

DOCUMENT RESUME

ED 441 155

CE 080 180

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TITLE Student Support Services and Success Factors for Adult On-Line Learners.
PUB DATE 1998-10-00
NOTE 25p.; Paper presented at the Annual Conference of the International Society for the Exploration of Teaching Alternatives (28th, Cocoa Beach, FL, October 14-17, 1998).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS College Programs; Continuing Education; *Distance Education; Educational Attitudes; Higher Education; Inservice Teacher Education; Nontraditional Education; *Student Attitudes; *Student College Relationship; Student Motivation; *Student Personnel Services; *Vocational Education Teachers; *World Wide Web
IDENTIFIERS Online Courses; *University of Central Florida

ABSTRACT

A study examined a variety of student support services and four areas for student success from the viewpoint of World Wide Web-based learners in the University of Central Florida College of Education, Vocational Education area. A two-part on-line survey form was included in the exam files for adult learners in four Web-based courses during spring term 1998. A total of 48 adult learners, representing learners across the state in a variety of vocational education careers from nursing to bricklaying, responded. The average age of respondents was 43 years old, with an average of 1.7 dependent children at home; 65 percent were married, and 86 percent had full time jobs. The overall ratings for the student support services were very high, with only 10 percent of the respondents giving poor ratings for the entire array of student support services, and 90 percent of the respondents giving average or above-average overall ratings. The most common theme in terms of students' perceptions of success factors were budgeting time, being self-motivated, and having supportive friends and family. Mentoring students and encouraging them, especially those new to Web-based learning, seemed to be the most effective and appreciated aspect of instructional support. Suggestions for improvement included better instructions during face-to-face orientation on steps for logging into Web course sites, an improved process for obtaining student identification cards, and specific hands-on training during orientation for using Web LUIS and other Internet search engines. Appendices include a copy of the survey, a breakdown of the results, and an excerpt from Forums for Vocational Education Teacher Training Web courses. (Contains 12 references.) (KC)

STUDENT SUPPORT SERVICES AND SUCCESS FACTORS FOR ADULT ON-LINE LEARNERS

Conference Paper Presented at the International Society for the
Exploration of Teaching Alternatives

Cocoa Beach , FL

Oct. 14-17, 1998

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ABSTRACT

For web-based learners, availability of student support services can be a challenge since many of these learners are geographically removed from the non-virtual campus. Coordination and on-line access for many of these services have been attempted at the University of Central Florida to address a variety of learner needs for web-based courses. This study attempted to examine a broad variety of student support services and four areas for student success from the viewpoint of web-based learners registered within the College of Education, Vocational Education area.

For the student support services, a two-part on-line survey form was included in the exam files for adult learners in four Web-based courses originating at the University of Central Florida in the Spring term, 1998. Learners were requested to volunteer their time to fill in the interactive forms and submit them through the Web CT courseware for later compilation and downloading.

Although not all respondents completed all the items, there were a total of 48 adult learners who submitted surveys. This population of students represented learners across the entire state of Florida in a rich variety of vocational education careers from nursing to bricklaying, and an equally diverse set of educational institutions from private proprietary schools to penal institutions. The average age of respondents was 43 years old with an average of 1.7 dependent children living at home. In addition, 65% were married and 86% had full-time jobs in addition to student responsibilities.

The respondents varied greatly in their preparedness for the technology involved in Web-based courses and also in their comfort level for taking the on-line courses. The most experienced Web learner had taken 10 on-line courses and for some learners the Spring term was a first experience in Web-based courses.

The heart of the student support services survey was an investigation of ratings by the learners for various support personnel, support services on-line, support services on-campus, and supporting departments which comprehensively

spanned such areas as instructional support, library resources, registration processes, academic support, and Financial Aid services.

Interestingly, 62.5 % rated the on-line university library resources available to them as average or above average and 35% reported average or above average resources for libraries in their localities. For learners using on-line resources outside of those through the university, there were 68% who rated them as average or above average.

