The purpose of this study was to understand how nontraditional adult learners perceive online learning. The investigation was guided by three research questions. First, how do nontraditional adult students react to online learning? Second, what factors influenced their successful online learning experiences? Lastly, what factors contributed to their non-successful online experiences?

This qualitative study included face-to-face interviews of twelve nontraditional adult learners who were actively participating in online learning courses at the time this study was being completed or had done so in their past educational efforts. Three categories of interrelated findings were inductively drawn from the data using the constant comparative method of analysis.

When the participant’s profiles were arranged in a descending age order, the older subjects exhibited more stressful emotional reactions, more lack of computer literacy, and more problems with the technology than the younger age participants.

The participants of the study discovered during the interview process that they had indeed experienced growth and development in the area of online learning. The two participants who
adamantly disliked online education were still willing to try it again after our session. The participants who enjoyed online were excited about finding new courses to take.

The results of this study demonstrate that online learning is a viable method for nontraditional adult learners to use to further their education, personal, and professional goals. Three conclusions were reached: 1) Nontraditional adult learners will be successful with the education method of online learning if the climate is set to address the specific needs of this population, 2) the competence and style of online instructors affect the success of nontraditional adult learners, and 3) the type and user-friendliness of online learning plays an important role in the success of nontraditional adult learners.

As a result of this study about online learning, I have experienced a transformational learning experience myself. Online learning did not appeal to me at all in the beginning and now I have gone full circle. I am teaching an online course this fall semester, 2006.

INDEX WORDS: Online Learning, Nontraditional Adult Learners, Accreditation, Online Education, Adult Education, Distance Education
ONLINE LEARNING AS PERCEIVED BY NONTRADITIONAL ADULT LEARNERS

by

CHARLENE CLARE GOODWIN

R.D.H. West Liberty State College, 1968
B.S. West Liberty State College, 1968
M.S.Ed. University of Kentucky, 1977
M.S.HCP&A. Mercer University, 1998

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial
Fulfillment of the Requirements for the Degree

DOCTOR OF EDUCATION

ATHENS, GEORGIA

2006
ONLINE LEARNING AS PERCEIVED BY NONTRADITIONAL ADULT LEARNERS

By

CHARLENE CLARE GOODWIN

Major Professor: Laura L. Bierema
Committee: Juanita Johnson-Bailey
Kananur Chandras
Julius Scipio
Sally Zepeda

Electronic Version Approved:
Maureen Grasso
Dean of the Graduate School
The University of Georgia
May 2006
DEDICATION

This research study is dedicated to the memory of my mother, Jessie Murphy Goodwin. Her belief in my abilities and pride in my accomplishments remain a part of my heart to this day. To my sister, Penny Sue Goodwin, thank you for your continued support during this time of my growth.
ACKNOWLEDGEMENTS

I wish to extend my gratitude and respect to my committee members. Without their patience and commitment, this study would have been meaningless. To Laura L. Bierema, thank you for becoming my advisor and guiding this process to conclusion.

I wish to thank those participants who agreed to be involved in this study. Through knowing them, I have gained a new excitement for the field of online learning.

A special thanks to Denise Collins, Administrative Assistant, at the College of Education, UGA, Athens, GA. Her enthusiasm and support for this process were invaluable to me.
# TABLE OF CONTENTS

---

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>x</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>1 INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>6</td>
</tr>
<tr>
<td>Statement of the Purpose</td>
<td>7</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>7</td>
</tr>
<tr>
<td>Summary</td>
<td>8</td>
</tr>
<tr>
<td>Definitions</td>
<td>10</td>
</tr>
<tr>
<td>2 REVIEW OF THE LITERATURE</td>
<td>12</td>
</tr>
<tr>
<td>Prologue</td>
<td>12</td>
</tr>
<tr>
<td>Introduction</td>
<td>13</td>
</tr>
<tr>
<td>Adult Education</td>
<td>13</td>
</tr>
<tr>
<td>Online Learning</td>
<td>15</td>
</tr>
<tr>
<td>Learning Participation</td>
<td>27</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>45</td>
</tr>
<tr>
<td>Critical Issues</td>
<td>48</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Conclusions and Discussion</td>
<td>102</td>
</tr>
<tr>
<td>Implications for Practice</td>
<td>112</td>
</tr>
<tr>
<td>Recommendations for Future Research</td>
<td>115</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>119</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>132</td>
</tr>
<tr>
<td>A INTERVIEW QUESTIONS</td>
<td>133</td>
</tr>
<tr>
<td>B CONSENT FORM</td>
<td>134</td>
</tr>
</tbody>
</table>


LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Interactive Model of Program Planning</td>
<td>41</td>
</tr>
<tr>
<td>Table 2</td>
<td>Participant Profiles</td>
<td>73</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 1: Time Line for Development of Online Learning ..........................................................25
CHAPTER 1
INTRODUCTION
Background of the Problem

The Internet, the most important technological development in the last 30 years, made it possible for anyone with a computer and an online connection to surf the world. Watts (2003) proposed, “Technology has typically heralded new eras of economic growth and a corresponding improvement in the human condition” (p. 97). Bertsch (2003) believed “The world will adopt telecommunications technology not because it is better, which it might be, and not because it is faster, which it is. The world will adopt telecommunications technology because it is cheaper. Period” (p. 81). The Internet has impacted many aspects of our lives, such as medicine (telemedicine), buying goods (online shopping), personal communications (email) and entertainment (Web sites). All of these changes have occurred due to the Internet but the most important effect has been in the area of education (Gurak and Duin, 2004). Online learning is one form of education that had a major growth period in the 1990s. Porter (1997) declared that learners will gain many benefits from this type of education and says “They may learn independently, at their own pace, in a convenient location, at a convenient time, about a greater variety of subjects, from a greater variety of institutions or educators/trainers” (p. 13). It has made education available to anyone who wants it literally whenever he or she wants it to further their education or get the training they need. According to Maid (2003), “Still, we must remain diligent about technology’s ability to standardize and be careful that it does not lure us into what can only be called ‘one-size fits all’ model” (p. 43).
Higher education seeks to develop students capable of independent thinking and decision-making, not students who merely receive knowledge that has been given to them by teachers. Freire (1970) described “banking education” as the opposite outcome. Banking education is a learning situation where students are merely passive receptors of deposits of knowledge. Merriam & Caffarella (1999) proposed a learning situation where students and teachers dialogue with each other in order to humanize and liberate knowledge in a “problem posing” environment. Instructors in higher education transmit knowledge and encourage critical thinking while working with students to help them reach new insights and find new solutions to old problems.

Online learning is one tool to help instructors accomplish their goals of developing independent and creatively thinking students. Online learning has been impacted in recent years by advancements in technology that allow learning to occur anywhere and anytime. The number of online learning participants has increased significantly over the past ten years. According to Drake (2000), “The number of students taking classes online will triple to 2.2 million by the year 2002” (p.1). Four- year colleges offering online programs will increase to 8 percent by the same year (Drake, 2000). Since adult learners are becoming the main users of online education, the importance of online learning becomes increasingly significant. Gilbert (2001) defines online as “active and prepared for operation. Originally a military term, it now implies being connected to a computer network” (p. 242).

Bruce (1999) researched issues linked to online education in the United States and believes that this type of learning gives a unique opportunity to those people wanting to study but cannot attend a residential college because of personal circumstances or work related obligations. Bruce further discussed five aspects of education in general that are being changed by the advent
of distance or online learning: (1) students; (2) teachers; (3) schools; (4) commercialization; and (5) the curriculum. Students have learning preferences that differ from active learners (hands-on, discussion group participation) to more passive learners (note-taking, prefer to read information). Online offers nontraditional adult learners the opportunity to match their learning style with the type of technology and course that fits them (Valenta, Therriault, Dieter, and Mrtek, 2001). Teachers need to be agents of change and are under obligation to incorporate new techniques in their pedagogy in order to create an atmosphere that is favorable for learning to occur in the online setting. Schools and colleges are finding their traditional academic mission being challenged by the need to collaborate with other educational providers and also vendors of software and hardware for online access. Colleges and universities must consider what technologies make online learning easy to access for the nontraditional adult learner (Eastmond, 1998). Commercialization has meant that colleges and teachers must learn to deal with the business side of online learning and determine how resources will be used. Curricula need to include more variety in educational and training methods and online courses need to include elements of research to keep seeking new information. Technology must be used to enhance the learning process to meet the needs and preferences of the nontraditional adult learner (Porter, 1997).

