Instructional Immediacy and the Seven Principles: Strategies for Facilitating Online Courses

Holly M. Hutchins
Doctoral Candidate
Department of Technology and Cognition
College of Education
University of North Texas, Denton TX
Hutchins@unt.edu

A Framework for Expanding Pedagogical Approaches to Enhancing Web-Based Instruction

Much has been made of assessing web-based classes over the past 20 years. In many research circles, the overwhelming concern has been whether traditional (face-face) classes and those taught via the web (web-based classes) fare the same in terms of student achievement and satisfaction. Others have focused on which technology is best for web-based classes, while still others are concerned with instructional design issues and determining which design features are essential for web-based courses in terms of clarity, consistency, and in ease of use. While important areas of inquiry and subsequent development, concern with instructional effectiveness, or how an instructor can best direct, facilitate, and support students toward certain academic ends (i.e., student achievement, student satisfaction) in web-based classes has received considerably less attention.

One approach is research in the area of instructional immediacy. Immediacy is a well–defined and researched construct in the instructional communication discipline and has recently been gaining momentum as an area of note in several studies concerning instructional effectiveness in web-based classes. Another approach is Chickering and Gamson's (1987) seminal work, Seven Principles of Good Practice in Undergraduate Education and its subsequent applications of instructional strategies used in web-based classes. Given attention primarily in educational journals and in practitioner literature, a discussion of such has been lacking in instructional research. This may be due to the lack of empirical research utilizing the Seven Principles as a variable of interest or, perhaps, because the principles are fairly simple and rather obvious to those concerned with effective teaching. The author will describe the current state of research on web-based instruction and posit new directions to expand the current paradigm. Issues of faculty attitude and support toward distance education, instructional immediacy, and the Seven Principles relative to web-based instruction will also be presented as variables in need of further attention in distance education research. Finally, the author describes how the constructs of immediacy and the Seven Principles could expand the current framework of research to include strategies that could better enable instructors to better achieve desired student outcomes in web-based courses.

Web-based Instructional Research

Countless studies (Clark & Jones 2001; Dobrin 1999; Keogh & Smeaton 1999) have found student achievement in web-based classes as comparable or better than that found in face-face instructional settings. Still others, when looking at both achievement and student satisfaction in web-based classes (Carrell & Menzel 2001; Swann 2001; Arbaugh 2000a, b; Comeaux 1995),

found similar results. This line of inquiry formidably known as the "no significant difference" genre is quickly falling behind other research pursuits within the web-based instruction discipline. As researchers are less concerned with the comparative value of offering a web-based class, their concern with specific learner characteristics, learning models, and curriculum restructuring (Congressional Web-based Education Commission 2000) indicate a shift in the research paradigm. Further, a report from the Institute for Higher Education (IHEP) commissioned by the National Education Association (NEA), the nation's largest professional association of higher education faculty, and Blackboard, Inc., a widely used platform provider for online education, also pointed to current needs in research concerning web-based instruction. The IHEP (2000) report, a sequel to the widely cited 1999 report that identified "gaps in the literature" of web-based learning, cited 24 benchmarks considered essential for ensuring quality and excellence in web-based courses. Of these, the teaching/learning process, course development, and course structure topic areas (each with subsequent benchmarks) received considerable attention. The issues specified in both reports suggest that researchers should expand their focus to include issues that help students achieve certain outcomes, rather than whether they did or not, when assessing the effectiveness of web-based instruction.

A second dominant trend in web-based research concerns which technologies are best to use in web-based courses. Ehrmann (1995), Director of Flashlight Project, a three-year project to develop and share evaluation tools for educational technology, reviewed current research on educational technology. He concluded that educators should focus on how they are using the technology to improve learning outcomes. Ehrmann (1995) encouraged researchers to focus on (a) which teaching and learning strategies are best (regardless of technology used) for the specific content and audience, and (b) which technologies are best for supporting those strategies (p. 4). Worley (2000), who cited Ehrmann (1995) and the IHEP (1999) report in her discussion of distance education pedagogy within the business communication discipline, argued that current research neglects the learner as the focal point in research on web-based learning. She encouraged researchers to examine the relationship between faculty and student and what learning strategies are employed, rather just the impact of the technology in isolation. The technology media, as Clark (1983) explained, are just "vehicles that deliver instruction but do not influence student achievement any more than the truck that delivers our groceries causes change in our nutrition" (p. 445). This is not to say that the technology used is irrelevant to a learner's experience and subsequent outcomes in web-based classes (cf., Comeaux 1995; Brindle & Levesque 2000; Witt & Wheeless 2001), but that research has not readily considered the other variables—specifically those related to instructional strategies—in studies on the effectiveness of web-based learning.

