computer and technical literacy, information technology has changed the way people live and learn, and it continues to significantly influence the infrastructure of formal education and its delivery.

While basic literacy continues to involve the three R's, the environment in which individuals are expected to demonstrate competency has changed considerably. Beyond the basic skills of reading, writing, and arithmetic, noted researchers and scholars proclaim that the citizen/worker of the twenty-first century needs complex information fluency skills (critical thinking, information literacy, and technology literacy). Milliron and Miles (2000) caution that while educators may need to embrace and use the new technologies, the basic skills-reading, writing and critical thinking-are also more important than ever.

Online education, combined with effective pedagogy and reflective teaching, has transformed higher education. It offers an increasingly popular and alternative route to traditional classroom teaching and learning. Accrediting agencies, notwithstanding, online and face-to-face courses must ensure comparability. Accordingly, faculty must make adaptations to on-the-ground teaching strategies as they transition from the face-to-face (F2F) classroom and/or integrate instruction between traditional and virtual settings.

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