In order to be successful in online learning courses, the type of student enrolled must be highly motivated and able to deal with abstract and vague ideas more easily than traditionally enrolled students (Carter, 2001; Sankaran & Bui, 2001). Individual learners will no longer remain isolated from their peers no matter where they reside and virtual communities of learners can collaborate since global opportunities are possible through existing technology (Pye, 1999). According to Seaman (2002), teachers will need support and training in order to be effective
online educators. The 2002 Sloan-C Consortium study found that 82% of program directors reported that faculty training and support was the most important issue for their individual institutions.

Students with disabilities or those working will find increased opportunities to learn by using online education (Huebner and Wiener, 2001). Where one resides will no longer act as a barrier to educational access. Teachers will find their role in education changing with online learning. The lecture format will have to be rethought in light of emerging technology or virtual classroom. Schools will undergo reorganizations as lines between schools, community colleges, technical colleges, universities, museums, nature centers, and workplaces become hazy (Land, 2002). The curriculum will change as students see the benefit of learning what ties directly into their work or careers (Bruce, 1999). Results of research looking at successful online students show that students need to be efficient in time management skills, be in control of their studies, and be able to put off current gratifications while keeping their goal in mind.

Distance education as defined by Eastmond’s (1998) literature review is a separation of teachers from their students who, under the guidance of an institution, then interact through mediated technologies. This form of learning is becoming an accepted means of higher education. This method provides broader access to information, achieves cost-efficiencies, and maintains quality programs at the same time (Eastmond). Bruce (1999) notes that distance learning refers to learning through an array of communication technologies, such as video, e-mail, teleconferences, and the World Wide Web.

In a survey conducted by the Sloan-C Consortium in 2002, program directors at 64% of the schools/colleges included in this survey responded that this type of learning is critical to the long-term strategy for their institution, while 29% felt it is
important but not really critical to their success. Those respondents who replied in this survey that it is somewhat important numbered 7%. Not a single institution surveyed reported that online learning is NOT important to their long-range strategy. According to Seaman of the Sloan Consortium, commercialization of online learning is becoming a large enterprise. For 2003 the projected global market size is $8 billion dollars and for the year 2004, the market size is $17 billion. The Sloan-C Enrollment Study of 2002 measured curriculum offerings of online courses. According to Seaman (2002), the times an online course was offered only once a year was 87% at doctoral/research institutions, 76% at masters’ degree institutions, 50% at baccalaureate institutions, and 46% at associate institutions. Fifty percent of the associate degree institutions offered the same online course two times in one year while 12% of baccalaureate institutions offered the same online course three times a year. Adler (2001) stated that online learning is becoming as popular as calculators in algebra class. The lines between students as learners, workers, and consumers are being blurred by the stimulus of online education (Bruce, 1999).

Work environments and societal changes require continuous learning and the new majority of students (over twenty-five, working full-time, residing off campus, attending college part-time) is pursuing education for career development, personal and professional reasons, upward mobility, and job security (Eastmond, 1998). Online learning is designed to allow learning by students, traditional and nontraditional, at anytime and anywhere. The problem to be considered concerns the success of such educational endeavors by one type of these students, the nontraditional ones. One example of a factor impeding successful online learning for adults 25+ years in age is lack of motivation (Huebner, K. M., & Wiener, W. R., 2001).

When considering the formal online learning arena, it is necessary to study the college environment where this type of learning mainly occurs. Specifically I will be studying the online
learning courses provided by a four-year college in the State of Georgia. This college became involved in online learning in the late 1990s by creating two GSAMS (Georgia Statewide Academic and Medical System) classrooms on the campus and used these rooms for providing online learning courses to students at distance sites. One of these GSAMS classrooms has since been discontinued and returned to a traditional classroom setting. The number of college students owning personal computers and having Internet access continues to increase. More students at this college began requesting online courses. The Divisions of Business & Economics and Information Technology began to offer online courses in early 2000. In the fall of 2001, 15 online classes were offered with 19 sections in Business, English, Health Sciences, Information Technology, Area B courses, and Regents Remediation. WebCT is the server used and of the twenty-six faculty involved in online learning, thirteen actively used WebCT. Students involved in this type of learning numbered eight hundred. In the spring of 2002, the number of classes rose to 21 with 27 sections and 463 students registered.

