

The Online “Classroom”: Differences In Perception Between Business Students And Non-Business Students

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Abstract

The authors discuss the results of a questionnaire given to 893 undergraduate college students regarding distance-learning courses, which reveal a number of differences in perception between business and non-business students. The authors suggest possible reasons for these differences, and make recommendations to university administrators and faculty as to what could be done to help reduce or limit these differences. The results of this study should be of interest to university administrators, faculty members, and students who plan to offer, teach, or take online courses in the future. In addition, this information may be helpful to university administrators in deciding which types of courses at their universities might be offered online. Faculty who are considering teaching one or more online courses may find the results of this study helpful in structuring these online offerings. This research is intended to give students a realistic expectation of what to anticipate from distance learning courses based on information we have found and studies we have done.

1.0 Background and Literature Review

This study analyzes the perceptions and preferences of undergraduate college students with respect to taking on-line or distance education courses. In the last decade, distance learning programs have become very popular, and the number of offerings continues to increase. The growing popularity of this medium for instruction is due to a combination of factors. Technological advances have made the availability both economical and practical. The economic advantages of distributing scarce resources, geographically and temporally, to students in remote locations provide a broader market for distance education. Additionally, the increasing demand from students to acquire education at times that are convenient given their busy schedules and personal commitments makes distance education attractive to working learners (Roberts, 1998). The new opportunities distance learning has provided have enabled students to create an atmosphere for learning at home.

The distance debate usually focuses on issues related to student learning and outcomes and student attitudes as compared to traditional classroom-based settings (Phillips, 1998; Webster and Hackley, 1997). One interesting study, through the application of expectancy theory, identified that, on average, students consider improving competence in performing course work as the most attractive outcome of a distance-learning class (Chen, Lou, and Luo, 2001). Using a meta-analysis approach, one group of researchers found considerable support for the premise that distance education does not diminish the level of student satisfaction when compared to methods of instruction that use the more traditional face-to-face approach (Allen, Bourhis, Burrell, and Mabry, 2002). Finally, the results of a study reveal that self-management, self-reliance, and accurate expectations of learner responsibilities are significant attributes for a successful distance-learning (primarily web-based) experience (Howland and Moore, 2002).

Distance learning can be defined as instruction not bound by time or place. This type of learning removes the physical and time constraints for the teacher as well as the student. Distance learning can more formally be defined as any course delivered with tools or technologies designed to overcome the restrictions of either same-time or same-place learning. In traditional education, “brick and mortar” limit enrollments. Such limitations cannot be easily corrected in the short run. However, with distance education and the appropriate technology, it is technically possible for an institution located in one locale to have many of its students located in remote locations hundreds of miles away (Daniel, 1997; Lewis, Alexander and Farris, 1997).

For the institution, distance-learning programs can initially be expensive and time consuming. For the instructor, the first crucial step is the choosing of a type of instruction that is designed for the new paradigm of distance learning. This is followed by the transformation of traditional education techniques to the new methodology. Students must also change their focus when in distance education. The students not only need traditional printed material, such as textbooks or other reading, but also must have access to and a working knowledge of web-based technology including the Internet, email, chat rooms and bulletin boards. Distance learning courses offer significant differences from the classic classroom environment. There is no face-to-face contact, no context clues, and no opportunity for immediate dyadic communication. In the first few weeks of the course, students usually feel high anxiety due to the uncertainty of what the professor really wants and, as a result, the professor is bombarded with emails. When both the professor and the student get comfortable with this new environment real learning can take place. This analysis focuses on the student and his perception of the online education experience.

This study attempts to address these and other topics such as what is distance learning, what are the advantages and disadvantages, and what changes can be made to improve this type of learning. The results of this study should be of interest to university administrators, faculty members, and students who plan to offer, teach, or take online courses in the future. Since many universities are still in the early stages of deciding whether to offer such courses, this information may be helpful to university administrators in deciding which types of courses at their universities might be offered online. Faculty who are considering teaching one or more online courses may find the results of this study helpful in structuring these online offerings. This research is intended to give students a realistic expectation of what to anticipate from distance learning courses based on information we have found and studies we have done. It is important that students have a realistic perception of the distance learning experience.

