

**A Needs Assessment of Online Learning Activities  
at the University of South Alabama**

Conducted on Behalf of the  
University Distance Education Committee by

John V. Dempsey  
Behavioral Studies and Educational Technology

Samuel H. Fisher, III  
Political Science and Criminal Justice

Dawn Wright  
Betsy Anderton  
USA Online Learning Lab

November 5, 2002

## Table of Contents

p. 3	Introduction
p. 4	Section 1- Description of the Organization, Faculty, and Students
p. 7	Section 2 - Methods
p. 8	Section 3 – Faculty and Student Training
p. 11	Section 4 – Hardware and Software Resources
p. 13	Section 5 – Library Involvement
p. 17	Section 6 – Obstacles and Challenges
p. 20	Section 7 – Summary and Recommendations

## Survey Summaries

p. 22	Appendix A Survey Results: Faculty That Have Taught Completely Online Courses Using eCollege System
p. 28	Appendix B Survey Results: Faculty That Have Taught Web-Enhanced or Blended Courses
p. 34	Appendix C Survey Results: Faculty That Teach Classes That Do Not Use Any Online Technologies
p. 38	Appendix D Survey Results: Students That Have Taken Completely Online Courses Using eCollege System
p. 45	Appendix E Survey Results: Students That Have Taken Web-Enhanced or Blended Courses
p. 53	Appendix F Survey Results: Students That Have Taken Only Classes That Do Not Use Any Online Technologies

## Introduction

The University Distance Education Committee designed and conducted a limited needs assessment of online learning activities at the University of South Alabama. Data was collected from six groups comprised of faculty (n=140) and students (n=707) participating in completely online courses, web-enhanced courses, and courses taught entirely in a traditional classroom format. The committee, comprised of representatives from all University colleges, offers this report to the university including recommendations resulting from an analysis of findings.

The goals of the Needs Assessment were to:

- 1) Describe the organization, personnel, and setting in order to provide background context for online learning activities at USA.
- 2) Provide background, experience level, and demographics of each of the groups in the study.
- 3) Assess the current and desired state of training for faculty and students engaged in formal online learning activities.
- 4) Describe resources available to faculty and students engaged in formal online learning activities.
- 5) Assess the current and desired state of online library use by faculty and students.
- 6) Determine perceived obstacles to instruction and learning by faculty and students.

The six groups under study were:

Group A - Faculty that have taught completely online courses using eCollege system

Group B - Faculty that have taught web-enhanced or blended courses

Group C - Faculty that teach only classes that do not use any online technologies

Group D - Students that have taken completely online courses using eCollege system

Group E - Students that have taken web-enhanced or blended courses

Group F - Students that have taken only classes that do not use any online technologies

Limitations of the Study:

The reader will note that the data used for this report were gathered at different occasions over the period of more than a year. Concurrently, much change has been in effect. Of particular note is the university's decision to support traditional classroom instruction with an optional web-enhanced system referred to as eCompanion.

## Section 1 Description of the Organization, Faculty, and Students <sup>1</sup>

The University of South Alabama (USA) is a comprehensive, coeducational, state-assisted institution, which serves as a major center of undergraduate, graduate, and professional education for Alabama, the Gulf Coast region, and the southeastern United States. The University of South Alabama is one of three institutions of higher education in the area, and has 11,447 students. This number has decreased since 1996 by a small amount. However, this enrollment is six times more than the area's next most attended school, the University of Mobile. Most first time undergraduate students were from Alabama (2,446) and Mississippi (278). Of first time students, 248 students were from other countries. Enrollment from other states has dropped since 1996. Of USA students, 73.7% of these are white, 14.7% are African American, 6.8 % are non-resident alien, 2.6% are Asian, and 1.3 % is Hispanic American. Sixty percent of the students are female, a number which has increased since 1996. The average age of a USA student is 25.9 years. Women at USA are averaging a slightly higher age than men at 26.2. The average undergraduate student is 24.2 years, and the average graduate is 32.2 years. There are 946 international students at USA, 8.1 % of University enrollment.

In-state full time undergraduate students pay about \$2,911.00 in tuitions per academic year. Out-of-state students pay \$5,581.00 per academic year. Graduate full time students pay \$3,001.00 and out-of-state graduates pay \$5,761.00. Students pay an additional fee of \$170 to register for a fully online course.

Over 82% of USA faculty members hold doctoral degrees. Of all faculty at USA, 61.8% of the males are tenured and 31.5 % of females have obtained tenure. Most Professors and Associates have been at the University for 15 or more years. Most Assistants and Instructors have been at USA for 0-2 years.

### Distance Education at the University of South Alabama.

USA provides students with online learning classes in three ways. Courses are offered via eCollege and are fully online, courses are fully online through another service provider of the teacher's choice, and classes are supplemented with online resources or activities.

In 1999, USA began offering online courses. The enrollment in online classes has more than tripled from 183 to 686 from that period to 2001. During the spring of 2001, 48 courses were offered online, 21 undergraduate and 27 graduate (2001 Bulletin). During this period, six and one-tenths percent of University students were enrolled in at least one online course.

The average age of an online student was 32.6 years, which is about the same age as the average graduate student (32.2 years) and five years older than the average USA student. Students over the age of 25 made up 74.3% of the online population and 35.5% of the total University population.

---

<sup>1</sup> Much of the data reported in this section was provided in 2001 by Mr. Paul Darring of the USA Institute for Research and Planning and can only be considered current to that date. The authors are indebted to Mr. Darring for his helpfulness. As of Fall Semester 2002, according to Dr. Tom Chilton, Director of USAOnline, actual enrollment is estimated at 1,000 students with over 1,600 course enrollments.

	TOTAL	Average Age	Over 25 years old	Fall 1999
Online Students	686	32.6	74.3%	183
University	11,255	25.9	35.4%	11,185
Percent	6.1%			1.6%
Graduate Students		32.2 years	71.3%	

Fifty-six percent of fully online students are residents of Alabama but the percentage of out-of-state students is larger than for the overall university student population.

Residency	Online	Percent	University	Percent
Alabama	390	56.8%	8,783	78.0%
Other States	248	36.2%	1,619	14.4%
Other Countries	48	7.0%	853	7.6%
Total	686	100.0%	11255	100.0%

Greater than half of the fully online students from Alabama reside in Mobile County (54.1%). This is a smaller percentage of students than the general university student population (68.3%).

Alabama Residency	Online	Percent	University	Percent
Mobile County	211	54.1%	5,995	68.3%
Other Counties	179	45.9%	2,788	31.7%
Sub-Total	390	100.0%	8,783	100.0%

A much larger percentage of women than men take advantage of fully online courses at South Alabama. This demographic is consistent with a number of North Americas and Australian studies (e.g., Robinson, 1992) that suggest that more women than men enroll in higher education distance courses.

Table 1.4  
Online students by gender Spring 2001

Gender	Online	Percent	University	Percent
Males	192	28.0%	4,464	39.7%
Females	494	72.0%	6,791	60.3%
TOTAL	686	110.0%	11,255	100.0%

Finally, as Table 1.5 indicates a larger percentage of graduates than undergraduate students register for fully online courses (58.7%). This is especially large in proportion to the percentage of graduate students in the university student population (19.3%).

Table 1.5  
USA and online students by class, Spring 2001

General Class	Online	Percent	University	Percent
Freshman	8	1.2%	2,304	20.5%
Sophomores	37	5.4%	1,803	16.0%
Juniors	78	11.4%	1,900	16.9%
Seniors	149	21.7%	2,655	23.6%
Unclassifieds	11	1.6%	163	1.4%
Undergrad Subtotal	283	41.3%	8,825	78.4%
Graduates	403	58.7%	2,175	19.3%
First Professionals	0	0.0%	255	2.3%
Grand Total	686	100.0%	11,255	100.0%

### References

- Darring, P. (2001). Online student demographics. Unpublished raw data.  
 Institutional Research and Planning. (2001). Tables and Figures. [On-line]. Available:  
<http://www.southalabama.edu/institres/irhome.html>  
 Robinson, R. (1992). Andragogy applied to the Open College learner. *Research in Distance Education*, 4(1), 10-13.  
 University of South Alabama. (2000). 2000-2001 Bulletin. [On-line]. Available:  
<http://www.southalabama.edu/bulletin/tableofc.htm>

## Section 2 Methods

Because of the varied experience faculty and students have had with the Internet, we identified six groups to survey with three groups drawn from faculty and three groups drawn from students. The three faculty groups were: faculty who teach online courses, faculty who teach traditional courses with an online component (web-enhanced), and faculty who do not use the internet at all in conjunction with their classes. The three student groups were broken down in the same manner: students who have taken online classes, students who have had web-enhanced classes, and students have had no experience using the web in class. After all the surveys were conducted we have 140 faculty members and 707 students. All the surveys were anonymous. The surveys were submitted and approved by the University of South Alabama Institutional Review Board prior to administering.