Instructor Role in Web-based Instruction

One significant difference between face-face classes and web-based instruction is in the role of the instructor. Knowlton (2000) argued for a student-centered approach to teaching web-based classes by suggesting that faculty use collaborative learning where students guide discussions and work in cohorts on assignments. The instructor, Knowlton explained, must take on the role of facilitator or coach rather than the sole "giver of knowledge" (p. 7). He presented a student-centered approach model to the online classroom that bridges traditional resources (textbooks and library research) with web resources, interactive activities, and unique student learning attributes (job, gender, culture). Additionally, Shrivastava (1999) proposed the creation of online learning communities as a framework for developing and facilitating business management classes. He described learning communities as "knowledge ecosystems " where groups of people are engaged in collective inquiry to enhance their personal knowledge and application of the knowledge to work situations" (p. 694). Co-learners, as Schrivastava (1999)

called them, include class peers, teachers, managers, experts, and outside experts operating as a network of information. Such a networked learning community extends the more traditional norms of the instructor as expert to the instructor as the facilitator of resources, knowledge, and student learning.

Bernice McCarthy (2000) also advocated a change in the traditional, linear instructor-student relationship. Recognized mostly in secondary education and in corporate training circles, McCarthy (2000) traced how the learner and instructor roles change when moving through each of the four quadrants of the 4MAT curriculum model: direct experience, reflection, abstract concepts, and action. As students move through the different quadrants when learning a lesson, the teacher's role changes from content expert (quadrants 1, 2) to facilitator and coach (quadrants 3, 4). The 4MAT cycle of learning centers on teaching to the learner where they are by considering their learning styles, left-right brain processing, and multiple intelligences (cf. Gardner 1999). The 4MAT model has been adapted to distance education by offering web-based educator training that mirrors the core principles of the 4MAT model.

While the suggestions offered in the cited reports and subsequent research will likely still be measured in terms of the learner (i.e., student satisfaction and achievement outcomes), the author proposes more research be directed toward discovering which instructor attributes and strategies best influence these outcomes. Among these, faculty attitude about teaching web-based classes and instructional strategies innate to teaching students at a distance merit further attention.

Faculty Attitude

Before faculty can get excited about increasing their use of strategies that may increase student achievement and satisfaction in their instructional foray, they must first be open to the idea of teaching a web-based class. In a survey of higher education faculty attitudes concerning distance learning, the NEA (1999) found that both traditional and distance learning faculty held positive attitudes of distance learning (72% of distance learning faculty; 51% of traditional faculty with 28% of traditional faculty remaining undecided). This finding supports much of what Allison and Scott (1998) found in their research that explored current attempts by institutions to directly and indirectly compensate faculty for adopting instructional technologies. Direct compensation may include stipends and assigned time (i.e. course release time); indirect compensation may include awards/recognition and staff development (i.e. attending related conferences). While both incentives are important, Allison and Scott (1998) argued that direct compensation works best to facilitate what others (Shrivastava 1999; Knowlton 2000) see as the changing role and obligation of faculty members from traditional lecturers to subject matter experts, courseware designer, instructional resource manager, and learning systems manager.

An additional concern of faculty toward web-based instruction is in course quality and training. Ross and Klug (1999), in their research concerning factors that influenced attitudes of business college faculty toward distance education, found that faculty were generally receptive to and supportive of teaching web-based courses, but that they perceived difficulty in realizing course goals in teaching using technology as the medium. Schifter (2000) also found that faculty perceived poor course quality and a lack of adequate faculty training to prepare faculty for teaching web-based courses as two of the top five issues inhibiting faculty participation in web-based classes. As evidenced, the concern then is not whether technology is used; rather, how does an instructor ensure quality and achieve learning goals when teaching via a different medium. Ross and Klug (1999) suggested that institutions take specific steps to increase faculty knowledge of and experience of distance learning options, whether in web-based or videoconference instruction, or as a supplement to face-face courses. Additional suggestions

include sharing reports and articles, training and resources, and testimonies from faculty who have taught web-based courses (both in undergraduate and graduate programs), to enhance support among faculty interested in developing and/or teaching a distance education class. Administrators may also use surveys to gauge faculty perceptions and include distance education goals and incentives within their institutional or program mission statements for further support.