Open-ended comments were also examined for the student success factors, for improving student services, and for facilitation of on-line learners, many of whom lived as much as 100 or more miles away from the physical university campus. The overall ratings for the student support services were very high with only 10% of the respondents giving poor ratings for the entire array of student support services while 90% of the respondents gave average or above average overall ratings. The most common themes in terms of students' perceptions of success factors were budgeting your time, being self-motivated to "attend" class, having the appropriate technology tools, and having supportive friends and family since Web-based courses require such a large time commitment.

Mentoring students and encouraging them, especially those new to Web-based learning, seemed to be the most effective and appreciated aspect of instructional support. This trend was particularly evident in the open-ended comments which also indicated a high degree of peer support for getting assistance for technology problems as well as assignment clarification. Suggestions for improvement included better instructions during face-to-face orientation on steps for logging into web course sites, improved process for obtaining student ID cards, and specific hands-on training at orientation for using Web LUIS and other Internet search engines.

I. STATEMENT OF THE PROBLEM

With the advancement in technology in education and training, web-based instruction has become more prevalent as a means of delivery for educational courses. One aspect of this new methodology that has not received much attention is the extension and evaluation of student-support services to distance learners enrolled in courses through an educational institution. Additionally most of the literature on Web-based instruction (WBI) has focused on the perspective of the instructor/facilitator and not the student.

This paper focuses on support for Web-based adult learners who do not have ready access to their main institutional campus. These students were in the process of obtaining teacher certification for vocational education. Like most industry trainees, they were part-time students enrolled in a “required” course, and simultaneously working full-time with responsibilities to careers, families, and other activities. These characteristics are similar to trainees in industry participating in mandatory re-certification courses.

For web-based learners, availability of student support services can be a challenge since many of these learners are geographically removed from the non-virtual campus. Coordination and on-line access for many of these services have been attempted at the University of Central Florida to address a variety of learner needs for web-based courses. This study attempted to get feedback and evaluation of a broad variety of student support services for web-based adult learners registered within the College of Education, Vocational Education area. The analysis of such data could help to confirm the effectiveness of a full array of equivalent student support services to distance learners as compared to on-campus students.

Peer mentoring is a method of increasing student-to-student interaction (1997, Marsh) and also a means of assisting students who may be considered “at-risk”(1997, Miner). In the context of WBI, peer mentoring can become an

integral and natural part of the forum activities as students with more experience in WBI and the mechanics of computer technology lend a hand to those with less experience. Fear of the technology is especially apparent with older students, as in this study, since many have never had to use computers within the context of their careers. Within WBI, peer mentoring needs to be qualitatively documented as an effective method of allowing those new to technology to overcome their fears in a safe learning environment.

Other student success factors which need to be considered from a Web-based student perspective include time management, scheduling, self-motivation and necessary technology. Comments from students can be enlightening to not only administrators and instructional staff, but also students who are considering WBI as a means of obtaining certification or a complete degree via the Internet.

II. LITERATURE REVIEW

Dillon and others (Dillon, et al., 1993; Kubala, 1998) have identified some of the factors which hinder effective distance education from the viewpoint of students. They include: 1) technical difficulties with telecommunication systems, 2) instructor's style or method, 3) the lack of sufficient library resources available to students at remote locations, and 4) poor courier services for transmitting hard copy resources and tests (pg. 306, Dillon et al.). With the advent of on-line courses, item 4 and perhaps 3 have become somewhat moot points since many of the course materials are now electronically transmitted or readily available over the Internet (1995, Erazo and Derlin). The exception for item 4 would be providing a textbook to distance learners.

In terms of instructor style or methods, Wilson and Ryder (1996) have offered an improvement in course formatting over traditional instructional designs. They believe that a dynamic learning community is characterized by "distributed control, commitment to generation and sharing of new knowledge, flexible and negotiated learning activities, autonomous community members, high levels of interaction," as well as common learning goals.

In many instances it appeared to the researcher (1996, Greer) that distance courses were being evaluated using traditional face-to-face evaluation forms. This raises the issue of analysis of the paradigm of distance learning, if indeed it is a new paradigm. Pat Moskal (10/22/96, personal communication), formerly of the UCF/Institute for Simulation and Training, believes that distance technology is simply an enhancement to existing learning paradigms and that good course content and good instruction span any variety of delivery methods. Others, like Tony Bates (1995, Bates) formerly of the Open Learning Agency of British Columbia, believe that an entirely new paradigm is being generated with the advent of advanced and interactive technologies which will reinvent education and make life-long learning an integral part of our leisure, family, and career lives.