The samples of students and faculty who did not teach or take online classes were random. Individual faculty were randomly selected from a list of all faculty who were not teaching online courses. These faculty were interviewed by phone during the months of June and July, 2001. A random selection of classes during the fall (2001) and spring (2002) semesters was drawn and, with the instructor's permission, the survey was administered to the students. Only students that were or had taken a web-enhanced class were given the appropriate (web-enhanced) survey instrument, and students that did not then or prior to that semester have a Web-enhanced or fully online course were given the appropriate (traditional) survey instrument. The procedure for online students and faculty was different. All faculty that teach online courses and all students that were taking online courses were invited to complete the survey. Faculty were sent a paper questionnaire and students were surveyed via the eCollege web site.

Our best estimate is that approximately 11 percent of the faculty teach fully on-line courses, 35 percent teach Web-enhanced courses, and 54 percent do not use the Web in conjunction with their courses. The best estimate of the proportion of students in the three categories is 36 percent of the students are in traditional courses, 57 percent have had Web-enhanced courses, and 7 percent have online courses. Out of the 707 students surveyed 166 had no experience using the Internet for classes, 270 had experience with a web-enhanced class, and 271 had experience with an on-line class.

The results of this set of surveys are a representation of opinion on various aspects concerning distance learning collected over the course of more than one year. It is expected that future surveys will show differing results as more students and faculty use the Internet in conjunction with their classes.

Section 3  
Faculty and Student Training

Using the Internet for courses, as an enhancement to the traditional class or for a fully online course, requires training of faculty and students. As with any tool the efficient use of the Internet is predicated on understanding how to use it.

Faculty Training

Faculty were asked a variety of questions relating to training issues (see Table 3.1). One question concerned the importance of training for faculty such as that provided by the Online Learning Lab. They were asked to rate the opportunities on a 1 to 5 scale with 1 representing “not at all important” and 5 representing “very important.” Overall, 77 percent of all faculty surveyed reported that formal training opportunities like those provided by the USA Online Learning Lab were important or very important.

Likewise, faculty were asked how well-trained instructors should be who teach web-enhanced courses. There was a strong opinion that faculty should be extremely well trained with all three groups having a mean greater than four. The same pattern is seen in response to training in instructional methods. Faculty teaching web-enhanced classes and those teaching online classes report that they are better trained in using web instructional methods than faculty teaching traditional classes.

Other questions concerned the adequacy of faculty training on technology and online teaching methods. Instructors reported a low to mid-level of training across groups with the traditional group a good deal lower, as expected. Instructors in every category reported a similar pattern of limited knowledge of copyright issues (e.g., putting material on the web from outside sources).

Table 3.1  
Opinions on Training by Faculty Group  
(Figures represent means scores)

	<u>Traditional</u>	<u>Web Enhanced</u>	<u>Online</u>
How important are formal training opportunities?	4.47	3.82	4.10
How well trained should instructors be?	4.46	4.16	4.19
Well-trained in web-enhanced instructional methods?	2.11	3.00	3.42
Well-trained in web-enhanced technology use?	2.53	3.18	na
Knowledge of copyright issues?	2.33	3.56	3.28

Of particular interest in this needs assessment was how online instructors get help creating and designing their online courses. Two-thirds of faculty members who teach online courses reported having others help in creating their online courses. As Table 3.2 indicates, faculty peers are the most powerful helpers to these faculty. Online learning staff, eCollege staff, and students are also reported as important resources for help with creating and designing online courses. Of some note is that fact that 97 percent of online faculty report being “comfortable” with these sources of help.

	<u>Help with creating course</u>	<u>Help with course design</u>
Faculty peers	50	53
Online Learning Lab staff	31	19
eCollege staff	28	47
Family members	8	3
Librarians	6	6
Listserv members	0	0
Friends	6	3
Computer Center staff	0	3
Students	14	6
Others	17	14

### Student Training

Many students today see computers as a given rather than a technological marvel. Students were asked to evaluate their computer skills level. Less than 10 percent of the students in traditional classes and web-enhanced classes reported a below average or novice level of computer skills. Perhaps because the actual performance (vs. the perception) of these skills is so essential to fully online courses, a larger number (18%) of online students reported low levels of computer skills. Even so, strong majorities in all three categories have average to above average computer skills.

Students taking a web-enhanced class or online class were asked their familiarity with a variety of web and computer tools. Over 90 percent of both groups were familiar

with e-mail, attachments, word processing, and cutting and pasting. Over 90 percent of the web enhanced students were familiar with creating files compared slightly less than 90 percent of the online students. Students were less familiar with using PowerPoint and other presentation software; however, the figures were relatively high with 77 percent of the students in web-enhanced classes and 63 percent in online classes noting they were familiar with such software.

Students, in all three groups, were then asked in what areas they required further training in preparation for online courses (see Table 3.3). Skills that elicited the greatest response for more training were online test taking, time management, use of the web for scholarly research, and use of egroups and webboards. Less than 20 percent of the students in all three groups felt a need for more training on keyboarding skills, use of chat rooms, web navigation, or word processing skills.

One interesting finding was the large difference between students online and students in web enhanced classes on the need for a library orientation and the web. Approximately 55 percent of the online students expressed the importance of having a library orientation on distance learning compared to 14 percent of the students taking web-enhanced classes.

Table 3.3  
Skills Requiring Additional Training by Student Group  
(Figures percentage saying yes)

	<u>Traditional</u>	<u>Web Enhanced</u>	<u>Online</u>
Keyboarding	17.5	23.7	9.2
Chatrooms	21.1	11.1	14.8
Web Navigation	18.7	17.8	18.1
Online Test taking	40.4	34.4	24.0
Time Management	27.1	34.8	28.8
Word Processing	17.5	11.1	12.2
Scholarly Research on Web	27.7	38.9	56.8
Egroup/webboard	48.8	30.0	na
Library orientation for distance learning	na	14.2	55.4

Section 4  
Hardware and Software Resources

Access to computers is the single necessary resource of online learning activities. Computers have replaced typewriters for faculty so it is now a given that every faculty member has access to a computer in their office. For students there are various places where they can use a computer for online activities. Students and faculty were asked where they could access computers for course work.

Faculty Resources

Faculty were asked to rate the adequacy of their computer equipment and software at work and at home for use with online or web-enhanced courses. A five-point scale was used with 1 representing “not at all adequate” and 5 representing “very adequate.” The mean score for the adequacy of hardware and software at school was 3.5 while the mean score for the same at home is 2.9. When broken down by faculty type there was little variation (see Table 4.1). Web-enhanced and online faculty were only slightly more satisfied with hardware and software resources than traditional faculty.

Table 4.1  
Adequacy of Hardware and Software for Faculty by Location  
(Mean response on 5-point scale)

	<u>Traditional</u>	<u>Web Enhanced</u>	<u>Online</u>
Work	3.5	3.5	3.5
Home	2.6	3.2	3.2

Student Resources

The vast majority of students access computers at home to do course work (see Table 4.2). Approximately 95 percent of all students surveyed have some kind of home access, although this percentage is considerably lower for traditional students. Students taking web-enhanced classes reported home computer access that was almost as high as online students, 97% and 98% respectively.