Instructional Immediacy

Research in instructional immediacy has received considerable attention as a component of eliciting student satisfaction and learning in web-based classes. First described by Meharabian (1969) as behaviors that enhance closeness and nonverbal interaction with another, the definition was extended by Gorham (1988) to include verbal interaction that increased psychological closeness between teachers and students. Verbal immediacy includes the use of humor, frequent use of student name, encouragement of discussion and following up on student-initiated comments, encouraging future contact with students, and sharing of personal examples; nonverbal immediacy includes smiling, eye contact, vocal expressiveness, open gestures and body movement behaviors by the instructor. Immediate teachers often encourage students to appreciate or value the learning task, which in turn, has been found to enhance cognitive learning (Rodriquez, Plax & Kearney 1996)

While nonverbal immediacy is important, verbal immediacy may be more relevant to web-based instructional settings as the instructor is not physically apparent to provide nonverbal cues. Research by Freitas, Myers, and Avtgis (1998) strengthens this assertion. They found that students enrolled in conventional, face-face classes and those enrolled in a web-based, synchronous course perceived differences in the amount and quality of (instructor) nonverbal immediacy, but not in verbal immediate behaviors. While Freitas, et al. (1998) viewed such a result as surprising, the stability of verbal immediacy over different instructional mediums may lend itself as better variable to study as compared to nonverbal immediacy. For example, Arbaugh (2001) investigated the extent to which instructor verbal immediacy behaviors are (statistically) significantly associated with student learning and satisfaction in web-based MBA courses. A factor analysis produced two factors (a) classroom demeanor, which reflected the instructor's use of personal examples, humor, and openness toward and encouragement of student ideas and discussion; and (b) name recognition, referring to the extent to which the instructor was addressed by name by students and vice versa. Arbaugh (2001) reasoned that instructors who readily used verbally immediate behaviors in a face-face classroom, should find it fairly easy to do such in an online format as many strategies should be the same.

For instructors unaware of or simply not using verbally immediate behaviors, Jensen (1999) demonstrated that faculty could successfully learn to use such after participating in an immediacy training program. Faculty participating in such training increased their use of verbal immediacy behaviors by 42 percent and, consequently, experienced a 59 percent increase in student participation in class compared to those in the control group. While Jenson's (1999) results were for faculty teaching face-face classes, she reasoned that verbal immediacy was more relevant from a faculty training perspective because it was more easily controlled and was not bound by physical proximity as with nonverbal immediacy behaviors. The same characteristics extend to web-based learning formats, and especially web-based instruction. Further, the specific examples of verbal immediacy that increased the most (i.e., name recognition and encouraged discussion) in the experimental group were the same as those found by Arbaugh (2001).

Immediacy also relates to course design, or how a teacher deliberately arranges a set of external events to support the (learner's) internal learning process (Gagne? 1992). Gagne? (1992)

distinguished between teaching and instruction by stating that instruction can include events generated by animate or inanimate events (television, book, picture, etc.) and that teaching may play an essential role in arranging such events thus, "teaching may be considered as only one form of instruction, albeit a signally important one" (p. 3). LaRose and Whitten (2000) found that adapting the computer's response to students can contribute to verbal immediacy. The authors suggested programming the computer to issue personal greetings when a user logs on, issuing quirky or helpful error messages rather than the "404 not found" when problems arise, and customizing a personal tutor that can help students with navigating the course site as ways to enhance student perceptions of verbal immediate behaviors in web-based classes.

Swan (2001) examined how instructional factors affect student satisfaction and perceived learning from asynchronous online learning. She found design clarity, interaction with instructors, and active discussion among course participants significantly influenced student's satisfaction and perceived learning of the course material. Swann (2001) cited Rourke, Anderson, Garrison, and Archer's (2001) idea of a creating a "community of inquiry" as a way to understand the interaction between student, instructor and course content. Cognitive presence occurs through frequent interaction with the material, teaching presence through frequent and effective interaction with the instructor, and social presence occurs through frequent and effective interaction with other students. Swan (2001) found cognitive presence positively correlated with student satisfaction and (perceived) learning when classes were kept small (11-20), student contact with instructor and/or other students was required on a consistent basis, content was easy to access and consistent design features (colors, headings, images, links) were used among lessons. In addition, perceived usefulness of the course software and flexible course access has also been found to be strongly associated with student satisfaction in web-based classes (Arbaugh 2000b).