Depending on one's thinking, then, evaluation forms can be designed to focus on the traditional questions for student evaluations or shift and incorporate those questions which address the new teaching and learning styles needed to make the most of the technology for educating independent adult learners.

Another aspect of evaluating on-line courses includes some measure of the cost-savings to the student and a metric for opening access to students who would otherwise be unable to commute to the non-virtual campus. Such data can be used by strategic planners and institutional researchers to economically and politically justify offering web-based courses through public institutions.

Many student success factors need to be considered from a Web-based student perspective. These include value-added course delivery, the importance of peer mentoring, developing a sense of community, time management, scheduling, self-motivation and necessary technology skills and equipment. Comments from students can be enlightening to not only instructional staff, but also students who are considering WBI as a means of obtaining certification or a complete degree via the Internet.

III. UNIVERSITY OF CENTRAL FLORIDA WEB-BASED INSTRUCTION

The College of Education has been one of the “avante garde” colleges at U.C.F. in exploring the benefits, time-investment, and necessary support staff for offering web-based instruction for college credit courses. Dr. Larry Hudson in the vocational education area has been a distance learning advocate for decades. Currently, he and Dr. Robert Paugh have an entire program for vocational education teacher training and certification available through web-based courses. The series of courses for this program are offered in rotation during all three semesters of the school year.

The support staff needed to create, maintain, and administer this program ranges from Peer-Assisted Learners who are web-savvy fellow students to web-based instructional design personnel at the university level. In an attempt to offer an equivalent array of student support services to the target audience for this program as compared to on-campus students, many of the university’s support staff have been involved in making information available over the Internet.

For example, the UCF Student Academic Resource Center offers an on-line site with a wide range of self-help information for improved study habits, learner attitudes, reading and comprehension skills, note-taking, and math study skills ([http:// pegasus.cc.ucf.edu/~sarc](http://pegasus.cc.ucf.edu/~sarc)). The UCF library has done an outstanding job of offering on-line resources, both abstracts as well as full-text documents, with a variety of search engines (First Search, EBSCOHOST, Lexus-Nexus), numerous databases, and title or keyword searching for a comprehensive list of on-line electronic journals (<http://library.ucf.edu>). The vocational education faculty have also incorporated an extensive information resource area specific to vocational education. The target audience includes web-based and on-campus learners within this department as well as faculty and students at other educational institutions. These resources are well organized and within the public access areas of the vocational education web site (<http://reach.ucf.edu/~voced>).

In light of the expense and efforts made by U.C.F. to offer equivalent student support services to web-based learners as compared to on-campus students, Dr. Hudson allowed the current researcher to survey students enrolled in four web-based courses during the Spring term, 1998. The researcher was well-acquainted with the learners in the study since she had been employed by the College of Education for two semesters as a graduate research assistant for purposes of offering guidance, navigation tips, moderation in forum discussions, and other mentoring support to the adult learners in the on-line vocational education teacher training program.

IV. METHODOLOGY

A two-part on-line student services survey form (Appendix 1) was included in the exam files for adult learners in four Web-based courses offered Spring, 1998, for vocational education teacher training. Learners were requested by course e-mail and by notices in class forums or bulletin boards to voluntarily complete the survey and submit it electronically within the Web CT software program used for these courses. Learners were surveyed during the last 2-3 weeks of the term in order to assess the full benefit of student support services for the courses.

The first part of the survey form included not only demographic information but also information on job commitments, parenting responsibilities, and commuting distances to the non-virtual or physical university campus. In addition, a self-evaluation of various facets of computer expertise and comfort with technology prior to taking the current course were also included.

