

## **Students' Perceptions of On-line Courses: An Exploratory Study**

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### **ABSTRACT**

**This paper investigates students' perceptions of on-line courses. The emergence of the internet has become a major force in higher education with many schools experimenting with different forms of on-line instruction.**

**An important factor that has been largely ignored is how students feel about on-line courses. This study discovered that students have accepted on-line courses as an alternative to the traditional classroom environment. Further research is needed to expand the scope of this paper and to see whether these results can be generalized in other university settings.**

**Keywords:** on-line course, students' perceptions, Online Education. Distance Education.

### **INTRODUCTION**

**Although universities have evolved through the years, the basic delivery of instruction has remained unchanged. One could say that the way most students learn today, students going to a university classroom to listen to a lecture delivered by a professor, is similar to the way students were learning 150 or even 200 years ago. While some attempts have been made in the past to change the way students are learning in a traditional classroom setting, most of those attempts have failed. In the 1950s, with the popularization of the new revolutionary technology, television, many forward thinkers imagined an educational system where thousands or even millions of students would be listening to the same lecture from world famous professors. Of course, after the initial excitement, television did not prove to be a very viable alternative in replacing the traditional classroom. In other cases, public and private universities have experimented with different types of correspondence courses. While some schools, like the University of Maryland in the United States and the Open University in the United Kingdom, have had some success with specific student populations, in most instances degrees obtained through a "correspondence" school have had a fairly bad reputation (Dash, 2000; Carpenter, 1998).**

**The advent of the World Wide Web and the widespread use of computers have generated an unprecedented interest in on-line education. Universities, after investing millions of dollars in acquiring advanced computer technology, are looking for ways to reach students more efficiently and effectively. The main goals of on-line education are to eliminate the need of the traditional classroom and to provide a better more efficient learning environment for students (Eastman and Swift, 2001). Students do not need to come to a fixed physical location to take a course; on-line courses can be taken at anytime, anywhere. Lectures and class discussions are delivered through the internet in a synchronous or asynchronous way. This movement towards on-line instruction has not been limited to for-profit institutions, such as Phoenix University in the US, but has even spread to prestigious private and public institutions. In the last couple of years, prestigious US institutions like Duke University, The University of Chicago, and the Wharton School of the University of Pennsylvania, among others, have offered on-line MBA degrees. The interesting facet of on-line instruction is the interest that it has generated among private sector companies. Possibly for the first time in educational history, many business people are seeking to create for-profit institutions. The list is long and includes software billionaire Michael Sawyer, who plans to spend \$100 million in establishing a free web site offering access to the "greatest minds of our times",**

and the 1980s controversial financial figure Michael Milken, who is investing \$500 million in an on-line venture (Lindquist, 2000). Even prominent previous critics of on-line instruction, such as William Bennett, the former US Secretary of Education, have recently reassessed their opinions of on-line instruction. While last year he stated that "there is no good evidence that most uses of computers significantly improve learning," this year he described the new technology as "the only way to reach everybody" (Time Magazine, 2001).

From the previous examples, it is becoming evident that on-line instruction will become an integral part of higher education for the foreseeable future. While many researchers have looked at issues such as the performance of students in on-line courses versus the performance of students in on-campus classes (Huff, 2000) and the cost efficiency of on-line instruction (Carr, 2000), there have been very few studies on how students perceive on-line courses. This study tries to answer several research questions by surveying upper level business students at Clayton College & State University (CCSU), located in Morrow, Georgia. CCSU has experimented with on-line courses since January 1997 and was a pioneer in offering non-traditional instruction in the Southeastern United States. The questions that this study proposes to answer include: the reasons that students select on-line courses; what type of computer familiarity and training these students have; what has been their experience with on-line courses; what do they consider as necessary factors to be included in an on-line course; and their overall satisfaction with on-line instruction.

