Distance Learning Programs for Non-Traditional and Traditional Students in the Business Disciplines

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Abstract

The article presents a comparison of online and on ground instructional techniques focusing on the differences between face-to-face and computer-mediated communication. Lessons are drawn from the authors, who collectively teach online courses at Nova Southeastern University as well as the United States Sports Academy, Baker College, the University of Central Florida, and the University of Hawaii. The initial phases of course development, student feedback, and peer review began the authors' transition into their current regular practice as virtual professors at graduate and undergraduate schools, while they continued to teach in traditional classrooms in their respective institutions.

Introduction

Distance education is not a new concept. Plato declared long ago, "learning occurs in the mind, independent of time and place" (University of Guelph, 2002). Some business schools have been providing outreach education programs since the early 1970s through traditional off-campus classes (Gibson & Herrera, 1999). By 1998, more than one thousand institutions provided distance learning using electronic delivery methods, while projections for the year 2007 indicate that nearly 50 percent of all post-secondary learners will take some courses through electronic media (Neeley, Niemi, & Ehrhard 1998). The mainstream status of electronic formats is evident in modern definitions for distance education, which describe it as any learning that takes place away from the center for instruction using non-traditional designs and instructional techniques (Moore & Kearsley, 1996). Electronic formats of "non-traditional" techniques are specified in one definition provided by the United States Distance Learning Association, which includes electronically-mediated instruction through satellite, video, audio, audio-graphic computer, and multimedia technology for learning at a distance (Leonard, 1996, p.41).

Developments in the area of desktop computing and the Internet have facilitated asynchronous (instruction and learning not occurring at the same time) online courses as one viable delivery alternative. In the past, many individuals could not attend institutions of higher education, because their schedules conflicted with traditional classroom hours. Today, these same people can acquire associates, baccalaureates, and masters degrees through technology-based distance delivery systems offered by a number of colleges and universities. Distance education is suited for busy people who wish to increase their knowledge and skills without giving up jobs, leaving home, or losing income (Tesone and Ricci, 2003). Classrooms, libraries, and textbooks can now all be accessed from a student's personal computer at home or at their place of work. Many higher learning institutions in theU.S. and in other countries provide courses and programs using distance learning delivery methods. As such, opportunities abound for interested business faculty members to adopt the delivery method.

This article presents a comparison of online and on ground instructional techniques focusing on the differences between face-to-face and computer-mediated communication. Lessons are drawn from the authors, who collectively teach online courses at Nova Southeastern University as well as the United States Sports Academy, Baker College, the University of Central Florida, and the University of Hawaii. The initial phases of course development, student feedback, and peer review began the authors' transition into their current regular practice as virtual professors at graduate and undergraduate schools, while they continued to teach in traditional classrooms in their respective institutions.

While many business educators have been teaching Web-based courses since the middle 1990s (early adopters), increased demand in the area of "e-learning" creates opportunities for more faculty members to transition into roles as "virtual" professors by adding online courses to their repertories (Polley, 1999). Developments have practically eliminated the focus on technology issues for instructors, which was not the experience of early adopters of online learning environments (OLE) who developed home-page courses using hypertext markup language (HTML) in a time prior to the availability of sophisticated Web site editors. Courseware platforms in current use facilitate online course development activities in which the technical applications are seamless, affording educators with opportunities to focus more exclusively on pedagogical issues associated with the delivery method. Some online business educators suggest that the essence of the pedagogical shift from traditional class instruction to online formats is simply stated as a shift from "teacher orientation" (classroom) to "learner centered" (OLE) (Tesone, 2000). An examination of circumstantial profiles of OLE students may help to provide a rationale for this assumption.