The second part of the survey form (Appendix 1) was the heart of the information concerning student support services for web-based learners. Since the distance to campus ranged anywhere from 10-300 miles one way, both on-campus and web-based services were included on the survey. The following is a list of the twenty services examined for the learners in this study:

1. UCF Library on-line resources
2. UCF Library in-house resources
3. Non-UCF local library in-house resources
4. On-line resources aside from UCF Library resources
5. UCF Bookstore
6. Peer Assisted Learners (PAL's) on-line
7. Student Academic Resource Center on-line
8. Student Academic Resource Center on-campus
9. Student picture ID services
10. Course registration by telephone using PIN
11. UCF Admission process
12. Course registration via the Web
13. Faculty support
14. UCF Graduate Research Assistant (GRA)
15. Departmental support
16. UCF Financial Aid Services on-line
17. UCF Financial Aid Services on-campus
18. Student Services in College of Education for Education majors
19. Web course orientation activities
20. Overall rating of Student Support Services

An open-ended question on suggestions for improvement and the support which students appreciated most concluded the second part of the survey instrument.

Another facet of this study was a qualitative analysis and summary of Web-based learners' reactions to the following four questions. These questions were posted in the forums for the same four vocational education classes at UCF and students were asked to volunteer their responses:

- 1) What support is needed to succeed in a Web-based course?
- 2) What organization is essential for success in a Web-based course?
- 3) What technologies are required for success in a Web-based course?

4) What success is earned by participating in Web courses?

V. ANALYSIS OF RESULTS

Although not all respondents completed all the survey form items, there were a total of 48 adult learners who submitted student support services survey forms. This population of students represented learners across the entire state of Florida in a rich variety of vocational education careers from nursing to bricklaying, and an equally diverse set of educational institutions from private proprietary schools to penal institutions.

The analysis of the demographic information indicated an average age of 43.2 years for 47 respondents with a standard deviation of 9.2 years. Range was from 27-69 years of age. There were 20 males and 27 females who responded. One respondent did not complete some of the demographic information.

Responses indicated that about 2/3 of the learners were married (n = 31), one was widowed, and 15 were single. Twenty-two learners had one or more dependent children living within their homes. The average age of the 36 dependent children indicated on the survey was 10.6 years with ages ranging from 1-23 years. Most of the respondents had full-time employment (86 %), two indicated part-time work, and five worked within the home.

For the demographic item concerning computer literacy and familiarity with Internet technology, the 48 respondents indicated an average of 2.8 web-based courses taken between January 1995 and May of 1998. The standard deviation was 1.9 courses and the range was 1 to 10 courses taken.

The self-evaluation of computer literacy skills showed a wide range of abilities within the respondents as follows:

	<u>E-mail/Attachments</u>	<u>Web Navigation</u>	<u>Word Proc.</u>
Novice	53%	60%	15%
Moderately Experienced	15%	9%	32%
Comfortable	21%	26%	23%
Very Experienced	11%	6%	30%

In terms of anxiety level in using the technology and the Internet prior to any web course, the responses indicated that 63% were “mildly anxious”, 24% were “anxious”, and 13% were “highly fearful”. Clearly there were extremes in the student competency and comfort levels in taking a college credit course over the Internet. Any learners who felt no anxiety at all were forced to mark the mildly anxious category since it was reasonable to assume some anxiety over failure of the technological tools to perform is always a threat to learning on-line.

Mileage one-way to the main campus to use on-campus facilities, to speak in person with faculty, and to attend a mandatory orientation ranged from a few miles to 300 miles. The orientation was scheduled on a Saturday to accommodate students with long commutes to the campus. About 25% of respondents had commutes of 25 miles or less one way. About 30% had commutes between 26 and 50 miles. The balance of the respondents (45%) had more than 50 miles one-way to get to the non-virtual campus. Within this latter group of 21 respondents, the average mileage was 148 with a standard deviation of 96 miles.

The table in Appendix 2 summarizes the results of the twenty areas of student support services that were included in part 2 of the survey instrument. Simple percentage computations were used for each of the categories and numbers were rounded to the nearest percent. There were a surprisingly large number of responses overall which indicated that the specified service was “never used”. It is not clear whether this category was marked because students were unaware of what service was available over the Internet, or whether there simply was no need for the student to obtain the available services.

Overall, the ratings which reflected actual use for the twenty items on the survey for student services fell largely into the “average” or “above average” categories. However, the highest “poor” rating (21%) of all 20 areas went to the process of accessing a student ID card since no representatives from this office were made available at the mandated orientation at the beginning of the term. For those students with long commutes, obtaining an ID card by taking time off from

work and driving for hundreds of miles a second time to the non-virtual campus was not feasible. Development of a CD-ROM tutorial has been initiated by UCF to eventually eliminate the one, mandated Saturday visit to the campus. Even so, this does not address the issue of obtaining student identification cards.