This research is important because on-line instruction is a new concept, and we still do not know how students perceive it and what are the important factors for success in the on-line environment. The vast majority of college professors have been trained to transmit knowledge in the traditional classroom environment. This training may or may not be sufficient to create satisfactory teaching experiences in the new on-line world. By asking students to discover what they consider as important factors, academics will become better at adjusting and succeeding in the new on-line environment (Visser and Visser, 2000)

## **REVIEW OF THE LITERATURE**

Although there are many articles on on-line education, the effectiveness and even perception of on-line education is an issue that must be addressed. In addition, the exponential growth of courses being offered via distance education mandates that consideration be given to students' perceptions of their on-line learning experiences (Pettracchi, 2000). As Pettracchi indicated, increasing the knowledge of how students perceive on-line education will assist educators in enhancing the value of the learning experience. Other authors (Long et al, 2000) have stressed that the rise in the number of students taking on-line courses has caused more quality assurance programs in the field. One way of addressing the quality concerns of on-line instruction is to survey the perceptions of students taking these courses.

Perceptions of courses taken on-line vary. According to a survey of 247 corporate recruiters administered by Business Week magazine, almost all the respondents would not consider in hiring a recipient of an on-line MBA (Dash 2000). Dash (2000) also indicated that some students have become concerned about the additional costs involved, often 20% than fees of similar programs offered on campus. Another study (Carr, 2000), indicated that students taking courses on-line were generally less happy than students taking similar courses on-campus. Carr's study suggested that it might be beneficial to develop tests to be given to students to determine the appropriate type of instruction. Somewhat surprisingly, there has been an extensive belief among educators that the type of technology used in on-line education plays only a small role in determining student satisfaction (Reis, 2000). Reis' article indicated, though, that students are often frustrated within the on-line environment. However, not everybody agrees with this view, Johnstone and Krauth (1996) reported that achievement and satisfaction for students taking on-line courses is not significantly different from students taking on-campus courses (Johnstone and Krauth, 1996).

Many students appreciate the flexibility and benefits from taking on-line courses. It makes it much easier for them to complete their educational goals, even while they are at home, at work, or on vacation (Hitchcock, 1999). In Visser and Visser's study (2000), almost half of the study participants cited flexibility of the instructional mode as the primary reason for choosing to enroll in distance education courses. There is definitely support for the offering of on-line courses, but, as expected, students often question the method of delivery (Schulman and Sims, 1999).

An increasing number of educators are becoming concerned that on-line education does not improve the learning process (Frost and Fukami, 1997), and some authors have even questioned whether on-line technology is pedagogically more effective than older technology (Bates, 1994). Some educators are also concerned that an on-line course does not offer the same value as an on-campus course (Mangan, 1999), and one author (McCollum, 1999) has voiced his concerns that the perceived lack of quality in on-line courses might have an effect on the certification process for universities. Healy (1999) stated that some educators felt that money was being spent disproportionately on on-line education when it should have been spent on instructional development. In addition, although the percentage of colleges offering distance education programs increased from 48% in 1998 to 72% in 1999, the American Federation of Teachers (AFT) in July 2000 passed a resolution encouraging new quality standards for college distance-education programs (Henry, 2000). The AFT even recommended that undergraduate programs include some classroom-based coursework. Another study (Boehle, Dobbs, and Stamps, 2000) concluded that some courses can effectively be taught on-line, but also cautioned against offering undergraduate programs entirely on-line.

It is important that the goals and stated outcomes of similar courses taught on-line and on-campus are the same. Because of their very nature, however, on-line courses often tend to be passive in character and do not meet the interactive requirements of a successful course. The reason for this lack of interactivity may be the cost associated with constant professor and student interaction. Educators must continually seek ways for students to still have interactive experiences when taking on-line courses (Huff, 2000). Robinson (1995) emphasized the importance of student support through assistance and guidance from various sources. Distance education programs provide three (3) means of support for students. First, academic support provides students with cognitive and meta-cognitive tools and resources needed for linking student performance to course goals. Second, affective support refers to the motivational needs of the student. Third, administrative support involves assistance with logistical components such as registration, fee payment, and ordering of course materials (Visser and Visser, 2000). In addition, each college must adopt policies on on-line courses to meet the needs of its specific student body (Young, 2000). Schools have different cultures and thus different expectations relevant to their on-line education programs (Young, 2000).