Online Learner Audiences

The main audience for distance learning programs apparent in the literature is the non-traditional adult learner (beyond the traditional 18-22 year cohort) at the undergraduate and graduate levels, who balances work and family demands with part-time degree completion (Gibson, Tesone, Hodgetts, & Blackwell, 2001). That study notes aspects that appeal to the adult learner primarily include flexibility of time, convenience of working from home or office, and culturally diverse group interactions. This audience includes those individuals already working in the business disciplines with fluctuating schedules. These professionals sometimes find they are working in remote locations, or employed across the broad expanses of the management, accounting, hospitality, sports, and related business segments. In addition, individuals working in areas such as event planning and sport facilities management services have schedules that preclude attendance at regularly scheduled classes. Other groups are comprised of international learners seeking courses or degrees at U.S. universities. Another niche consists of out-of-state traditional

students who would like to continue coursework at their college or university during the summer months from their hometowns and cities through programs that use distance-learning techniques. Finally, students who are working in full-time internships away from a campus may continue their course work through asynchronous online methods (Tesone, 2000). One study concludes frequently noted convenience themes of "time" and "location" as student self-reported reasons for pursuing online education programs (Gibson, Tesone, Hodgetts, & Blackwell, 2001). The authors of this article have anecdotally noted that for the most part, students comprised within this profile are highly motivated learners with practical industry experience. However, in a Web-based environment one crucial element of student success and satisfaction involves very high levels of interactivity build into the course design and delivery.

An Experiential Perspective for Instructors

The authors began their transition in the middle 1990s and found that collaborative communication and support among online colleagues were instrumental in developing effective instructional skills for "cyber space." At that time, the "newness" of the delivery method provided an impetus for forums of discussions ranging from online pedagogy to plagiarism. Unfortunately, these types of discussions take place less frequently than they used to in those times, as the OLE alternatives are somewhat commonplace and many institutions provide formalized training programs for instructor certification to teach online courses. Many other reasons may be responsible for this change, not the least of which is the increasingly hectic schedules and demands of faculty (Giannoni and Tesone, 2003).

The pedagogical issue associated with training and forums among instructors teaching in Web-based courses becomes one of those things that an instructor does to create and environment of interactivity. The answer is: daily bulletin board discussions, progressive case studies, significant proportional grade point distributions based on participation, and other activities requiring the student to demonstrate the integration and internalization of knowledge in its applied form. Although the courses for most business and related fields readily lend themselves to these modalities, they can be used in quantitative courses as well. For example, with mathematics students, an instructor might ask them for short paragraphs using the concepts of metaphor, analogies, and symbols. On a more concrete or pragmatic basis, s/he might request examples of the use of the concept of percentages (such as what one might do upon paying their bill in a restaurant). Though a test in geometry might result in demonstrating a student's knowledge of the formula arriving at the hypotenuse of an isosceles triangle, it by no way evidences the student's ability to transfer this information in real life. Through testing, educational institutions are in essence sending a message to students that all that is required of them is rote learning, primarily based on memorization, rather than impressing them with the significance of knowledge in the service of utility.

In an asynchronous online format, there is no collective audience in a classroom, no eye contact, no chalkboard (although electronic white boards are used by some instructors), no auditory communication (something the authors are experimenting with), and no real control by the professor. All instructional techniques usually practiced in the classroom must be built into the course design using text and images. This requires advanced planning and longer preparation time, as the instructor must visually project into the future of the class. Comprehensive planning and preparation will aid in visualizing and anticipating various situations or issues that may arise as the class moves ahead during the semester and working in the solutions before it commences. The virtual professor is not just a facilitator, but also a coach of the course technology. Many students have not experienced online formats and sometimes seem insecure in the new environment when they take their first course. For this reason, the academic literature continues

to publish articles that focus on student technical proficiency as part of online education (Hartman, Lewis, & Sterkel-Powell, 2002).