The need for an ID card arises when students are asked for an identifying code number on the card in order to access numerous full-text research services available through the UCF on-line library resources. In addition, access is also restricted to some of these same services because students need to dial-up directly to the Pegasus server, which is long distance for the majority of learners taking web-based courses for vocational education teacher certification.

Despite these obstacles, the respondents indicated that 63% rated the on-line UCF library resources as “average” or “above average”, on-line resources outside of those from the UCF library had a 68% rating for “average” or “above average”, and 35% rated local in-house library resources as “average” or “above average”. Apparently amongst the various methods of obtaining information for assignments, the majority of learners felt that their research and reading resource needs were being met adequately despite their distance from the U.C.F. campus.

Eleven Web-based students responded to the four questions about success factors for WBI. A synopsis of their responses is given below:

What support is needed?

Support is needed from all areas: family, friends, co-workers, and other web students. Novices were particularly grateful for support offered by the experienced web students within their classes. The encouragement and instruction from peers motivated new students to overcome the hurdles of learning how to use the computer technology and how to post assignments within the Web-based course. One of the mainstays for student success is learning how to use the copy and paste functions of the text editor and peers with experience in many cases helped newcomers step-by-step through an example via the forum or class-mail.

Orientation and introduction to instructional staff was also considered very helpful by the students who responded. This allowed students to use a computer lab and practice logging into the course with user identification and password. Navigation skills could also be practiced with the help of instructors and other support persons. One student's reaction to the orientation was, "I was overwhelmed and questioned my sanity for even being there and taking these Web courses. I stayed because the course was required and I had no choice."

Informal peer support and a sense of community can also be enhanced by allowing students a Coffeehouse Forum where non-course topics can be discussed. This allows adult students a chance to discuss other aspects of their life with fellow students. As with most adult students, there is usually more on their plate than can be handled and having some time and space to "talk" to an objective adult can be a much needed catharsis. One student commented: "It's nice to hear that everyone else is having the same concerns or problems as you, you're not out there alone. One of our best teaching tools is the knowledge of other teachers. We all need to share and do what's best for the students, the forums provide an opportunity to do this."

What organization is essential for success?

Organization is essential both for the student and the instructor. Instructors should post tips to follow when using the forums, mail, and other course functions at the very beginning of class in order to save time and frustration. Changes within the course during the course term should also be minimized. Not all students can be on-line daily or even every other day. There should be announcements of any changes that occur which stay in place over several days in order to accommodate the different schedules of learners.

Due dates for class projects must be posted well ahead of time. Instructors and students need to be aware that for instructors this is a job (usually Monday through Friday) while for students this is a requirement for their job. This means that the adult learners must fit the course demands into any available remaining time outside of usual working hours. Therefore, much of the students' work may

be done on weekends. Web students may be restricted as to input or access if they are logged on to the computer only in the evening or on the weekend. Thus students need to learn to adjust to questions that may go unanswered until the next regular business day.

Consensus from the Web students was that one must be able to schedule the time needed to do the assignments and correspond with fellow classmates. It is the student's responsibility to keep track of important dates. A coping mechanism was suggested by one student as follows, "Time management skills and a really big calendar with different colored pens to keep track of assignments are recommended."

Another student commented, "Enrolling in Web courses lets you manage the time you spend on learning along with your everyday schedule, and therefore gives you a flexibility that isn't there with most classes. It could, however, be a problem for those that don't manage their time wisely. I wish this type of course delivery was available in more areas."

If you are not a self-motivated person you might not be successful in Web-based courses. Despite the demands, one student appreciatively remarked, "Web-based learning is a wonderful opportunity. Education at your convenience. Who would have thought? I can work on my class any time I want without being tied down to a certain time period. I can have career, family and an education at the same time. Without Web-based delivery this wouldn't be possible."

Most students agreed that it was essential to sign on to the class course page several times each week. Signing on daily to the course and reading messages takes much less time than waiting to do it once a week and it avoids the unwanted sensation of becoming "electronically buried" by numerous forum postings.