Perhaps the most compelling result implicit in Swann's research (2001) was how students' perception of increased interaction with the instructor occurred when they interacted with the course (regardless if they had direct contact with the instructor) on a consistent basis. Her finding supports both Gagne? et al.'s (1992) perspective on the teacher as being only one aspect of instruction and LaRose and Whitten's (2000) description of the computer as a "social actor" (p. 326) that possible functions as an instructional object and thus affects overall satisfaction and (perceived) learning.

Chickering & Gamson's Seven Principles of Good Practice

The Seven Principles for Good Practice in Undergraduate Education arose out faculty concern over student apathy and incompetent teaching. The American Association for Higher Education (AAHE) and the Johnson Foundation co-sponsored the report and it continues to be a model for good teaching practices in higher education as well as certain administrative settings. A summary of the Seven Principles (Chickering & Gamson 1987) is described in Table 1.

Table 1. Seven Principles of Good Practice in Undergraduate Education*, Chickering and Gamson (1986)*

1. Encourage contact between students and faculty: Frequent student-faculty contact both in and outside of class is an important factor in student motivation and involvement.

2. Develop reciprocity and cooperation among students: Faculty should create and encourage opportunities for collaborative learning among students.

3. Encourages active learning: Faculty should require students to apply their learning in oral and written forms.

4. Give prompt feedback: Faculty should provide appropriate and prompt feedback on performance. Students need help assessing their current competence and performance, and need frequent opportunities to perform and receive suggestion for improvement. Such feedback should be an ongoing process in collegiate settings.

5. Emphasize time on task: Faculty should create opportunities for students to practice good time management. This includes setting realistic time for students to complete assignments as well as using class time for learning opportunities.

6. Communicate high expectations: Faculty should set and communicate high expectations for students. Such becomes a self-fulfilling prophecy for students and they often will rise to meet the challenge.

7. Respect diverse talents and ways of learning: Faculty should create learning opportunities that appeal to the different ways students will process and attend to information. Varying presentation style and assignment requirement will allow students to showcase their unique talents and learn in ways that work for them.

In 1999, Chickering and Gamson reflected on the current applications of the Seven Principles since their initial release by discussing the extensions of their original work found in student learning assessments (ex. College Student Experiences Questionnaire), professional development workshops, personnel effectiveness assessments (ex. Seven Principles for Good Practice in Student Affairs; Learning Process Inventory and Assessment), and student evaluations of academic programs. The authors also discussed research lines using the Seven Principles as predictors of student satisfaction and faculty involvement in college courses.

As an additional extension of the Seven Principles, several authors have applied the instructional practices to distance learning formats. Chizmar, Walbert, and Hurd (1999) demonstrated the direct application of the Seven Principles to three undergraduate web-based classes. They cited specific examples of how instructors can use technology to successfully support each of the Seven Principles including (a) encouraging student use of the communication technologies for sharing ideas, critiques, and review of assignments and to work on group projects with other students and the instructor(s); (b) providing prompt feedback to student questions and assignments and giving online quizzes that provide immediate feedback as to performance; and (c) choosing diverse learning tools (interactive simulations vs. a checklist of ideas) based on their preferred way of interacting with the material (individually or as a part of a group). Chickering and Ehrmann (1996) and Lemke and Ritter (2000) found similar experiences when using technology (e-mail, computer conferencing, World Wide Web resources, video-conferencing, and simulation software) to support the application of the Seven Principles. In a survey of 236 students over two years, Lemke and Ritter (2000) found that students perceived that the use of technology did support Chickering and Gamson's (1987) Seven Principles and that their performance increased as a result.

Perhaps the most in-depth application of the Seven Principles to a web-based format is from Graham, Cagiltay, Byung-Ro, Craner, and Duffy (2001). The authors, a team of evaluators from Indiana University's Center for Research on Learning and Technology (CRLT), evaluated four online courses at a professional school at a large Midwestern university. The authors provided an overview of the Seven Principles, the technologies employed to support each, and specific

recommendations based on the faculty and student anecdotal comments and researcher observations. Although the authors noted that the strategies and suggestions mentioned were specific to the web-based classes evaluated, such strategies could be used as a general framework for assessing online teaching and learning.