The reported use by online students of USA Computer Labs (12%) and USA Library computers (3%) is limited. This would suggest that these resources are much more important to students taking traditional and web-enhanced courses than for online students. Conversely, over 2/5 of online students reported the workplace as a place where they use the computer for course work. This was a much higher percentage than the other groups.

Table 4.2  
 Sites of Computer Access by Student Group  
 (Figures percentage saying yes)

	<u>Traditional</u>	<u>Web Enhanced</u>	<u>Online</u>
Home	88.6	97.0	97.8
USA Computer Labs	59.6	58.2	12.18
Work	13.3	19.6	40.2
Public Library	5.4	6.7	7.8
USA Library	25.3	25.6	3.0
Other Location	1.8	5.6	8.1

Section 5  
Online Use of the University Library

The library is important for faculty and students that use the Internet and those that do not. A series of questions were asked to determine the uses of the library by students. We wanted to see if there were any differences among the three groups in how they used library resources.

Faculty Use

Faculty were asked about their use of the library via the Internet and also, what sort of demands they made of students to access the library by Internet. Faculty made much greater use of the Internet to access the library than their students. However, there is also a great deal of variation among the faculty. Faculty teaching web-enhanced courses accessed the Library via the Internet most frequently (mean=31 times), followed by faculty teaching traditional courses (mean=25 times) and online faculty (mean=12 times). Likewise faculty in the web-enhanced group required their students to access the library via the Internet more frequently (mean=31) than did the traditional group (mean=13 times) or fully online group (mean= 2). These differences are pronounced, but it may be that this statistic is partially attributable to the differing nature of the content areas and research expectations of the faculty groups surveyed.

Table 5.1 Faculty Reported Access of Library Via Internet (All figures are mean instances)			
	<u>Traditional Faculty</u>	<u>Web Enhanced Faculty</u>	<u>Online Faculty</u>
Times used in a semester	25	31	12
Times required students to use in a semester	13	31	2

Notable as well were the faculty groups' responses to questions regarding library instruction for themselves as well as their students. See Table 5.2. Online instructors were more likely to have received instruction on the availability of electronic informational resources than the other groups. Both online and web-enhanced instructors were much more likely to send a student to a reference librarian for help with an informational problem. They were considerably less likely, however, to request library instruction for their class.

Table 5.2  
Faculty Use of Library Instruction  
(All figures are percentages)

	<u>Traditional</u>	<u>Web</u>	<u>Online</u>
Faculty have received instruction on electronic information resources?	56	46	63
Faculty have requested library instruction for class?	52	89	19
Faculty referred student to reference librarian?	19	63	58

A variety of online research tools are available for use by faculty and students. Faculty were asked if they had used the USA electronic catalog, electronic indexes, electronic references, non-USA electronic catalog, and electronic journals (see Table 5.1). The most widely accessed features by the three groups of faculty were electronic journals and the USA electronic catalog. Greater than eighty percent of faculty in all three groups used electronic journals. The least used library tools by all three groups were non-USA electronic catalogs. An index was created to determine the overall use of these electronic library tools. A score of 5 indicated use of all the listed tools and zero represents no use. The mean score for faculty of traditional courses was 4, for web-enhanced faculty it is also 4. Online faculty reported a lower mean use (3).

Table 5.3  
Faculty Use of Online Library Tools  
(All figures are percentages)

	<u>Traditional</u>	<u>Web</u>	<u>Online</u>
USA Elect. Catalog	79	83	72
Electronic Indexes	79	78	69
Electronic References	75	78	58
Non-USA Catalogs	56	68	39
Electronic Journals	84	83	81

### Student Use

Faculty can also greatly influence student use of online library tools by requiring its use in out-of-class assignments (see Table 5.4). The USA electronic catalog was the most required tool; however, the percentages were not as high as the faculty's own use. Faculty teaching web-enhanced classes required greater use of the electronic library tools than other faculty. With the exception of non-USA electronic catalogs each of the four other tools are required by 50 percent or more of the faculty teaching web-enhanced classes while faculty in the two other groups have lesser requirements.

Table 5.4  
Faculty-Required Student Use of Online Library Tools  
(All figures are percentages)

	<u>Traditional Faculty</u>	<u>Web Enhanced Faculty</u>	<u>Online Faculty</u>
USA Electronic Catalog	41	53	36
Electronic Indexes	35	51	36
Electronic References	25	51	44
Non-USA Catalogs	38	41	17
Electronic Journals	21	56	50

All students were asked how many times during the semester they have actually accessed the library. Looking at the three student groups, more than twenty percent never accessed the USA library during a course, with online students having the highest percentage of non-access (26%). At the same time, online students are much more likely to access the library 15 times or more a semester than the other two groups.

Articles from professional journals, newspapers, and magazines are primary reference material for students' research papers. Today much of this material is accessible online. All the students in the traditional and web-enhanced classes accessed articles on electronic databases 1 to 5 times a week. Interestingly, a third of the online students never accessed articles from electronic databases. In all three groups, a minimum of 10 percent pulled articles electronically 20 or more times during the semester.

There are a variety of resources for students at the University library. Students in the sample were asked how many of five possible resources were used during the semester. The resources are the USA electronic library catalog, electronic indexes, electronic references, non-USA electronic catalogs, and electronic journals. The

questions called for a yes or no response. The USA electronic catalog and electronic journals were the two most widely used. Sixty-eight percent of the traditional students, 78 percent of the web-enhanced students, and 46 percent of the online students used the USA electronic catalog. Forty-nine percent of the traditional students, 61 percent of the web-enhanced students, and 65 percent of the online students used electronic journals. Another way to examine library usage is to combine the responses to create an index. This is done by creating an index by summing the five responses (yes=1, no=0) to create a range of scores from 0 to 5. The mean score for traditional students was 2.19, for web-enhanced students 2.67, and for online students 1.97.

Table 5.3  
Students' Reported Use of Online Library Tools  
(All figures are percentages)

	<u>Traditional</u>	<u>Web</u>	<u>Online</u>
USA Electronic Catalog	68	78	46
Electronic Indexes	35	48	32
Electronic References	44	49	33
Non-USA Catalogs	23	30	21
Electronic Journals	49	61	65

Section 6  
Obstacles and Challenges

There is little question in most individuals' minds that online learning environs constitute additional pressures on both faculty and students. With the popularity of online learning comes an additional demand for time and other resources as well as pedagogical and technological unfamiliarity. We wanted to look at what the various groups perceived these to be and how important they were.

Faculty Obstacles and Challenges

Time is surely one of the greater barriers to the online instructor. Faculty in the web-enhanced and fully online conditions reported large increases in the time it takes to manage an online course versus a traditional course. See table 6.1. Given the already hectic teaching and publishing requirements of most faculty members, the large reported increase in time required to teach a web-enhanced or online course poses a real challenge the university.

Table 6.1 Faculty Reports of Time Required to Manage Traditional, Web-Enhanced, & Online Course		
<u>How long to:</u>	<u>Web-Enhanced Faculty</u>	<u>Online Faculty</u>
Manage a Traditional Course?	8.6 hours	10.3 hours
Manage a Web-Enhanced course	13.7 hours	n/a
Manage an Online course?	n/a	20.4 hours
Percentage increase in weekly hours	159%	198%

Open-ended comments by faculty included the increased time it took for processes like responding to increased e-mails and the slower mechanics of grading in an online environment; the feeling of being “on call” seven days a week, and especially having too many students in a class to use the medium effectively.

Along with time demands, faculty perceived that there were inadequate professional incentives or rewards for teaching an online course. This finding was very consistent across all groups. See table 6.2. Open-ended comments by faculty regarding inadequate incentives were common and frequently strongly worded, which would indicate that this is a special concern of faculty.

Table 6.2  
Faculty Opinions about Incentives, Rewards, & Interest  
(Figures represent means scores on 1 to 5 scale)

	<u>Traditional</u>	<u>Web Enhanced</u>	<u>Online</u>
How adequate are professional incentives and rewards to support online or Web-enhanced course?	1.58	1.6	1.6

There were also some areas where the three faculty groups differed in their perceptions. Not surprisingly, online faculty were more comfortable with distance learning technology. They were a great deal less likely to find their course content inappropriate for teaching online. They reported considerably fewer obstacles related to hardware and software. Also, online faculty reported fewer obstacles related to intellectual property issues. See table 6.3.