What technologies are required?

The need for current hardware and software capabilities in order to successfully complete a web course were epitomized by one student who said, "I didn't realize how much extra time I was spending on-line when all I had to use

was a very old computer at home. Once I had a newer computer to use, I realized the unequalness of the students' abilities. Like in a regular classroom, not all students were equal; but this time it was due to something other than intelligence."

Internet access for Web-based courses is indispensable. Subscribing to a local or national Internet Service Provider who offers quality service, technical support, and a connection that is compatible with the software used in the course is essential.

A person taking a Web course should be familiar with e-mail, forums, and navigating the Internet. One student said, "Experience with the World Wide Web and e-mail would make starting Web courses much easier, but it is not essential. There should be enough support to get you started in the beginning as long as you attend the orientation."

What success is earned by participating in Web courses?

The information received from fellow classmates about web sites assists peers in their work. A student summarized it as follows, "I have learned so much in a short time, not only about how to teach, but about myself and my fellow professionals. We have gone through a virtual bonding and give each other support, encouragement and we share levity to spice up the class. By sitting right here at home, I am able to improve myself intellectually, learn information that benefits my work activities, and satisfy job requirements."

Another student put it succinctly when he said, "In my opinion, Web-based learning is the best thing that ever happened; without it, I wouldn't be able to continue my education. Without Web-based technology, most students would not be able to complete their education, as they are working full-time and raising a family, which limits their opportunity to travel for classes. I am looking forward to continuing taking my classes via the Web. It gives one a feeling of accomplishment and well-being. If there had been classes available over the Web years ago, I might have laughed it off, but having been indoctrinated to my way of

thinking there is no better way. Thank you for giving me the opportunity to express my comments.”

VI. CONCLUSIONS AND FUTURE DIRECTIONS

Effective student support services are possible for web-based learners. Overall satisfaction with student support services was rated at “average” or “above average” by 90% of the respondents for this survey. The most important human support appears to have been that of faculty encouraging students to overcome the fear and steep learning curve with respect to the technology. For many students who responded, this was their first adventure in taking a course over the Internet. With time and increased experience using web technology, it can be assumed that this support need will subside for adult learners as a whole.

Faculty were also cited in the open-ended comments as being very responsive to students’ questions concerning assignments. Ratings for faculty were some of the highest for the 20 areas of student support in the survey. Responses indicated that 71% of the learners felt that faculty support was “above average” and 19.5% rated their support as “average”, or a total of 90.5% in the “above average” or “average” categories.

The second most important human support appears to have been from peers in giving technology tips, in exchanging helpful research information, and in building networks with others across the state who are in similar vocational education fields. Much of this activity occurred within the class forums and many of the open-ended comments indicated a great deal of appreciation for peer support within these four classes.

From the researcher’s perspective of web course facilitator, the tone of the exchanges within the web course seemed to nurture a positive, socially supportive, learning community with more interaction among students, and between students and support staff or faculty, than in a traditional face-to-face classroom. An example of two forum postings are shown in Appendix 3.

The seasoned instructional staff were able to elicit deep thinking about the teaching profession and students' motives in one particularly revealing assignment during the Spring term, 1998. Even more important than the introspection required to complete some assignments was the fact that the class forums allowed students to review the work of classmates and to make contributing comments about their own experiences relative to the postings. This nurtured a sense of community and dynamic learning within the web courses.

Under the open-ended item for the on-line student support services survey, suggestions for improvement of WBI included better instructions during face-to-face orientation on steps for logging into web course sites, an improved process for obtaining student ID cards, and specific hands-on training at orientation for using Web LUIS and other Internet search engines.

The information resources available to web-based learners for conducting necessary research for various group and individual projects seemed to be quite adequate, either over the Internet or at a local library. The University of Central Florida Library has made many resources available at no additional cost to its students, but some hurdles for web-based learners remains in terms of accessing these materials, i.e., the need for a toll-free dial in connection to the pegasus server and a "guest" identification number for enrolled students who do not have an official student ID card.