## **METHOD**

The population for this study were students taking junior and senior level courses at Clayton College and State University. The University is an ideal location for such a study because of its involvement in an Information Technology Project (ITP). In the fall of 1997, CCSU became only the third U.S. public university, and the first in the Southeast, to provide all of its students with notebook computers. The program is unique because the students do not own or lease the computers. Instead, they are required to pay an additional student fee of \$300 per semester for use of the computer.

The university offers over 80 courses on-line, and students have the choice of taking similar courses either on-line or in a traditional classroom setting. The experience that the University has had with on-line instruction over the last four years, provided an ideal laboratory environment to investigate the perceptions that students have of on-line courses.

Out of an approximate total population of 400 junior and senior students, 200 names were

selected randomly. The researchers were then successful in collecting 160 questionnaires. Three questionnaires were not usable, and a total of 157 usable questionnaires were collected.

## RESULTS

The results of the study show a wealth of information about the diversity of reasons for students taking on-line courses. Thirty-six percent of the students had not taken any on-line classes and were not qualified to answer the majority of the questions. However, they provided the authors with some interesting reasons for not taking on-line courses. Some of these reasons were: "I did not take them because I wanted to take advantage of having the teacher available to me," "I need personal instruction," "I'd rather attend the lectures because I learn more," "Most of my remaining classes would be more beneficial to me if I were learning directly from the professor," and "I normally do not take on-line courses because I feel I learn better by listening versus self-study." These views show that on-line instruction is not for everybody, and that there will always be a certain percentage of students suspicious of new technology who are more comfortable in a traditional campus setting.

One hundred and twenty one of the respondents who completed the questionnaire, 77 percent of the respondents, had taken at least one on-line course (Table: 1). This high percentage of students exposed to on-line courses shows how important such courses have become in certain institutions of higher learning. The majority of the students responding to the survey had taken two or three on-line classes. About 15 percent of the sample had wide exposure to on-line classes and had taken five or more courses.

Table 1  
Demographic Information

Number of online Courses taken in the past		Percent
0	36	22.9
1	35	22.3
2	27	17.2
3	27	17.2
4	9	5.7
5	11	7.0
6	12	7.6

The subsequent sections of the survey inquired about the reasons for selecting on-line instruction instead of traditional classes. Table: 2 presents the reasons for taking on-line courses. Scheduling convenience was selected by almost 80 percent of the respondents. The University enrolls a large number of non-traditional working students. Although all business courses are offered day and night, many students have a hard time finding courses available at times that will fit into their busy work and family schedules.

On-line courses seem to offer them the flexibility to take classes that otherwise they might have been unable to take. The second most popular reason for taking on-line courses is the ability to take more classes. Fifty two percent of the respondents selected this reason.

Conflict with work schedules and time conflicts with another course were some of the other important reasons. Lack of transportation and need to stay home due to family obligations do not appear to be important reasons for taking on-line courses. When looking at the predominant reasons, universities have to be concerned with students overloading their schedules with on-line courses. Students might feel that they can take more courses, but often find that they are not able to keep up with the course requirements.

Table 2  
Reasons for Taking On-Line Courses

Reasons for Taking On-Line Courses	N	Percent
Scheduling convenience	96	79.3
Ability to take more classes per semester	63	52.1
Work schedule	50	41.3
Time conflict with another course	33	27.3
Lack of equivalent on-campus course	28	23.1
Perception on-line course was easier than the on-campus course	19	15.7
Need to stay home	4	3.3
Lack of transportation to school	0	0
Other reasons	5	3.2

The vast majority of CCSU students taking on-line classes felt that they had intermediate or advanced computer skills (Table 3). These numbers reflect the success of the laptop program that the University adopted in Fall of 1997. Every student has access to a computer and 97.4% feel that they have intermediate or advanced computer skills, although approximately 40 percent of the students have not taken any formal computer classes.