2.0 Methodology

The purpose of this paper is to determine the perceptions of undergraduate students toward online courses. With the increasing interest in online education, such private institutions as the University of Phoenix have become much more appealing to all persons interested in pursuing a college degree, and according to the University of Phoenix, students can earn degrees whenever and wherever they want, via the Internet (“U. of Phoenix Online” brochure, 2001). Because these institutions have begun to offer more courses online, other universities, both public and private, are showing more interest, as well. However, for such a program to proliferate, students’ attitudes toward online course offerings should be assessed.

With this in mind, a questionnaire was developed to determine the attitudes of students at a medium-sized southern university. The instrument was pilot-tested on a sample of 20 business students and further improvements were made. The questionnaire was then given to eight hundred ninety-three (893) undergraduate students—business and non-business—at two regional state universities, composed of one hundred and ninety (190) who had taken courses online, and seven hundred-three (703) who had not taken any courses online. In addition to demographic questions on gender, age, grade-point average, enrollment status, classification, and whether or not the student had ever taken an online course, there were also sixteen (16) Likert-type questions concerning online courses and related statements with which the students could express various levels of agreement or disagreement (1=Strongly Agree; 2=Agree; 3=Neither Agree nor Disagree; 4=Disagree; 5=Strongly Disagree).

In order to assess attitudes toward online courses, percent responses to the Likert questions are presented in total, as well as for students who have and have not taken courses online. In addition, tests of significance were made to determine if there are significant differences in responses between business and non-business students.

3.0 Findings/Results

Table 1 gives a demographic profile of all respondents, as well as students who had and had not taken courses online. As shown in the table, the entire group consisted of more females than males, with the majority of respondents aged 21 years old or less. The mean grade-point average was 3.051, and almost all the respondents were full-time students, with sixty four percent classified as juniors or seniors. Better than sixty percent of students were majoring in some area of business while the remaining thirty-nine percent were non-business majors. In relation to online course experience, over twenty-one percent of the respondents had taken an online course prior to this questionnaire.

Table 1. Demographic Profiles of All Respondents (n=893), Respondents Who Had Taken Courses Online (n=190), and Respondents Who Had Not Taken Courses Online (n=703).

Demographic Variables	All Respondents (n=893)
Gender:	
Males	46.6%
Females	53.4%
Age Groups:	
21 or less	67.3%
Over 21	32.4%
Mean Grade-point Average:	
	3.051
Enrollment Status:	
Part-time	3.2%
Full-time	96.8%
Classification:	
Freshman	9.8%
Sophomore	26.0%
Junior	32.7%
Senior	31.5%
Major:	
College of Business Major	60.58%
Non-College of Business Major	39.42%
Have You Taken an Online Course Before?	
Yes	21.3%
No	78.7%

Table 2 shows the results of significance tests between the perceptions of business and non-business students. Both business and non-business students agreed that the flexibility associated with online classes is a positive aspect (#1), as was the fact that online classes basically involved no structured classroom-type environment

(#9). Both groups also felt this way when asked if online courses allow studying at your own pace (#5), whether online courses require more self-discipline (#16), and whether online classes essentially require students to teach themselves (#14); while both groups agreed with these statements, the business students showed stronger agreement in every case. Additionally, both groups of students showed the same level of agreement that interaction with the instructor is greater in a regular class than in an online class (#3).

Table 2. Results of Comparisons of Attitudes of Business Students vs. Non-Business Students Toward Online Course Offerings and Related Statements.