Web-based courses are a means of furthering education for those who otherwise could not attend in-person courses. In addition to the training benefits, being forced to learn to operate within a technology-rich environment also had some spin-off benefits for the Web-based learners in this research study. Students learned how to give and take peer support and mentoring, how to overcome difficulties with the technology, how to better express themselves in written communication, how to develop a sense of community in cyberspace, and how to best schedule their training and education around other demands of life and work.

VII. REFERENCES

Bates, A. W. (1995). The Future of Learning. Paper presented at Minister's Forum on Adult Learning. Edmonton, Alberta, CA. Nov. 30-Dec. 1.

Dillon, C., Gunawardena, C. and Parker, R. (1993, Spring). Learner support in distance education: An evaluation of a state-wide telecommunications system. In Phillip J. Sleeman (Ed.). International Journal of Instructional Media, 19(4). Pp. 297-311.

Erazo, Edward and Derlin, Roberta. (1995). Distance learning and libraries in the cyberspace age. Proceedings of the 1995 Conference of the Council for Higher Education Computing Services. Roswell, NM. Nov. 8-10, 1995.

Greer, Linda B. (1996). Evaluation forms for distance education. Research paper, doctoral studies, University of Central Florida. Orlando, FL.

Marsh, Debra. (1997, March). Computer conferencing: Taking the loneliness out of independent learning. Language Learning Journal(15). Pp. 21-25.

Miner, David. (1997, Summer). Disadvantaged youth: Programming for "cultural mainstreaming": Educational, social, economic success. Adult Basic Education, 7(2). Pp. 67-83.

Moskal, Dr. Pat. (1996, Oct.). Personal communication. Institute for Simulation and Training, University of Central Florida, Orlando, FL.

Kubala, T. (1998, March). Addressing student needs: Teaching on the Internet. THE Journal, 25(8). Pp. 71-74.

U. S. Department of Education, Office of Educational Research and

Improvement, ERIC. (1990). Distance education interaction and feedback at a glance. University of Alaska: Anchorage.

U. S. Department of Education, Office of Educational Research and Improvement, ERIC. (1990). Evaluation in distance education at a glance. University of Alaska: Anchorage.

Web Sites:

<http://library.ucf.edu> (UCF Library)

<http://pegasus.cc.ucf.edu/~sarc> (UCF Student Academic Resource Center)

<http://reach.ucf.edu/~voced> (UCF Vocational Education)

Wilson, Brent, and Ryder, Martin. (1996). Dynamic learning communities: An alternative to designed instructional systems. Conference paper presented at the 1996 National Convention of the Association of Educational Communication and Technology. Indianapolis, IN. Feb. 1996.

Appendix 1
Survey Instrument
WEB STUDENT EVALUATION OF STUDENT SUPPORT SERVICES
UNIVERSITY OF CENTRAL FLORIDA
College of Education
Program in Vocational Education
Spring 1998
Linda B. Greer

Purpose: This is being conducted to assess the current state of student services support for the web-based students at UCF. This information will benefit post-secondary institutions in terms of identifying important factors and state-of-the-art methods which influence effective student service support structures for web based training (WBT). All names and responses will be treated confidentially, only trends will be expressed in the final report. The results of this will provide the data for several publications &/or conference proceedings.

Directions: This survey is designed to be completed in 10-15 minutes. For items having multiple-choice responses, place an "X" in the appropriate space next to the selected response category/categories. For open-ended items, print your response in the space provided. If you have questions, telephone Linda Greer at 407-359-1332 or e-mail <tutor@gdi.net>. Thank you.

I. Biographical Information

- 1) Course you are currently taking on-line: _____ 2) Your age: _____
- 3) Sexual status: ☐ M ☐ F 4) Marital status: ☐ Single ☐ Married ☐ Widow/-er
- 5) Number of children living with you: _____ 6) Ages of these children: _____
- 6) Work status: ☐ F/T ☐ 1 P/T job ☐ Multiple P/T jobs ☐ Working in the home
- 7) No. of UCF web courses (semester in length) you have taken (and are taking) since Jan. 1995: _____
- 8) Miles one way to UCF campus that you would normally drive to attend class: _____ mi.
- 9) Rate your computer expertise: *(Check one column for each item.)*