Recent Findings from the Business Literature

A number of recent articles in the business literature provide suggestions for online learning efficacy (Pan, 2003; Walker, 2003; Bishop and Spake, 2003; Brown and Green, 2003; Welch, 2002 and others) based on descriptive experiences and general assessment approaches that preclude actual comparisons between online and traditional courses. Other recent articles address learning outcomes along with student satisfaction perceptions using instructors' self-report surveys (Arbaugh and Duray, 2002). Studies have also used instructor surveys to generate findings on online learning methods (Perreault, Waldman, Alexander, Zhao, 2002; Vrasidas, 2002; Lynch, Murranka, 2002; Drago, Peltier, & Sorensen, 2002). Finally, the business literature continues to publish accounts that describe transitional approaches between traditional and online learning environments (Cuellar, 2002; Kozlowski, 2002; Summerville, 2002; Edwards, Wiley, & Nelson. 2002; Paulsen, 2002).

An Empirical Perspective

One of the authors engaged in a recent study that compared an experimental group of online students with a traditional classroom setting (control group) for a Principles of Management Course conducted within a prominent university in the western United States. The study was designed to compare learning outcomes (student success) and student perceptions of the learning process (satisfaction) between the groups that comprised a convenience sample (n=70).

Prior to the start of the semester, the instructor had purchased copies of a management skills survey pencil-and-paper test consisting of 25 questions that was developed by an industrial psychologist. The collateral accompanying the testing instrument documented the validity and reliability of instrument as a measure of management skills knowledge, as demonstrated through a reported normative distribution representing a number of nations to include the United States.

The test was administered as an assessment of student knowledge concerning management skills during the first week of the class prior to class lectures and assigned readings. At the same time the instrument was delivered to local area service industry managers possessing 1-to-3 years of full-time practical experience in supervisory positions (n=30). Of the thirty-targeted managerial participants, 15 actually completed the testing instrument in the presence of a proctor with three of responses eliminated as being incomplete. This resulted in 12 useable respondents for the study to be compared with the student participants for the purpose of establishing content validity of the instrument for use in this particular study. The twelve respondents were all managers in middle-to-large organizations near the university. During pre-test questioning none of the management respondents reported participation in recent managerial training other than what they had learned in college.

Pretest and demographic data were tallied by the instructor during the first week and kept confidential with only the instructor having knowledge of the information. The instructor announced the option for any student in the class to take the course in a Web-based format, as opposed to attending regular class sessions. Originally, thirty-one of the 70 students opted for the online version of the course, with three returning to the classroom after one week, resulting in an experimental group of 28 online students, who were compared with a control group of 42 classroom students. Since participation in the online learning environment (OLE) version of the course was of a voluntary nature, it was made clear that any online student may return to the

regular classroom format at any time during the semester for any reason or no reason at all. Also, online students were required to take midterm and final examinations with the regular class on the established examination dates.

While the control group attended regular class sessions at appointed times, the OLE version of the course was offered in asynchronous (not real time) mode permitting students to engage in the course from any location and at any time. With the exception of the delivery mode, all attributes of the course were identical between the two groups, including text, lectures, exams, and written assignments. However, all of the online participants were required to respond to the instructor's lecture questions as well as to each other's responses (two classmate comments per week) via a discussion board. In the actual classroom, the same participation was voluntary on the part of the students, even though the lectures and questions were identical for both the control and experimental groups. Just prior to the administration of the final examination for the course, both groups completed the management skills knowledge-testing instrument as a posttest for later data comparisons. The instructor maintained the dataset for both groups with updates concerning course grades throughout the semester.

Just prior to the conclusion of the course, a neutral third party administered a specific pencil and paper student satisfaction opinion survey concerning the online course experience. The survey asked online participants to rate experience attributes on a Likert-type scale with a range of 5 (Strongly Agree) to 1 (Strongly Disagree) concerning positively framed statements. Two weeks prior to the end of the semester, all student participants completed a standard course evaluation form, in which the data for experimental group participants was separated from those comprising the control group members. Finally, at the conclusion of the semester the dean of the school conducted informal focus group sessions with each group of students to ascertain general feedback comments concerning both the classroom and online versions of the course.