Statement of the Problem

Given that the educational system in this country is undergoing changes concerning the use of online technology, the problem considered is that not all nontraditional adult learners enrolled in online education courses are successful with this type of learning. Some learners do much better in settings where they work with other people while some work better alone. Other learners prefer working directly with the instructor rather than working on their own (Porter, 1997). According to Piotrowski and Vodanovich, (2000), there are four groups of obstacles related to online learning via Internet teaching: instructional (e.g., student/instructor interplay), technical (e.g., software appropriateness), institutional (e.g., monetary support), and personal (e.g., student attitudes). Another example of an obstacle is the student’s technological
competence (Piotrowski & Vodanovich, 2000). For new local and global markets, understanding the barriers to online learning becomes very important (Anakwe, 1999). His study highlighted the importance of social culture in academic and industry’s use of online learning by looking at an individual’s culture and (1) receptivity toward distance learning; (2) media preference for distance learning, and (3) course type preference for distance learning.

**Statement of the Purpose**

The purpose of this study is to understand how nontraditional adult students view online learning. This study will look at what features they perceive influence their participation, and what factors exist that interfere or facilitate their online learning.

**Research Questions**

Given the fact that online learning offers educational access to learners not able to attend face-to-face classes, and that the college student population is older, more diverse, and has varying needs, the following questions will be addressed in this study:

1. How do nontraditional adult students relate to online learning?
2. What factors influenced their successful online learning experiences?
3. What factors contributed to their non-successful online experiences?

Successful experiences are those where the student completed and exited the course with a grade of D or better. This exit grade of D as successful course completion is based on the academic guidelines approved by the middle Georgia college where this research occurred. A non-successful student failed to complete the course or received a grade of F.

**Significance of the Study**

This study concerning online learning and nontraditional students was built on two theoretical frameworks: individual adult learning theories and online learning theory. My
findings will contribute to our understanding of how best to educate nontraditional learners in the online setting. Theories of adult learning were reviewed as they relate to nontraditional learners both in a group and individually. Additionally, factors that influence online learning were examined for knowledge of how such factors may be eliminated, reduced, or controlled when dealing with educating this particular adult group. This study was done at a four-year college employing online learning classes as part of its curriculum in the University System of Georgia.

This study will help adult educators in the college setting, computer trainers at community centers, employers, employees, software and computer manufacturers, and nontraditional adult students involved in online learning environments better understand online learning issues. If adult educators comprehend the factors hindering nontraditional students from succeeding in an online learning situation, they will be able to design aspects of online courses that will help their nontraditional students succeed. Computer trainers at community centers and employers will be able to provide online courses with modules that will assist the nontraditional student in online courses. Employees and nontraditional students will approach this learning medium with less trepidation and fear. Software and computer manufacturers will benefit by understanding what factors in their software and/or equipment that need to be altered in order to help nontraditional students succeed in the online learning environment. The wide range of factors involved in the success of such learning as well as those issues impeding learning while participating in an online experience for nontraditional adults were evaluated.

Summary

Life-long learning is vital to the health and well being of adults as they age. With advances in technology since the 1940s and the ease of accessibility to computers for adults, Web-based instruction has come to be a large part of the learning efforts of older adults. This
topic of factors influencing online learning as perceived by nontraditional students is a timely one that requires further research.

There is not a lot of research concerning how adult learners feel about this Web-based learning experience. Participating in learning opportunities can enrich the lives of older adults and assist them in living better quality lives. Many older adults want to pursue degrees and study other subjects in order to stay mentally active, to continue to personally develop, to make up for opportunities missed at a younger age, to foster a greater sense of achievement, to learn for the joy of learning, to help maintain their independence and well-being, to pursue meaningful and purposeful activity, and to achieve goals related to personal competence (Ellis, 1996). A survey of older adults in the United States (Ellis, 1996) showed that 30% of older Americans own personal computers and 28% of that number had accessed the Internet in the month before the study was conducted.