	<u>Novice</u>	<u>Very Experienced</u>	<u>Moderately Experienced</u>	<u>Comfortable</u>
Word Processing	_____	_____	_____	_____
E-mail/Attachments	_____	_____	_____	_____
Web Navigation	_____	_____	_____	_____

- 10) Rate your anxiety level in using the technology and the Internet for this course:

_____ Mildly anxious _____ Anxious _____ Highly fearful

II. Student Support Service Ratings Never Used Poor Average Above

Average

(For each item, mark one column at the right)

1) UCF Library on-line resources	_____	_____	_____	_____
2) UCF Library in-house resources	_____	_____	_____	_____
3) Non-UCF local library in-house resources	_____	_____	_____	_____
4) On-line resources aside from UCF Library	_____	_____	_____	_____
5) UCF Bookstore	_____	_____	_____	_____
6) Peer Assisted Learners (PAL's) on-line	_____	_____	_____	_____
7) Student Academic Resource Ctr. (SARC)on-line	_____	_____	_____	_____
8) Student Academic Resource Center on-campus	_____	_____	_____	_____
9) Student Picture ID services	_____	_____	_____	_____
10) Getting PIN for telephone registration	_____	_____	_____	_____
11) Admission process to UCF	_____	_____	_____	_____
12) Course Registration process via the Web	_____	_____	_____	_____
13) Faculty support	_____	_____	_____	_____
14) Graduate Research Assistant support	_____	_____	_____	_____
15) Departmental support (Instr. Programs)	_____	_____	_____	_____
16) Student Financial Aid Services on-line	_____	_____	_____	_____
17) Student Financial Aid Services on-campus	_____	_____	_____	_____
18) Student Services in Coll. of Education	_____	_____	_____	_____
19) Web course orientation activities	_____	_____	_____	_____
20) Overall rating of Student Services Support	_____	_____	_____	_____

21) Suggestions for improvement and comments on the positive aspects of student support can be printed below:

Thank you for taking the time to help us better understand student services for our web learners.

Appendix 2

Table of Ratings for 20 Student Support Service Areas

<u>Service Area</u>	<u>Never Used</u>	<u>Poor</u>	<u>Average</u>	<u>Above Avg.</u>
	%	%	%	%
1. UCF Library on-line resources	31	6	38	25
2. UCF Library in-house resources	63	2	19	17
3. Non-UCF local library in-house resources	63	2	25	10
4. On-line res. aside from UCF Library res.	28	4	38	30
5. UCF Bookstore	31	2	42	25
6. Peer Assisted Learners (PAL's) on-line	44	0	17	40
7. Student Academic Resource Center on-line	73	0	12	15
8. Student Academic Res. Center on-campus	77	2	10	10
9. Student picture ID services	54	21	17	8
10. Course registration by telephone using PIN	58	10	15	17
11. UCF Admission process	10	10	55	26
12. Course registration via the Web	35	0	20	45
13. Faculty support	7	2	20	71
14. UCF Graduate Research Assistant (GRA)	48	0	21	31
15. Departmental support	52	2	27	19
16. UCF Financial Aid Services on-line	92	0	8	0
17. UCF Financial Aid Services on-campus	83	2	13	2
18. Student Services in Coll. of Ed. for majors	58	0	20	23
19. Web course orientation activities	4	4	33	58
20. Overall rating of Student Support Services	10	0	42	48

Appendix 3
**Excerpts from Forums for
Vocational Education Teacher Training
Web Courses**

Posted by David K. on Mon, Apr. 27, 1998, 22:57

Subject: Thanks to All!

Linda, Good luck in Va. It will be a sad time for you as well. Have a safe trip and thank you, for just being human. These classes via web are great, but sometimes it can be hard to put a face to a name. Your input and help, in needed times, was a great support to us all.

Sincerely,
Your Friend, Dave

“In all honesty, the idea of returning to college via the Web is phenomenal! In this day and age I realize that very little is impossible, but to bring the classroom home and not have to run to class is a miracle and very much appreciated. I do not feel that anything has been eliminated taking this course or any future course over the web. What I have been able to accomplish and learn absolutely astounds me. New friends have been made. I hope they will be there to completion; they are beautiful people. I hope that we maintain contact!”



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