Table 3  
Computer Familiarity and Training

Received any type of computer instruction		<u>N</u>	<u>Percent</u>
	Yes	73	60.3
	No	48	39.7
Rate your overall skills with the computer		<u>N</u>	<u>Percent</u>
	Beginner	3	2.5
	Intermediate	106	87.5
	Advanced	12	9.9
Rate your overall skills using the Internet		<u>N</u>	<u>Percent</u>
	Beginner	10	8.3
	Intermediate	89	73.6
	Advanced	22	18.2
Do you have the computer skills necessary for success in the on-line courses		<u>N</u>	<u>Percent</u>
	Yes	115	95.0
	No	6	5.0

### Student Evaluation of Online Courses

Table 4 presents information on a series of issues associated with on-line courses, from the presentation at an introductory orientation to success of on-line communication. Due to the fact that face to face communication, very frequent in a traditional classroom setting, does not exist in an on-line environment, students may feel isolated and without clear guidance about the direction of the course. Therefore it is very important for students to understand the technology and to be very clear about the course guidelines. Simple tasks, like scheduling exams and answering questions can become major issues if a clear communication network does not exist in the on-line environment. Our research indicates that the majority of students had a good or excellent experience with issues like overall presentation at orientation, explanation of purpose, objective, and grading procedures of course, ease of communication with instructors, instructor responsiveness or assistance with

questions about assignments, course material etc, instructor led reviews for tests, scheduling of tests and other assignments, resolution of conflicts with other class tests or

#### Experience with On-Line Courses

	Unacceptable		Needs improvement		Neutral		Good		Excellent	
	N	%	N	%	N	%	N	%	N	%
Overall presentation at orientation	0	0	11	9.3	19	16.1	65	55.1	23	19.5
Explanation of purpose, objective, and grading procedures	4	3.3	3	2.5	17	14.0	74	61.2	23	19.0
Ease of communication with instructors	4	3.3	7	5.8	22	18.2	53	43.8	35	28.9
Instructor responsiveness or assistance with questions about assignments, course material etc	4	3.3	0	0	28	17.8	53	43.8	36	29.8
Instructor led reviews for tests	14	11.6	8	6.6	40	33.1	45	37.2	14	11.6
Scheduling of tests & other assignments	10	8.3	0	0	21	17.4	63	52.1	26	21.5
Resolution of conflicts with other class tests or assignments	7	5.8	5	4.1	42	34.7	30	24.8	37	30.6
Formats allowed for turning in assignments	4	3.3	13	10.7	11	9.1	58	47.9	35	28.9
Lecture and/or lab course syllabus on the Web	4	3.3	7	5.8	11	9.1	72	59.5	27	22.3
Class notes on the web	4	3.3	11	9.1	11	9.1	72	59.5	23	19.0
Presentation materials (power point) on the web	8	6.6	0	0	12	9.9	64	40.8	37	30.6
Hyperlinks	8	6.6	6	5.0	22	18.2	63	52.1	22	18.2
Textbook	2	1.7	6	5.0	41	33.9	58	47.9	14	11.6
Audio and/or video course tapes	16	13.6	18	15.3	70	59.3	7	5.9	7	5.9
Course specific software	9	7.6	12	10.2	65	55.1	25	21.2	7	5.9
Connection to the Internet	10	8.3	6	3.8	26	21.5	53	43.8	26	21.5
Ease of access to e-mail	9	7.4	15	9.6	17	14.0	55	45.5	25	20.7
Ease of access to on-line materials	4	3.3	6	5.0	12	9.9	71	58.7	28	23.1
Assistance from the University technical personnel with computer-related problems	4	3.3	14	8.9	56	46.3	39	32.2	8	6.6

assignments, formats allowed for turning in assignments, lecture and/or lab course syllabus on the web, class notes on the web class notes on the web, presentation materials (power point) on the web, hyperlinks, textbook, audio and/or video course tapes, course specific software, connection to the internet, ease of access to e-mail, and assistance from the University technical personnel with computer-related problems. Very few students

considered their experience to be unacceptable or in need of improvement. The data show a high degree of satisfaction and acceptance among students at CCSU. However, one has to keep in mind, that the numbers do not reveal anything about the quality of instruction of these courses, but the overall student attitude is positive.