Concurrently, there does seem to be an interest in expanding participation in online education among those faculty members who are using a web-enhanced course management system. On a five-point scale these faculty reported their interest to be 3.8. Because at the time of this report these faculty were surveyed before the web-enhanced course management system (eCompanion) was introduced, there is reason to suppose that this interest might be higher in the future when the process becomes easier for individual faculty members to implement.

Table 6.3  
Faculty Perceptions of Obstacles that Limit Use of Online Technology  
(All figures are percentages)

	<u>Traditional</u>	<u>Web Enhanced</u>	<u>Online</u>
Lack of familiarity with distance learning technologies	65	54	39
Appropriateness of course content for a Web based course	62	44	18
Technical support	46	51	50
Time to develop course	67	61	86
Intellectual property issues	35	29	22
Grading student performance	37	34	31
Time commitment compared to traditional lecture course	59	44	67
Impact on promotion and tenure decisions	25	26	28
Lack of encouragement by administrators	32	25	25
Lack of appropriate hardware	40	35	22
Lack of appropriate software	38	39	14

## Section 7 Summary and Recommendations

The general purpose of any needs assessment is to identify the gap between what is and what should be. Overall, the gap in online learning at the University of South Alabama is not an immense one, although there are areas for improvement. More than anything else, the authors of this report hope to provide information that can be used for improvement of a developing resource.

Below we have detailed some recommendations corresponding to the earlier sections of the report. Readers are requested to refer to that section of the report and the summaries of surveys in Appendices A through F to decide for themselves whether these recommendations are supported adequately by data.

Based on the findings of this report, we recommend the following:

### Faculty and Student Training

- Increased faculty training on both the technologies and instructional design of web-enhanced and fully online courses.
- Additional guidance provided by the university on online copyright issues.
- Recognition and other more tangible incentives for those faculty members who actively participate in training to expand their online teaching skills.
- Increased training for students in online test taking, time management, and the use of the web for scholarly research.
- An in-depth USAOnline orientation for fully online students. Training concerning using the library for fully-online courses appears to be especially important.
- More discussion with faculty regarding intellectual property issues

### Hardware and Software Resources

- Continued improvement of hardware and software resources for faculty overall.
- Increased hardware and software support for online and web-enhanced faculty who are frequently forced to work at home as well as their university office.
- Increased technical support for fully online students in particular who do not have the “safety net” of USA computer labs in the event of serious technical problems.
- Timely hardware/software updates.
- Better support for technical questions regarding computers.
- Expanded availability of online and telephone help desks for course management system issues.

### Online Use of the University Library

- Increased support and training for university faculty teaching online courses.
- Institute mechanisms (online courses, CD-ROMS) for time-independent library instruction of online students.
- Greater emphasis on providing access to full-text online journals.
- Online instruction on how to use the Internet for scholarly research.
- Required online library orientation for all students.

### Obstacles and Challenges

- Decreased teaching load for faculty instructing fully online courses.
- Reduced class sizes for online courses in order to increase faculty/student interaction.
- Recognition of effort to develop online courses in faculty annual review.
- Clearer definition of how teaching online classes counts toward promotion/tenure.
- Increased time for course development.

## Appendix A

### Faculty Who Teach Online Courses n= 36

How many years have you been teaching in a higher education institution? mean - 14.3

For which course(s) have you taught online?

Lower Division	3%
Upper Division	37
Graduate	45
Upper/Grad	14

How important are formal training opportunities such as those provided by the Online Learning Lab to the skill development of instructors who deliver web-enhanced courses?  
(not at all important) (very important)

1	2	3	4	5	Total	Mean	n
0 %	6	26	19	48	100%	4.10	31

How well trained should instructors be who teach web-enhanced courses?

(not at all well trained)				(extremely well trained)			
1	2	3	4	5	Total	Mean	n
0 %	3	16	41	41	100%	4.18	32

How knowledgeable are you about copyright issues in regard to the online portions of your courses?

(not at all knowledgeable)			(extremely knowledgeable)			Total	Mean	n
1	2	3	4	5	Total	Mean	n	
8 %	19	22	36	14	100%	3.28	36	

In terms of instructional methods, how well trained do you think you are to deliver web-enhanced courses?

(not at all well trained)				(extremely well trained)			
1	2	3	4	5	Total	Mean	n
6 %	14	22	50	8	100%	3.42	36

Is your online course part of a degree program? Yes - 92% No - 8%

Were you required to teach this online course or was it totally your choice to do so?

64% - Required
36 - Own choice

Did you have personal help creating your online course? Yes - 66% No - 34%

Who helped you?

- 50% Faculty peers
- 31% Online Learning Lab staff
- 28% eCollege staff
- 8% Family members
- 6% Librarians
- 0% Listserv members
- 6% Friends
- 0% Computer center staff
- 14% Students
- 17% Others

Who do you go to if you have a problem with the course design?

- 53% Faculty peers
- 19% Online Learning Lab staff
- 47% eCollege staff
- 3% Family members
- 3% Librarians
- 0% Listserv members
- 3% Friends
- 3% Computer center staff
- 6% Students
- 14% Others

Do you feel comfortable with this type of help? Yes - 97% No - 3%

### Resources

How adequate are the hardware and software resources in your office for your course?  
(not at all adequate) (very adequate)

1	2	3	4	5	Total	Mean	n
8%	3	33	39	17	100%	3.53	36

How adequate are the hardware and software resources in your office for your course?  
(not at all adequate) (very adequate)

1	2	3	4	5	Total	Mean	n
17%	8	31	28	17	100%	3.2	36

How important would a telephone help line be to aid you with problems related to technology?

(not at all important)				(very important)			
1	2	3	4	5	Total	Mean	n
9%	9	18	21	44	100%	3.8	36

How adequate are the human resources available to support your online course while it is in progress?

(not at all adequate)					(very adequate)		Total	Mean	n
1	2	3	4	5					
3%	23	37	27	10	100%	3.2	36		

Do you think your students have an adequate support network available to them?

Yes - 53 % No -47 %

How do you get help when you have technical problems delivering your online course?

- 42% Call software specific technical support
- 47% Ask university colleagues
- 11% Call University Computer Center
- 39% Muddle through without help

Do you feel comfortable with this type of help? Yes - 91% No - 9%

To whom do you refer students when they have technical problems?

- 3% Faculty peers
- 25% Online Learning Lab staff
- 89% eCollege staff
- 3% Listserv members
- 3% Computer center staff
- 11% Students
- 6% Others

### Obstacles and Challenges

What is the likelihood that you will continue to teach web courses?

(not at all likely)					(extremely likely)		Total	Mean	n
1	2	3	4	5					
0%	0	17	23	60	100%	4.4	35		

How much time does it take per week to manage:

- A traditional course? mean - 10.3 hours
- An online course? mean - 20.4

Do you employ online office hours? Yes - 47 % No – 53%

If so, how many hours per week?

- 6% 1-2 Hours
- 6 2-3 Hours
- 17 3-4 Hours
- 6 4-5Hours
- 67 Over 5 Hours

How adequate are the professional incentives and rewards for developing and teaching an online course?

(not at all adequate)					(very adequate)			
1	2	3	4	5	Total	Mean	n	
65%	15	18	3	0	100%	1.6	34	

How many students do you think you can manage well in your course?

1-10	11-15	16-20	20-25	Over 25	Total
17%	28%	39%	14%	3%	100%

Do you agree with the University's policy on online ownership?

29%	Yes
38	No
32	Unfamiliar with policy

How comparable are the learning opportunities for your on campus and online students?

(not at all comparable)				(the same)		
1	2	3	4	5	Total	
11%	29	31	14	14	100%	

When registering for an online course are students aware of the qualities that make for a successful distant-education student like self-motivation, time commitment, and at least a minimal ability to use the technology?

37%	Yes
26	No
37	Don't Know

How satisfied are you with eCollege as a course management system?

(not at all satisfied)					(very satisfied )			
1	2	3	4	5	Total	Mean	n	
19%	25	44	11	0	100%	2.5	36	

How would you rate your experience with eCollege's course management system for your course?