Likert Statements	Mean Responses*		Standard Deviations		t-stat	p-value
	Bus.	Non-Bus.	Bus.	Non-Bus.		
1. One of the advantages of taking a course online is that class times are flexible.	1.73	2.11	0.95	1.07	-5.386	.000**
2. I believe that a class in liberal arts, such as history, psychology, sociology, etc., would work well if offered online.	2.53	3.04	1.20	1.21	-6.047	.000**
3. The interaction/lectures with the instructor is greater in a regular classroom setting than in an online class.	2.09	2.16	1.10	1.21	-0.918	.359
4. Math and other quantitative courses are among the most difficult of all my college courses.	2.64	2.43	1.39	1.33	2.138	.033**
5. I believe taking a course online allows studying at your own pace.	2.16	2.33	0.99	1.07	-2.411	.016**
6. In my opinion, management courses should not be offered online.	3.21	2.93	1.11	0.86	3.826	.000**
7. Meeting with other students outside of class is important to me.	2.96	2.61	1.14	1.09	4.490	.000**
8. I would take a statistics or other quantitative class online if it was offered.	3.29	3.37	1.32	1.20	-0.878	.380
9. The fact that in an online class there is no structured classroom-type environment appeals to me.	2.76	2.85	1.07	1.02	-1.345	.179
10. In the future, I will take as many courses as possible online.	3.03	3.30	1.19	1.09	-3.294	.001**
11. I would miss the interaction with other students in an online class.	2.76	2.44	1.20	1.09	3.971	.000**
12. The textbook is more important in an online class.	2.25	2.55	1.06	1.08	-4.010	.000**
13. Tests in an online class are more difficult.	2.97	2.95	0.74	0.73	0.347	.729
14. Online classes require the students to teach themselves the material.	2.14	2.30	0.95	1.02	-2.346	.019**
15. The technology required to take an online course increases the value of the experience.	2.54	2.84	0.92	0.95	-4.633	.000**
16. Online classes require the student to be self-disciplined.	1.61	1.96	0.89	1.19	-4.940	.000**

*1 = Strongly Agree; 2 = Agree; 3 = Neither Agree nor Disagree; 4 = Disagree; 5 = Strongly Disagree

**Significant at .05 or less level

Both groups also agreed that the textbook is more important in an online class (#12). Also, both groups agreed that technology required for an online course increases the entire experience (#15), but again the business students showed a significantly stronger level of agreement.

The business students agreed that some liberal arts classes would work well online, while the non-business students interestingly showed a slight level of disagreement with this statement, a difference which was significant (#2). Along these same lines, the business students felt that management courses should be offered online, while the non-business students showed a significant difference in the other direction (#6). Also, both groups showed the same level of disagreement with the statement that they would take a statistics or other quantitative course online (#8); perhaps this is partly because both groups felt that math and other quantitative courses were the hardest for them in college (#4), even though the non-business students had a significantly stronger level of agreement.

While both business and non-business students felt that meeting with other students outside the classroom was important, the non-business students felt significantly stronger about this than did the business students (#7). The same can be said for the interaction with other students which is missing in online classes—both groups of respondents agreed that they would miss this, but the non-business students felt significantly stronger about this than did the business students (#11).

Both business and non-business students were essentially neutral in their opinions on whether or not tests in online classes are more difficult than in regular classes (#13). Lastly, and perhaps not unexpectedly, when asked if they would take as many online courses as possible, the business students were essentially neutral on this issue, but the non-business students disagreed significantly (#10). Thus, perhaps an overall generalization might be that the business students seem to be more favorably disposed toward online courses than the non-business students in this study.

4.0 Summary and Conclusions

The results of this research show that there exist a number of essential differences in perception among college students regarding distance-learning. When the respondents were divided by business versus non-business majors, numerous differences were found. These differences range from the advantages of taking online courses, to the types of courses to be offered. Anecdotally, it seems that business faculty have more exposure to distance-learning technology than their non-business counterparts, which might explain some of the differences in perceptions between business and non-business majors.