Table 5  
Important Factors in an On-Line Class

	Not at all important		Not so important		Neutral		Fairly important		Very important	
	N	%	N	%	N	%	N	%	N	%
Discussion of textbook material	1	.9	12	10.3	31	26.7	42	36.2	28	17.8
Discussion of recent developments in area of study	3	2.5	12	9.9	49	40.5	42	34.7	13	10.7
Textbook quality	0	0	3	2.5	26	22.0	35	29.7	54	45.8
Availability of class notes	0	0	4	3.3	5	4.1	52	43.0	60	49.6
Study guides	0	0	4	2.5	19	15.7	48	39.7	50	41.3
Other presentation material	1	.8	7	5.8	39	32.2	43	35.5	31	25.6
Related experience of instructor	0	0	6	5.0	21	17.4	40	33.1	54	44.6
Interaction with instructor	4	3.3	4	3.3	22	18.2	32	26.4	59	48.8
Interaction with other students	0	0	8	6.6	31	25.6	50	41.3	32	26.4
Ability to ask questions	0	0	0	0	13	10.7	43	35.5	65	53.7
Ease of asking questions	4	3.3	0	0	10	8.3	46	38.0	61	50.4
Ability to get assistance when needed	0	0	4	3.4	6	5.1	32	27.4	75	64.1

Table 5 presents information on what factors students consider to be important in an on-line class. Although students are taking an on-line class, it is very important for them to be in touch with the instructor and other classmates. From the data shown in the table, it appears that a well-designed on-line course has to be interactive and if there is not constant communication between the professor and the students, the course satisfaction will possibly decline. Some of the important issues from the students' point of view for the success of an on-line class are the availability of class notes, study guides, interaction with the instructor, ability and ease of asking questions, and ability to get assistance when needed. Universities prior to introducing on-line courses have to very closely look whether they can satisfy the needs of their students. The technical capability of the computer network is one aspect of the preparation. The training of the professors is another. The demands that students have for interactive instruction, transforms the on-line classroom into one-to-one interchange. Many Universities perceive on-line education as a way of lowering their always-escalating instructional costs (Eastman and Swift, 2001). However, the demands for interactivity between instructor and individual students may make successful on-line instruction more expensive than traditional classroom-based methods.

Table 6 presents information on how satisfied students feel with on-line courses. Forty-eight percent of students felt somewhat satisfied with their experience, and 21.5 percent felt completely satisfied.

These numbers definitely indicate high satisfaction with on-line course experiences, but Universities have to pay attention to the 19 percent of students who did not feel that on-line courses met their particular needs and are somewhat dissatisfied.



**Table: 6**  
**Overall Satisfaction with On-Line Courses**

Based on the factors listed as important in an on-line course, how well have the on-line courses met your needs for learning the course material?	Not well at all		Not very well		Neutral		Fairly well		Very well	
	N	%	N	%	N	%	N	%	N	%
	4	3.3	16	13.2	23	19.0	56	46.3	22	18.2
How satisfied are you with your overall on-line course experience?	Dissatisfied		Somewhat dissatisfied		Neutral		Somewhat satisfied		Completely satisfied	
	N	%	N	%	N	%	N	%	N	%
	0	0	23	19.0	14	11.6	58	47.9	26	21.5

### **CONCLUSION, RECOMMENDATIONS AND SUGGESTIONS FOR FUTURE RESEARCH**

This paper attempted to investigate the perceptions that college students have of on-line courses. Keeping in mind the limitations of the study and its exploratory nature, the results revealed interesting trends and insights about the views that students hold of on-line courses. Overall, it appears that students have accepted on-line courses as an alternative to the traditional classroom environment. In designing new forms of instruction, Universities in many cases ignore asking the students what they want. Universities need to study the views of students in order to better design on-line courses.

This is an exploratory study of how students perceive on-line courses. Further research is needed to expand the scope of this paper and to see whether our results can be generalized in other university settings. Clayton College and State University is a very diverse campus with a large number of non-traditional students. Samples from more traditional campuses need to be taken to measure the satisfaction level of traditional students. Moreover, we have seen the increase of on-line instruction in graduate programs. It would be interesting to research whether graduate and undergraduate students have similar perceptions or whether their views and needs are different. Because it appears that on-line instruction is going to become part of college experience, further research is needed to understand it and improve it.

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