(awful)				(very good)				
1	2	3	4	5	Total	Mean	n	
17%	25	39	17	3	100%	2.6	36	

How supportive is your Dean of your online course?

(not at all supportive)				(very supportive)				
1	2	3	4	5	Total	Mean	n	
5%	11	26	29	29	100%	3.6	35	

How supportive is your Chair of your online course?

(not at all supportive)					(very supportive)		Total	Mean	n
1	2	3	4	5					
3%	6	21	33	36	100%	3.9	33		

How supportive are your department colleagues of your online course?

(not at all supportive)					(very supportive)		Total	Mean	n
1	2	3	4	5					
3%	9	27	30	30	100%	3.8	33		

Specifically, what obstacles (other than lack of time) limit the use of technology in your classes?

- 39% Lack of familiarity with distance learning technology
- 18% Appropriateness of course content for a Web based course
- 50% Technical support
- 86% Time to develop course
- 22% Intellectual property issues
- 31% Grading student performance
- 67% Time commitment compared to traditional lecture course
- 28% Impact on promotion and tenure decisions
- 25% Lack of encouragement by administrators
- 22% Lack of appropriate hardware
- 14% Lack of appropriate software

### **Library Involvement**

How often during a semester do you access the library using the Internet? mean - 12.2

How often during a semester do you require your students to access the library using the Internet? mean - 2

Check the online library tools below that you have used (all that apply)

- 72% USA Electronic Library catalog
- 39% Non-USA electronic catalog
- 69% Electronic indexes
- 81% Electronic journals
- 58% Electronic references

Check the online library tools below that you require students to use in your web-enhanced courses (all that apply)?

- 36% USA Electronic Library catalog
- 17% Non-USA electronic catalog
- 36% Electronic indexes
- 50% Electronic journals
- 44% Electronic references

Have any of your students asked you about password access to library databases?

8% Yes  
92 No

Have you ever had instruction on the availability of electronic informational resources in your field?

63% Yes  
37 No

How useful would online reserves be for you?

(not at all useful)

(extremely useful)

1	2	3	4	5	Total	Mean	n
3%	14	37	11	34	100%	3.6	35

Have you ever requested library instruction for your online class?

19% Yes  
81 No

Have you ever referred a student to a reference librarian for help with an information problem?

58% Yes  
42 No

How important is it for your students to know the current literature in your field?

(not at all important)

(extremely important)

1	2	3	4	5	Total	Mean	n
0%	8	11	22	58	100%	4.3	36

**Appendix B**  
**Faculty Who Teach Web-Enhanced Courses n = 41**

How many years have you been teaching in a higher education institution? mean - 15.48  
n – 40

For which course(s) did you use supplemental web materials?

Lower Division	14%
Upper Division	19
Graduate	11
Lower/Upper	33
Upper/Grad	17
Lower/Grad	6

n – 36

Mean number of web-enhanced courses - 3

n – 32

Specifically, what obstacles (other than lack of time) limit the use of technology in your classes?

14%	Classroom with a syllabus online
57%	Classroom with syllabus and a number of other materials online
11%	A hybrid class with campus meetings set at the beginning of the semester
0%	A hybrid class with flexible campus meetings
4%	Mostly online with a few classroom sessions
14%	Other

n – 28

Which of the following web-based components do you include in your courses (check all that apply)?

68 %	Syllabus	5%	Usenet newsgroups
29%	Calendar	7%	Group conferencing (real-time)
80%	Resources	29%	Grade reporting
37%	Bibliography	44%	File or document exchange
59%	Links to Professional Organizations	22%	Student web pages
20%	Current News	17%	Photos of class participants
22%	Listserv	17%	Online testing & assessment course & content management
20%	Discussion Board	41%	Readings
2%	Whiteboard	34%	Lecture Notes
22%	Simulations	20%	Glossary
7%	Chat room	2%	Web Lectures
63%	Key links to WWW resources	2%	Moos/Muds
59%	Post assignments or solutions	3%	Other (please describe)
22%	Conduct regular lectures		
27 %	Multimedia textbooks		
68%	E-mail communications		
		n-41	(all above)

How important are formal training opportunities such as those provided by the Online Learning Lab to the skill development of instructors who deliver web-enhanced courses?  
(not at all important) (very important)

1	2	3	4	5	Total	Mean	n
9 %	15	6	26	44	100%	3.82	34

How well trained should instructors be who teach web-enhanced courses?  
(not at all well trained) (extremely well trained)

1	2	3	4	5	Total	Mean	n
8%	3	8	29	53	100%	4.16	38

11. How knowledgeable are you about copyright issues in regard to the online portions of your courses?

(not at all knowledgeable)		(extremely knowledgeable)			Total	Mean	n
1	2	3	4	5			
10%	15	15	32	29	100%	3.56	41

12. In terms of instructional methods, how well trained do you think you are to deliver web- enhanced courses?

(not at all well trained)		(extremely well trained)			Total	Mean	n
1	2	3	4	5			
12%	24	32	15	17	100%	3.00	41

In terms of technology use, how well trained do you think you are to deliver web-enhanced courses?

(not at all well trained)		(extremely well trained)			Total	Mean	n
1	2	3	4	5			
21%	8	21	36	15	100%	3.18	39

### Resources

How adequate are the hardware and software resources in your office for your course?  
(not all adequate) (very adequate)

1	2	3	4	5	Total	Mean	n
8%	18	15	35	25	100%	3.52	40

How adequate are the hardware and software resources in your office for your course?  
(not all adequate) (very adequate)

1	2	3	4	5	Total	Mean	n
18%	18	23	23	20	100%	3.0	40

How important would a telephone help line be to aid you with problems related to technology?

(not all important)					(very important)			
1	2	3	4	5	Total	Mean	n	
23%	13	10	10	44	100%	3.5	40	

How do you get help when you have technical problems delivering your web-enhanced course?

- 29% Call software specific technical support
  - 59% Ask university colleagues
  - 17% Call University Computer Center
  - 54% Muddle through without help
- n – 41 (all above)

How important is it that the university provide a course management system (e.g., eCollege, WebCT, or Blackboard) for use in your web-enhanced courses?

(not all important)					(very important)			
1	2	3	4	5	Total	Mean	n	
19%	11	5	27	38	100%	3.5	37	

How important is it that the university provides the ability to store files on a server that can be accessed through the Internet for use in your web-enhanced course?

(not all important)					(very important)			
1	2	3	4	5	Total	Mean	n	
5%	2	2	27	63	100%	4.4	40	

### Obstacles and Challenges

What is the likelihood that you will continue to teach web-enhanced courses?

(not at all likely)					extremely likely)			
1	2	3	4	5	Total	Mean	n	
3%	0	0	18	80	100%	4.7	40	

How much time does it take per week to manage:

- A traditional course? n – 34 mean - 8.6 hours
- A web-enhanced course? n – 29 mean - 13.7 hours

Do you employ online office hours?

- 17 % Yes
  - 83 No
- n – 41

If so, how many hours per week?

30	%	1-2 Hours
20		3-4 Hours
10		4-5 Hours
40		Over 5 Hours

n – 10

How adequate are the professional incentives and rewards for developing and teaching an online course?

(not all adequate)					(very adequate)			
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>Total</u>	<u>Mean</u>	<u>n</u>	
71%	12	12	0	6	100%	1.6	41	

Given training and the opportunity, would you be interested in expanding your participation in online education?

(not at all interested)					(extremely interested)			
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>Total</u>	<u>Mean</u>	<u>n</u>	
10%	5	24	22	39	100%	3.8	41	

What is the likelihood that you will teach an online course in the future?

(not at all likely)					(extremely likely)			
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>Total</u>	<u>Mean</u>	<u>n</u>	
23%	8	15	8	46	100%	3.5	39	

Specifically, what obstacles (other than lack of time) limit the use of technology in your classes?