Data Analysis

The dataset contained comparisons of all grading information, as well as demographics including age, gender, and national origin, which provided a near perfect comparative composite for each group. However, the purpose of this report is to focus on those factors that may have been directly attributable to a comparison of standardized test scores for the experimental, control, and validation groups that participated in the study. Table 1 provides an overview of the data analysis comparisons.

Category	Classroom	Online	Managers
Sample Size	n=42	n=28	n=12
Grade Point Range	1.5-3.9	1.25-3.45	N/A
Grade Point Average	2.8	2.8	N/A
Class standing (1-4)	3.5	3.5	N/A
Pre-test Range	52%-84%	56%-84%	Only tested once
Post test Range	60%-96%	60%-96%	64%-80%
Pre-test Mean Average	67.4%	69.5%	Only tested once
Post test Mean Average	74.5%	76.3%	74.0%
Pre-test Standard Deviation	.074	.083	Only tested once
Post test Standard Deviation	.084	.100	.103

Table 1. Demographic and Pre/Post Test Comparisons

The control group comprised the largest set (n=42), with the experimental group consisting of 28

participants and an even smaller number of management respondents (n=12). The range of self-reported cumulative grade point averages was wider for the control group as compared with the experimental group, which is likely due to variances in sample sizes. However, the mean grade point averages were the same for both groups, as was the average class standing of participants, which were mid-year undergraduate juniors. The range of pre-test scores was slightly wider for the control group, with an equal range of scores for both groups on the posttest. Comparatively, the scores for the posttest for both the control and experimental groups was the widest range at 36 points. The management group of respondents demonstrated the narrowest range at just 16 points. Mean average pretest scores varied between the two student groups by just over 2 points, while the same variance for posttest scores rated just below 2 points. Standard deviation scores rose by 20 and 17 points respectively for the control and experimental groups of participants. The data analysis for the study was limited to simple descriptive statistics, as there was no intention on the part of the researcher to determine further variances due to the nature of the study, which was to observe a single convenience sample within one specific timeframe (a recent semester).

A neutral observer who collected the information from participants in the experimental group analyzed data from two student satisfaction surveys. A summary of the data analysis is presented in Table 2.

	Student Interaction Satisfaction Questionnaire Summary:Please complete this section. Read each item and respond in the following manner:5= Strongly Agree4= Somewhat Agree3= Don't Agree or Disagree	
	2 = Somewhat Disagree	Mean
	1 = Strongly Disagree	Scores
1	I interacted with most of the people in my class.	4.0
2	I exchanged information more than once per week.	4.6
3	I feel that I know most of the students in my class quite well.	3.3
4	I feel that I know the professor for this class quite well.	4.4
5	I really enjoyed discussions with certain students in this class.	4.4
6	I have established friendships with certain students in this class.	4.0
7	I would like to meet certain students outside of the class.	3.9
	I became more comfortable with interaction as the class	
8	progressed	4.6
9	I looked forward to interacting with students in my class.	4.2
	I looked forward to the professor's comments concerning my	
10	responses.	4.6

Table 2. Student Interaction Satisfaction Questionnaire Summary

The10 questions comprise a student self-report of attributes related to interactivity with peers and the instructor, which was one of the stated outcomes for the OLE version of the course. Scores in this category range from 3.3 to 4.6 on a five-point scale, with eight of the ten scores at or above the level of 4.0. An additional 12 questions (not shown in this article due to the policy of the institution) comprise a standard course and instructor student evaluation form given to all students at the school. The mean average score reported by students in the online version of the

course was 4.65, which was comparable with the average score provided by students in the classroom version of the course. On the other hand, interactivity scores for the classroom version of the course were somewhat lower than those reported for the online version. The specific data from the classroom evaluation is not reportable due to university policies concerning the publication of information concerning official courses (the online version was not sanctioned as an official course).