Given these results, information sessions could be offered to faculty prior to their venturing into the online realm illustrating the expected benefits from taking part in one or more distance learning classes. A similar course of action could be taken during advising for students. These steps may help to alleviate anxiety or fears concerning distance-learning held by faculty and/or students. Additionally, before offering online courses, professors and/or administrators might wish to more effectively communicate some of the benefits associated with these courses in order to reduce resistance to them. A detailed description of the course and what it entails should be made available to prospective students well in advance of the time that the course will be offered. Also, if possible, teachers could use former students to serve as “walking, talking advertisements” of the virtues of such courses. At any rate, while the success of online courses might not depend entirely on communicating what such courses involve, certainly some of the resistance to them could be alleviated by setting up a long-range plan which would focus on making more knowledge about these courses available to future students.

5.0 References

1. Allen, M., Bourhis, J., Burrell, N., and Mabry, E. (2002). “Comparing Student Satisfaction with Distance Education to Traditional Classrooms in Higher Education: A Meta-analysis.” *The American Journal of Distance Education*, 16(2): 83-97.
2. Chen, Y., Lou, H., and Luo, W. (2001). “Distance-Learning Technology Adoption: A Motivation Perspective.” *Journal of Computer Information Systems*, Winter: 38-43.

3. Daniel, J. (1997). "Why Universities Need Technology Strategies." *Change*, 29: 10-17.
4. Howland, J., & Moore, J. (2002). "Student Perceptions as Distance Learners in Internet-Based Courses." *Distance Education*, 23(2): 183-195.
5. Lewis, L., Alexander, D., & Farris E. (1997). "Distance Education in Higher Education Institutions" (NCES 98-062): Washington, D.C.: U.S. Department of Education Office of Educational Technology National Center for Education Statistics.
6. Phillips, V. (1998). "Online Universities Teach Knowledge Beyond the Books." *HR Magazine*, 43(8): 121-128.
7. Roberts, B. (1998). "Training Via Desktop." *HR Magazine*, 43(9): 98-104.
8. "University of Phoenix Online" brochure, University of Phoenix, 2000.
9. Webster, J., & Hacklery, P. (1997). "Teaching Effectiveness in Technology Mediated Distance Learning." *Academy of Management Journal*, 40 (6): 1282-1309.

6.0 Appendix

Online Course Questionnaire

Gender: ___Male ___Female Age: _____ G.P.A _____
 Enrollment Status (please check one): ___Part Time ___Full Time
 Class: ___Freshman ___Sophomore ___Junior ___Senior ___Graduate Student
 Major: _____
 Have you taken an online course before? Yes _____ No _____
 If yes, what course? _____

Please indicate your level of agreement or disagreement with the following statements by placing the appropriate number next to the statement. Please use the following numbering system:

- 1 = Strongly Agree
- 2 = Agree
- 3 = Neither Agree nor Disagree
- 4 = Disagree
- 5 = Strongly Disagree

1. One of the advantages of taking this course online is the fact that class times were flexible	1 2 3 4 5
2. I believe that a class in liberal arts, such as history, psychology, sociology, etc., would work well if offered online	1 2 3 4 5
3. The interaction/lectures with the instructor is greater in a regular classroom setting than in an online class	1 2 3 4 5
4. Math and other quantitative courses are among the most difficult of all my college courses.	1 2 3 4 5
5. I believe taking a course online allows studying at your own pace	1 2 3 4 5
6. In my opinion, management courses should not be offered online	1 2 3 4 5
7. Meeting with other students outside of class is important to me	1 2 3 4 5
8. I would take a statistics or other quantitative class online if it was offered.	1 2 3 4 5
9. The fact that this course had no structured classroom-type environment appeals to me	1 2 3 4 5
10. In the future, I will take as many courses as possible online.	1 2 3 4 5
11. I would miss the interaction with other students in an online class	1 2 3 4 5
12. The textbook is more important in an online class	1 2 3 4 5
13. Tests in an online class are more difficult	1 2 3 4 5
14. Online classes require the students to teach themselves the material	1 2 3 4 5
15. The technology required to take an online course increases the value of the experience	1 2 3 4 5
16. Online classes require the student to be self-disciplined	1 2 3 4 5

Notes