- 54% Lack of familiarity with distance learning technology
  - 44% Appropriateness of course content for a Web based course
  - 51% Technical support
  - 61% Time to develop course
  - 29% Intellectual property issues
  - 34% Grading student performance
  - 44% Time commitment compared to traditional lecture course
  - 26% Impact on promotion and tenure decisions
  - 25% Lack of encouragement by administrators
  - 35% Lack of appropriate hardware
  - 39% Lack of appropriate software
- n – 41 (all above)

### Library Involvement

How often during a semester do you access the library using the Internet? mean - 31

n – 31

How often during a semester do you require your students to access the library using the Internet? mean - 31

n - 31

Have you ever requested library instruction for you class?

43 % Yes

57 No

n - 40

Check the online library tools below that you have used (all that apply)

83% USA Electronic Library catalog

68% Non-USA electronic catalog

78% Electronic indexes

83% Electronic journals

78% Electronic references

n - 40 (all above)

Check the online library tools below that you require students to use in your web-enhanced courses (all that apply)?

54% USA Electronic Library catalog

41% Non-USA electronic catalog

51% Electronic indexes

56% Electronic journals

51% Electronic references

n - 39 (all above)

Have any of your students asked you about password access to library databases?

10 % Yes

90 No

n - 41

Have you ever had instruction on the availability of electronic informational resources in your field?

46 % Yes

54 No

n - 41

How useful would online reserves be for you?

(not at all useful)

(extremely useful)

1	2	3	4	5	Total	Mean	n
21%	15	21	13	31	100%	3.2	39

Have you ever requested library instruction for your class?

89 % Yes

11 No

n - 37

Have you ever referred a student to a reference librarian for help with an information problem?

63	%	Yes
37		No
n – 40		

How important is it for your students to know the current literature in your field?

(not at all important)					(extremely important)		
1	2	3	4	5	Total	Mean	n
10%	8	15	5	62	100%	4.0	39

## Appendix C

### Faculty that teach only classes that do not use any online technologies n = 63

How many years have you been teaching in a higher education institution? mean - 17.38

How interested are you, on a scale from 1-5, in the possibility of teaching a Web based course?

(not at all interested)				(extremely interested)?				
1	2	3	4	5	Total	Mean	n	
21%	25	22	17	14	100%	2.79	63	

How interested are you, on a scale from 1-5, in the possibility of teaching a traditional course with Web component?

(not at all interested)				(extremely interested)?				
1	2	3	4	5	Total	Mean	n	
10%	8	16	25	41	100%	3.81	63	

### Training

How important are formal training opportunities such as those provided by the Online Learning Lab to the skill development of instructors who deliver web-enhanced courses?

(not at all important)				(very important)				
1	2	3	4	5	Total	Mean	n	
2%	4	7	21	67	100%	4.47	57	

How well trained should instructors be who teach web-enhanced courses?

(not at all well trained)				(extremely well trained)				
1	2	3	4	5	Total	Mean	n	
2%	2	3	36	57	100%	4.46	61	

How knowledgeable are you about copyright issues in regard to the online portions of your courses?

(not at all knowledgeable)				(extremely knowledgeable)				
1	2	3	4	5	Total	Mean	n	
34%	26	20	11	8	100%	2.33	61	

In terms of instructional methods, how well trained do you think you are to deliver web-enhanced courses?

(not at all well trained)				(extremely well trained)				
1	2	3	4	5	Total	Mean	n	
33%	32	27	6	2	100%	2.11	63	

In terms of technology use, how well trained do you think you are to deliver web-enhanced courses?

(not at all well trained)					(extremely well trained)		
1	2	3	4	5	Total	Mean	n
27%	16	32	24	0	100%	2.53	62

### Resources

How adequate is your computer equipment and software at school to support an online or web-enhanced course?

(not all adequate)					(very adequate)		
1	2	3	4	5	Total	Mean	n
12%	8	27	28	25	100%	3.47	60

How adequate is your computer equipment and software at home to support an online or web-enhanced course?

(not all adequate)					(very adequate)		
1	2	3	4	5	Total	Mean	n
33%	13	22	23	8	100%	2.6	60

### Obstacles and Challenges

How adequate are the professional incentives and rewards for developing and teaching an online course?

(not at all adequate)					(very adequate)		
1	2	3	4	5	Total	Mean	n
60%	26	11	4	0	100	1.58	57

Specifically, what obstacles (other than lack of time) limit the use of technology in your classes?

- 65% Lack of familiarity with distance learning technology
- 62% Appropriateness of course content for a Web based course
- 46% Technical support
- 67% Time to develop course
- 35% Intellectual property issues
- 37% Grading student performance
- 59% Time commitment compared to traditional lecture course
- 25% Impact on promotion and tenure decisions
- 32% Lack of encouragement by administrators
- 40% Lack of appropriate hardware
- 38% Lack of appropriate software
- 25% Other

## Library Involvement

How often during a semester do you access the library using the Internet? mean - 25

How often during a semester do you require your students to access the library using the Internet? mean - 13

Check the online library tools below that you have used (all that apply)

- 79% USA Electronic Library catalog
- 56% Non-USA electronic catalog
- 79% Electronic indexes
- 84% Electronic journals
- 75% Electronic references

Check the online library tools below that you require students to use in your web-enhanced courses (all that apply)?

- 41% USA Electronic Library catalog
- 25% Non-USA electronic catalog
- 35% Electronic indexes
- 38% Electronic journals
- 20% Electronic references

Have any of your students asked you about password access to library databases?

- 13 % Yes
- 87 No

Have you ever had instruction on the availability of electronic informational resources in your field?

- 56 % Yes
- 44 No

How useful would online reserves be for you?

(not at all useful)					(extremely useful)			
1	2	3	4	5	Total	Mean	n	
10%	15	23	20	33	100%	3.51	61	

Have you ever requested library instruction for your class?

- 52 % Yes
- 48 No

Have you ever referred a student to a reference librarian for help with an information problem?

- 19 % Yes
- 81 No

How important is it for your students to know the current literature in your field?  
(not at all important) (extremely important)

1	2	3	4	5	Total	Mean	n
7%	3	11	13	66	100%	4.28	61

## Appendix D

### Students that have taken completely online courses using eCollege system n=270

#### Demographics and Background

Age – mean=36

n – 262

Gender: 20% Male

80 Female

n – 269

Distance from campus:

36% 0-30 miles

11 31-60 miles

53 Over 60 miles

n – 266

Class standing

1 % Freshman

2 Sophomore

5 Junior

12 Senior

79 Graduate

n – 268

Degree program

18 % BA/BS

68 Masters

3 Doctorate

11 Other

n – 269

What is your current educational status?

11 % Full-time undergraduate student (12 or more credit hours)

11 Part-time undergraduate student (less than 12 credit hours)

48 Full-time graduate student (6 or more credit hours)

30 Part-time graduate student (less than 6 credit hours)

n – 270

How many hours a week do you currently work?

8 %	Do not work
2	1-10 hours
5	11-20 hours
6	21-30 hours
58	31-40 hours
22	Over 40 hours

n – 266

Are you primarily a:

5 %	Day student
13	Evening student
16	Combination
66	Online student

n – 270

Where do you use the computer for course work? Mark all that apply.

98 %	Home
12 %	USA labs
40 %	Work
8 %	Public library
3 %	USA Library
8 %	Other place

n – 271 (all above)

What college are you in ?

1 %	Allied Health
3	Arts and Sciences
8	Business
32	Education
1	Engineering
51	Nursing
1	Computer and Information Sciences
3	Continuing Education

n – 270

How many online courses have you taken? Mean – 4 courses

32 %	One course
17	Two courses
9	Three courses
9	Four courses
9	Five courses
24	Six or more

n – 267

## Training

What was your computer skill level prior to enrolling in the course(s)?

- 4 % Novice
- 14 Below average
- 50 Average
- 29 Above average
- 3 Expert

n – 270

Do you know how to use the following? Please check all that apply.