Implications

The empirical case noted in this article is relevant only to that particular course at that institution at that time. In that case, the two sections of the course were taught by the same instructor with the same lectures, written assignments, and testing processes. There were only two attributes of difference between the groups (online and traditional classroom). First the online volunteers self-reported convenience factors of time and place as motivation to engage in the Web-based version of the course, which is consistent with findings previously discussed in the article. Second, the instructor allocated 30 points on a scale of 100 for participation credit in the online course, as opposed to ten participation points for the traditional classroom students. It may be argued that had the equal amount of points been allocated to the classroom group, interaction levels would have increased. While this may be true, it is also possible that forced face-to-face participation in the classroom would have lowered student satisfaction scores for the traditional classroom group. One conclusion evident in this study is that an instructor may positively influence student satisfaction levels by maintaining a "teaching oriented" approach in the online environment.

Conclusion

The authors contend that the online environment is enjoyable for students and virtual professors. While sound arguments suggest this format may deprive traditional age undergraduate students the social, interactive, and verbal communications skills provided in regular classroom settings, non-traditional cohorts are often in possession of these skills because of their workplace training and experience. Adult learners seem to be motivated toward distance learning alternatives for reasons connected to professional and personal convenience. Primary convenience factors appear to be those related to the barriers of time and location that are ordinarily associated with regular classes provided at main campuses. Those faculty members who wish to add distance-learning instruction to their current repertoire may benefit from the experiential advice provided the authors in this presentation. Indeed, there are those instructors who possess no interest in such a delivery method. Nevertheless, those who willingly engage in this format should encounter many rewarding experiences in terms of student appreciation and instructional development. Finally, professors seeking to engage in instructional delivery in OLE formats need only to make a minor shift from a teaching orientation which seems to work in the classroom to a learner centered approach in the online environment. Sample suggestions for learner-centered OLE course design are included in Table 3.

Table 3. Eight Sample Suggestions for Learner Centered OLE Courses

Item	Eight Sample Suggestions for Learner Centered OLE Courses
1.	A Welcome letter distributed to all participants prior to the start of the course.
2.	Interactive Biographies—The Instructor posts a bio and asks all participants to respond
	with individual introductions and welcome responses.

3.	Clear and specific guidelines for participation stated repeatedly in preliminary course
	materials.
4.	Text-based lectures that engage the visual, auditory and tactile senses.
5.	Socratic-style questions posed for participant response at the end of each lecture.
6.	Close "shadowing" of participation levels (twice per day logons if possible).
7.	Intermittent Reinforcement—More instructor responses in the beginning of the course,
	with fewer direct responses as the participatory culture emerges.
8.	A "Down-to-Earth" Instruction Style—The technology creates a sufficient distance
	barrier, hence participants will appreciate an open and informal instructor.

Of course the suggestions listed above simply represent techniques that appear to work well for this group of instructors. Each individual has a separate teaching style and could provide other suggestions that work for each instructor. However, an instructor charged with the first-time development of an OLE course may find the hints listed in Table 3 to be helpful techniques for use in employing a learner-centered e-learning course environment.

References

Arbaugh, J.B., & Duray, R. (September, 2002). Technological and structural characteristics, student learning and satisfaction with web-based courses: An exploratory study of two on-line MBA programs. *Management Learning*. Thousand Oaks. (33), 3. 331-47.

Bishop, J.S.& Spake, D.F. (February, 2003). Distance education: A bibliographic review for educational planners and policymakers 1992-2002. *Journal of Planning Literature*. Columbus. 17, (3). 372-91.

Brown, A. & Green, T. (January/February, 2003). Showing up to class in pajamas (or less!): The fantasies and realities of on-line professional development courses for teachers. *The Clearing House*. Washington. 76, (3). 433-72.

Cuellar, N. (July-September, 2002). The transition from classroom to online teaching. *Nursing Forum.* Philadelphia. 37, (3). 5-13.