Future Implications

Two different, but potentially related approaches may offer some direction for researchers and educators concerned with instructional effectiveness in web-based courses. Both verbal and nonverbal immediacy instances are essential for affective learning, or satisfaction toward content and instructor. According to Rodriquez, et al. (1996) and Gorham (1988), affective learning mediates the relationship between immediacy and cognitive learning and has been shown as to be equally as relevant—and perhaps even more so—in web-based classes. Research concerning verbal immediacy is the most promising for web-based classes and offers novel approaches for bridging the virtual distance between the instructor and students. Chickering and Gamson's (1987) Seven Principles are also clearly applicable to web-based and other distance learning formats in that they provide instructional strategies focused on the learner, rather than on the medium used to teach the learner. Of course, if administrators expect faculty to provide quality instruction in web-based classes, they must address the unique pedagogical, compensatory, and support issues inherent to teaching in distance education classes.

Considered together, both immediacy and the Seven Principles may advance the current theoretical framework for enhancing instructional effectiveness as measured by student achievement and satisfaction in web-based classes. For instance, instructors who frequently refer to students by name succeed at establishing rapport with students and often motivate future contact (Principle #1) in both conventional and web-based instructional settings. Likewise, instructors can encourage discussion by requiring active learning opportunities (Principle #3) through students working in teams or in providing students diverse options (Principle #7) in how they interact with the course, their peers, or the instructor. In short, instructor success in using the Seven Principles may hinge on to what degree they employ verbal and nonverbal immediate behaviors. The same could also be said for the impact of immediacy behaviors on the degree to which some, or most, of the Seven Principles are utilized by an instructor. Exploratory research could shed light into how closely the constructs are related, and to what degree they measure separate attributes.

Additionally, focusing research on instructor behaviors rather than the technology employed will help address the gaps concerning the teaching and learning process in web-based classes as noted by several current national reports (cf. Commission on Technology and Adult Learning 2001; Congressional Web-based Education Commission 2000; IHEP 1999, 2000). How closely instructional immediacy and the Seven Principles are actually related is just speculative; however, such issues provide fertile opportunities for future research in how instructors can best achieve certain outcomes in web-based classes. Research investigating how certain facilitative strategies impact learning outcomes would provide faculty with proven techniques to enhance online learning. Further, such results could be used to support new funding opportunities for distance learning technologies and initiatives that help support instructors use of facilitation strategies.

Instructors interested in enhancing their instructional effectiveness should research and begin using specific ways to enhance immediacy behaviors in classes, regardless of the instructional medium. Face-face classes are easiest to practice immediate behaviors due to the instant reinforcement of feedback from students and the use of nonverbal immediate behaviors.

Suggestions presented in this paper offer a good start. Faculty may also contact related academic departments (e.g., Communication Studies or Psychology) or faculty training groups to sponsor instructional immediacy training similar to the program noted by Jensen (1999).

Several resources are available for faculty and distance learning administrators interested in learning about or applying the Chickering & Gamson's (1987) Seven Principles. The Center for Distributed Learning (CDL) at the University of North Texas extended the Graham et al. (2001) strategies to specific tools within WebCT, the platform used to support UNT's web-based classes. Faculty involved in the CDL's Excellence in Teaching Online (ETO) sessions learn how to apply the Seven Principles to online teaching and course development following the Graham, et al. (2001) guidelines (WebCT Participant Guide 2000). Additional resources can be located in the American Association of Higher Education Bulletin (AAHE) and the New Directions for Teaching and Learning journal, both cited at the end of this article.

Summary

What does the research in instructional immediacy and the practical suggestions innate to Chickering and Gamson's (1987) Seven Principles tell us about effectiveness in web-based instruction? Just the things that most (good) instructors already know: encourage students to think and learn, give prompt feedback, provide guidance and support, and consider what new and different ways technology may add support to current strategies and help to induct new ones. Worley (2000) stated it best that what faces an instructor teaching a web-based class is really "age-old questions that have always plagued the classroom, technically enhanced or otherwise" (p. 101). Rather than focus on how useful or comparative the specific technology is in web-based instruction, research should focus more on how such technology can support and enhance specific teaching and learning goals in web-based classes.

This paper reviewed compelling research in the areas of instructional immediacy and Chickering and Gamson's (1987) Seven Principles that can aid instructors in creating an interactive, learning community taught via the web. Perhaps distance education administrators can expand their offering of facilitation skills to faculty and staff members interested in teaching online courses. Further, researchers can embark on rich paths of discovery into new instructional models that are learner-centered and amenable to various forms of technological mediums. Future research geared toward how specific learner and instructor attributes and instructional design issues impact the learning situation in web-based classes will provide a wealth of practical strategies tied to proven results.

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