- 99 % Send and receive Email and attaching files
- 63 % Power Point or another presentation software
- 88 % Create files in your computer
- 94 % Use Internet search engines
- 97 % Word processor
- 90 % Cut and paste documents and images

n – 271 (for all above)

What additional training would you benefit from to be better prepared to take online courses? (Mark all that apply)

- 9 % Keyboarding
- 15 % Chat rooms
- 18 % Web navigation
- 13 % Use of Internet
- 24 % Online test taking
- 28 % Listservs
- 12 % Word processing
- 57 % Scholarly research on Web
- 55 % Library orientation

n – 271

## Resources

On a scale from 1-5, please rate the following aspects of your experience with online courses.

eCollege technical support

(poor)					(excellent)
1	2	3	4	5	
0%	2	26	34	38	

n – 262 mean – 4.07

Accessibility to access course  
(not accessible) (very accessible)

1	2	3	4	5
0%	2	7	31	60

n – 269 mean – 4.48

Quality of course content and presentation  
(poor) (excellent)

1	2	3	4	5
1%	3	13	39	43

n – 269 mean – 4.21

Instructor's knowledge of subject  
(poor) (excellent)

1	2	3	4	5
1%	2	5	31	62

n – 268 mean – 4.51

Instructor's availability  
(not available) (very available)

1	2	3	4	5
1%	4	14	36	45

n – 269 mean – 4.20

Services provided by USA libraries for online students  
(poor) (excellent)

1	2	3	4	5
2%	5	22	39	32

n – 262 mean – 3.95

### Library Involvement

How many times do you typically access the USA library during a course?

26 %	Never
35	1-5 times
14	6-10 times
7	11-15 times
18	Over 15 times

n – 223

Have you ever had library instruction?

32 %	Yes
68	No

n – 269

If yes, rate its helpfulness.

(not at all helpful)

(very helpful)

1	2	3	4	5
4%	8	23	19	46

n – 83 mean – 3.95

How many times have you used a research article accessed from USA library data bases online?

33 %	Never
31	1-5 times
14	6-10 times
4	11-15 times
5	16-20 times
13	Over 20 times

n – 235

How many times have you asked university librarians for assistance with an online course or assignment?

74 %	Never
24	1-5 times
2	6-10 times
0	11-15 times
0	Over 15 times

n – 260

Check the online library tools below that you have used (all that apply)?

46 %	USA Electronic library catalog
32 %	Electronic indexes
33 %	Electronic references
65 %	Electronic journals
21 %	Non-USA electronic library catalogs

n – 271 (all above)

### Obstacles and Challenges

On a scale from 1-5, 1 being strongly disagree and 5 being strongly agree, please answer the following questions.

An online course requires more work than a traditional course.

(Strongly Disagree)

(Strongly agree)

1	2	3	4
2%	18	42	36

n – 267 mean – 3.17

An online course requires more self-discipline to complete assignments.

(Strongly Disagree)		(Strongly agree)	
1	2	3	4
0%	6	22	72

n – 268 mean – 3.65

An online course requires more reliance on other students.

(Strongly Disagree)		(Strongly agree)	
1	2	3	4
18%	54	54	5

n – 268 mean – 2.14

An online course requires better time management.

(Strongly Disagree)		(Strongly agree)	
1	2	3	4
0%	7	33	60

n – 267 mean – 3.53

There is little social interaction with classmates.

(Strongly Disagree)		(Strongly agree)	
1	2	3	4
5%	39	39	16

n – 267 mean – 2.67

I have difficulty accessing an online course.

(Strongly Disagree)		(Strongly agree)	
1	2	3	4
50%	45	3	1

n – 266 mean – 1.56

The technical support was inadequate.

(Strongly Disagree)		(Strongly agree)	
1	2	3	4
35%	56	8	2

n – 264 mean – 1.77

Online courses are cost prohibitive.

(Strongly Disagree)		(Strongly agree)	
1	2	3	4
8%	30	41	21

n – 266 mean – 2.76

There is a lack of contact with professor.

(Strongly Disagree)		(Strongly agree)	
1	2	3	4
18%	54	21	6

n – 268 mean – 2.14

An online course offers learning opportunities similar to on-campus courses.

(Strongly Disagree) (Strongly agree)

1	2	3	4
4%	20	64	12

n – 266 mean – 2.85

Overall, how satisfied are you with your online education experience?

(Strongly Disagree) (Strongly agree)

1	2	3	4
1%	6	51	43

n – 268 mean – 3.35

How enjoyable was this online course compared to an on-campus course?

(not enjoyable) (same) (more enjoyable)

1	2	3	4	5
10%	15	25	27	23

n – 266 mean – 3.38

What is the likelihood you would take another online course?

(extremely unlikely) (very likely)

1	2	3	4
3%	5	21	71

n – 267 mean – 3.60

The pace of online courses are:

(far to slow) (just right) (far too fast)

1	2	3	4	5
0%	2	50	41	8

n – 266 mean – 3.55

Overall, how satisfied are you with the eCollege course management system?

(very dissatisfied) (very satisfied)

1	2	3	4	5
0%	4	58	38	0

n – 265 mean – 3.35

Appendix E

**Students that have taken web-enhanced or blended courses n = 270**

What is your age? mean - 22.9 n - 269

Gender - 39% Male  
61 Female n - 270

How far do you live from campus?

0-30 miles 86%  
31-60 miles 12  
Over 60 miles 3  
n - 269

Class standing

Freshman 21%  
Sophomore 17  
Junior 26  
Senior 33  
Graduate 4  
n - 270

Degree Program

BA/BS 96%  
Masters 4  
PhD 0  
n - 269

What is your current educational status?

Fulltime UG 87%  
Part-time UG 9  
Fulltime GR 4  
Part-time GR 0  
n - 270

How many hours a week do you currently work at your job? mean - 18.8 hours  
n - 262

Are you primarily a -

Day student 92%  
Evening student 8  
Weekend 0  
n - 269

Where do you use the computer for course work? (Mark all that apply)

- 97% Home computer
- 58% USA computer labs
- 20% Work computer
- 7% Public library
- 26% USA library
- 6% Other

n – 270 (for all of the above)

What college are you in?

- 5% Allied Health
- 36 Arts and Sciences
- 23 Business
- 9 Education
- 11 Engineering
- 0 Medicine
- 2 Nursing
- 13 Computer and Information Science
- 1 Continuing Education and Special Programs

n – 270

How many web enhanced courses have you taken? mean - 2.9

n – 240

For which course(s) did you use web components such as listservs, online chats, email, or a web page?

- 53% Lower Division
- 18 Upper Division
- 27 Lower and Upper Division
- 2 Graduate

n – 169

On the average how many hours are you on the Internet for any purpose each week?

- 1% None
- 42 1-5 hours
- 27 6-10 hours
- 14 11-15 hours
- 16 Over 15 hours

n – 268

On the average, how many hours were you on the Internet for course related work each week?

7%	None
75	1-5 hours
12	6-10 hours
5	11-15 hours
2	Over 15 hours

n – 267

### **Training**

What was your computer skill level prior to enrolling in the course(s)?

2%	Novice
5	Below average
53	Average
32	Above average
8	Expert

n – 269

If you had informational or technical questions about the online features of the course, where did you go to get help?

50%	Instructor
47%	Asked a friend
19%	Computer lab/technical support
2%	Advisor
31%	Did not need help

n – 270 (for all above)

Do you know how to use the following?

96%	Send and receive email and attaching files
96%	Internet search engines
77%	Power Point or another presentation software
95%	Word processor
92%	Create files on your computer
95%	Cut and paste documents and images

n – 270 (for all above)

What additional training would benefit from to be better prepared to take online courses?  
 Mark all that apply.

- 24% Keyboarding
  - 11% Chat Rooms
  - 35% Time management
  - 34% Online test taking
  - 30% E-group/web boards
  - 15% Library orientation for distance learners
  - 11% Word processing
  - 39% Scholarly research on the web
  - 18% Use of the Internet
- n – 270 (for all above)

### Resources

How important do you feel the web component materials/activities were to your course(s)?

(not at all important)					(very important)	
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>Total</u>	
4 %	13	31	34	18	100%	

n – 268 mean – 3.49

How did you get your questions regarding the course answered?

- 57 % Email
  - 48 % After class
  - 11 % Telephone
  - 26 % Office hours
  - 17 % Had no questions
- n – 270 (for all above)

How satisfied were with the level of response you received to your questions?