Drago, W., Peltier, J. & Sorensen, D. (2002). Course content or the instructor: Which is more important in on-line teaching? *Management Research News*. Patrington. 25, (6/7). 69-84.

Edwards, E., Wiley, D. & Nelson, L.M. (January/February, 2002). Foundations of a new instructional paradigm... really! *TechTrends*. Washington. 46, (1). 16-19.

Giannoni, D.L. & Tesone, D.V. (Spring, 2003). What academic administrators should know to attract senior level faculty members to online learning environments. *Journal of Distance Learning Administration*.

Gibson, J.W., & Herrera, J.M. (January, 1999). From classroom based to online delivery in eighteen months or less: A case study in online development. *T.H.E. Journal*. 57-60.

Gibson, J.W., Tesone, D.V., Hodgetts, R.M., & Blackwell, C.W. (October, 2001). The human dimension of online education: Cyberstudents speak out. *The International Professional Communication Proceedings*. 0-7803-7209-3/01. 367-378.

Guskin, A. (1994, Sept/Oct). From teaching to learning. Change, 13 (24), 15-25.

Hartman, J., Lewis, J.S. & Sterkel-Powell, K. (September, 2002). Inbox shock: A study of electronic message volume in a distance managerial communication course. *Business Communication Quarterly*. New York. 65, (3). 9-28.

Kozlowski, D. (July/August, 2002). Returning to school: An alternative to 'traditional' education. *Orthopedic Nursing*. Pitman. 21, (4). 41-48.

Leonard, B. (1996, April). Distance learning: Where work and training overlap. *HRMagazine*. 41-47.

Lynch, D.H. & Murranka, P. (January/February, 2002). Competency-based instruction in business and management communication courses taught by Association for Business Communication Member faculty. *Journal of Business Education*. Washington. 77, (3). 159-64.

Moore, M.G., & Kearsley, G. (1996). Distance Education: A systems view. Belmont: Wadsworth.

Neeley, L., Niemi, J.A., & Ehrhard, B.J. (1998). Classes going the distance, so people don't have to: Instructional opportunities for adult learners. *T.H.E. Journal* 26 (4), 72-74.

Pan, W.S. (September, 2003). The challenges of teaching statistics in the current technology environment. *Journal of American Academy of Business, Cambridge*. Hollywood. 3, (1/2). 351-66.

Paulson, K. (January/February, 2002). Reconfiguring faculty roles for virtual settings. *The Journal of Higher Education*. Columbus. 73, (1). 123-140. Polley, R.B. (1999, July). The making of a virtual professor. *ALN Magazine* 3(1), 15-23.

Perreault, H., Waldman, L., Alexander, M. & Zhao, J. (July/August, 2002). Overcoming barriers to successful delivery of distance-learning courses. *Journal of Education for Business*. Washington. 77, (6). 313-19.

Summerville, J.B. (July/August, 2002). Taking ID online: Developing on online instructional design course. *TechTrends*. Washington. 46, (4). 29-32.

Tesone, D.V., & Ricci, P. (Winter, 2003). Distance learning programs for career-change business educators. *Journal of Applied Management and Entrepreneurship*. 8(1) 57-65.

Tesone, D.V. (2000). Going the distance: When and how should hospitality educators use distance learning methods? *Journal of Hospitality and Tourism Education*. 12(1,) 52-56.

University of Guelph (2002). Your learning connection. Open Learning. Guelph, ON.

Vrasidas, C. (2002). Systematic approach for designing hypermedia environments for teaching and learning. *International Journal of Instructional Media*. New York. 29, (1). 13-25.

Walker, K. (June, 2003). Applying distributed learning theory in online business communication courses. *Business Communication Quarterly*. New York. 66, (2). 55-60.

Welch, A. (November, 2002). Going global? Internationalizing Australian universities in a time of global crisis. *Comparative Education Review*. Chicago. 46, (4). 433-63.

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