(not at all satisfied)					(very satisfied)	
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>Total</u>	
2 %	5	31	40	21	100%	

n – 243 mean – 3.73

If you used a discussion group, how valuable was the feature of the discussion groups to your work in the course?

(not at all valuable)					(very valuable)	
1	2	3	4	5	Total	
11%	18	39	23	9	100%	

n – 160 mean – 3.02

If you used documents available on the Internet, how valuable was this feature to you course?

(not at all valuable)					(very valuable)	
1	2	3	4	5	Total	
1%	6	21	38	35	100%	

n – 252 mean – 4.01

Which of the following Internet tools were used to supplement your course?

- 78% Documents available on the Internet
- 15% Internet field trips (visiting company web pages)
- 28% Message boards
- 15% Testing
- 9% Chat Rooms
- 6% Listservs
- 7% NetG
- 1% Conferencing software
- 60% Class homepage
- 19% File sharing
- 14% Student presentations on the web
- 9% Simulations
- 56% Posting of detailed class notes
- 23% Online journals
- 9% Video or audio
- 6% Other

n – 269 (for all above)

### Library Involvement

How many times do you typically access the USA library during a course?

Never	1-5	6-10	11-15	15+	Total
21%	59	12	4	4	100%

n – 267 mean – 2.13

Have you ever had library instruction?

6%	Yes
94	No

n – 267

If yes, rate its usefulness.

(not at all helpful)					(very helpful)	
1	2	3	4	5	Total	
5%	17	39	23	15	100%	

n – 175 mean – 3.26

How many times have you used a research article access from USA library databases online?

1-5	6-10	11-15	16-20	20+	Total
44%	24	15	7	10	100%

n – 254 mean – 2.16

How many times have you asked university librarians for assistance with a web-enhanced course assignment?

1-5	6-10	11-15	16-20	20+	Total
87%	7	5	1	0	100%

n – 219 mean – 1.22

Check the online library tools below that you have used (all that apply)

- 78% USA Electronic Library catalog
  - 30% Non-USA electronic catalog
  - 48% Electronic indexes
  - 61% Electronic journals
  - 49% Electronic references
- n - 269

### Obstacles and Challenges

Even though you have not taken an online course, we would like to know your perception of such courses. On a scale of 1-5, one being strongly disagree and five being strongly agree, please answer the following questions.

An online course requires more work than a traditional course.

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
7%	19	45	19	10

n – 262 mean – 3.05

An online course requires more self-discipline to complete assignments.

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
3%	8	18	36	34

n – 262 mean – 3.90

An online course requires more reliance on other students.

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
13%	29	40	13	6

n – 263 mean – 2.70

An online course requires better time management.

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
3%	8	19	39	30

n – 263 mean – 3.84

There is little social interaction with classmates.

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
2%	11	19	34	33

n – 264 mean – 3.84

I would have difficulty accessing courses.

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
22%	26	33	12	7

n – 263 mean – 2.55

Technical support is inadequate.

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
9%	22	48	14	7

n – 261 mean – 2.88

There is a lack of contact with professor.

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
7%	13	36	28	16

n – 264 mean – 3.33

An online course offers learning opportunities similar to on-campus courses.

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
14%	22	43	15	5

n – 263 mean – 2.75

### Comments and suggestions about online services:

Please compare your workload in web-enhanced courses to traditional courses without web components.

What is the likelihood you would take another web-enhanced course?

<u>Extremely Unlikely</u>	<u>Unlikely</u>	<u>Neither</u>	<u>Likely</u>	<u>Very Likely</u>
9%	12	23	25	30

n – 263 mean – 3.56

Overall, how satisfied are you with your web-enhanced experience?

<u>Very Unsatisfied</u>	<u>Unsatisfied</u>	<u>Neither</u>	<u>Satisfied</u>	<u>Very Satisfied</u>
3%	8	36	36	17

n – 262 mean – 3.57

A web-enhanced course requires more work than a traditional course.

<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Neither</u>	<u>Agree</u>	<u>Strongly Agree</u>
8%	18	47	19	8

n – 262 mean – 3.01

Appendix F

**Students that have taken only classes that do not use any online technologies n = 166**

What is your age? mean -23.1  
n-164

Gender -52% Male  
48 Female  
n - 166

How far do you live from campus?  
0-30 miles 88%  
31-60 miles 11  
Over 60 miles 1  
n – 165

Class standing  
Freshman 28%  
Sophomore 9  
Junior 16  
Senior 31  
Graduate 15  
n – 166

Degree Program  
BA/BS 84%  
Masters 16  
PhD 0  
n – 164

What is your current educational status?  
Fulltime UG 77%  
Part-time UG 7  
Fulltime GR 15  
Part-time GR 1  
n – 163

How many hours a week do you currently work at your job? mean - 18.0 hours  
n – 150

Are you primarily a -  
Day student 90%  
Evening student 10  
Weekend 1  
n – 165

Where do you use the computer for course work? (Mark all that apply)

89%	Home computer	n - 66
60%	USA computer labs	n-166
13%	Work computer	n - 166
5%	Public library	n - 166
25%	USA library	n - 166
2%	Other	n - 166
6%	Do not use computer	n - 166

What college are you in?

4%	Allied Health
40	Arts and Sciences
23	Business
7	Education
23	Engineering
0	Medicine
0	Nursing
4	Computer and Information Science
0	Continuing Education and Special Programs

n - 164

### Training

What is your computer skill level?

1%	Novice
5	Below average
56	Average
31	Above average
7	Expert

n - 166

Have you ever attended an orientation for distance learners?

3%	Yes
97	No

n - 165

These are skills needed to take an online course, which are you not familiar with? Mark all that apply.

n – 166 (for all below)

- 17% Keyboarding
- 21% Chat Rooms
- 19% Use of the Internet
- 40% Online test taking
- 49% E-group/web boards
- 27% Time management
- 17% Word processing
- 27% Scholarly research on the web
- 22% Use of online library resources

### Library Involvement

How many times do you typically access the USA library during a course?

Never	1-5	6-10	11-15	15+	Total
19%	52	14	7	9	100%

n – 166

Have you ever had library instruction?

- 53 % Yes
- 47 No

n - 166

If yes, rate its usefulness.

(not at all helpful)					(very helpful)
1	2	3	4	5	Total
5%	25	39	23	8	100%

n – 87 mean – 3.05

How many times have you used a research article access from USA library databases online?

1-5	6-10	11-15	16-20	20+	Total
61%	18	10	1	10	100%

n – 157 mean – 1.82

Check the online library tools below that you have used (all that apply)

- 69% USA Electronic Library catalog
- 23% Non-USA electronic catalog
- 35% Electronic indexes
- 49% Electronic journals
- 44% Electronic references

n – 166 (for all above)

## Obstacles and Challenges

Even though you have not taken an online course, we would like to know your perception of such courses. On a scale of 1-5, one being strongly disagree and five being strongly agree, please answer the following questions.

An online course requires more self-discipline to complete assignments.

<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Neither</u>	<u>Agree</u>	<u>Strongly Agree</u>
3%	10	29	25	33

n – 166

An online course requires more reliance on other students.

<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Neither</u>	<u>Agree</u>	<u>Strongly Agree</u>
13%	31	35	17	4

n – 166

An online course requires better time management.

<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Neither</u>	<u>Agree</u>	<u>Strongly Agree</u>
4%	9	24	28	35

n – 165

There is little social interaction with classmates.

<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Neither</u>	<u>Agree</u>	<u>Strongly Agree</u>
4%	7	23	28	39

n - 166

I would have difficulty accessing courses.

<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Neither</u>	<u>Agree</u>	<u>Strongly Agree</u>
21%	30	32	13	4

n – 165

Technical support is inadequate.

<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Neither</u>	<u>Agree</u>	<u>Strongly Agree</u>
7%	11	58	20	5

n – 160

Online courses are cost prohibitive.

<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Neither</u>	<u>Agree</u>	<u>Strongly Agree</u>
6%	10	61	15	8

n – 158

There is a lack of contact with professor.

<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Neither</u>	<u>Agree</u>	<u>Strongly Agree</u>
6%	10	25	36	23

n - 163