My research contributed to the understanding of computer technology in online education by delving into the perceived factors influencing learning by nontraditional students who participate in online learning. By providing rich data through qualitative research on this topic, my findings provided insight to educators and institutions interested in providing online learning experiences for nontraditional adult learners. Such educators and institutions will be able to design an online learning environment that is student friendly. This will allow the user to receive the most benefit from her/his online experience and the institution to provide a quality online learning experience for the student. This study will add to the body of literature dealing with online education as perceived by nontraditional adults.
Definitions

The following definitions listed below are specific to this study.

**Adult Learning**

This concept involves gaining knowledge by experience those results in a change of behavior (Merriam & Caffarella, 1999, p.249). It happens during learner created self-directed activities, informal society-based activities, and opportunities provided by formal learning institutions.

**Nontraditional**

This refers to college students 25+ years of age, employed full-time, and with family responsibilities.

**Online**

Kramarae (2001) defines online as a system and process of connecting students, teachers, and learning resources when they are not in the same location.

Gilbert (2001) defines an online as:

An educational program whose primary source is the Internet. The course site on the Web is self-contained in that the student does not meet in person with other learners or the instructor. Communication is asynchronous, occurring through e-mail, listservs, multi-user object-oriented environments (MOOs), threaded discussions, and chat rooms. (p. 242)

**Online Learning**

Involves a physical separateness between the student and the instructor and some form of technical media is involved.
Online Learning Course

Completely online: the Internet and other technology are used to enhance the course but there is never a face-to-face meeting of the students and the professor. All interaction is completed via electronic means such as chat rooms, asynchronous discussion boards, or email.

Hybrid courses use the same approach as a completely online course but do intersperse face-to-face meetings with the students and professor during the course term.

Web assisted courses, Web-enhanced, and blended courses all involve considerable use of instructional technologies along with reduced numbers of face-to-face class meetings (Reed Business Information, 2004). There may be access to course syllabi, lecture notes, group chat rooms and the like online but there are also classroom meetings with the course instructor.
CHAPTER 2

REVIEW OF THE LITERATURE

Prologue

Webster (1997) defines “prologue” as an introductory or preceding event or development. It is placed here to give background to my selection of this topic. The purpose of this study is to understand how nontraditional adult students view online learning. As part of the research for this paper, I enrolled in a distance education course in 1999 entitled: International Online Conference on TEACHING ONLINE IN HIGHER EDUCATION, and sponsored by the School of Arts and Sciences, Indiana University-Purdue University Fort Wayne, Fort Wayne, Indiana. The fee of thirty-five dollars was paid by credit card for a two-day international conference about how online teaching might enrich and enhance learning in postsecondary institutions. The course was accessible via my computer at work. A change in my work schedule prevented me from spending much time at the conference and I, as one of 300 participants, really did not understand how to get into the chat sessions as they occurred in real time or how to access the sessions provided by any of the seventy-five presenters. There was a link to the conference sessions called LinguaMOO and a cheat sheet that provided step-by-step instructions, but there was never any opportunity for such access on my part. Time management is critical when choosing to access online learning and even though I was never able to really participate, I was able to access several articles from some of the presenters at the conference. This stimulated my interest in the perceptions of nontraditional students concerning online learning.
Introduction

This chapter provides an overview of the development of online learning and a review of the literature dealing with online participation, online learning communities, program planning, and the effectiveness of online learning. The literature reviewed was selected from online education journals, adult education journals, general literature, and journals of higher education. Extensive searches of the Georgia Library Learning Online (GALILEO) databases were completed to identify resources. These databases included, but were not limited to: Academic Search Premier, Business Source, Computer Source, Educational Resource Information Center (ERIC), Funk & Wagnall’s New World Encyclopedia, Master File Premier, Professional Development Collection, Psychological and Behavioral Science Collection, Sociological Collection, and TOPICsearch. Textbooks written by authors versed in the four topic areas listed above were researched along with online sources. Search terms used included the following: online, online classes, online learning, adult education, adult learning, adult learning theory, online learning communities, ethics of online teaching and learning, barriers to learning, online accreditation, online technology, statistics for online courses, student life issues, technology and online learning, effectiveness of online learning, and nontraditional adult students.

Adult Education

A brief historical sketch of the development of education shows that the beginning of adult education concentrated on the basic skills of reading and writing. Churches taught people to read the Bible. In the 18th century, as people experienced the benefits of such education, they began to become involved in political, occupational, and social activities. Starting in the 1800s, a formal, organized movement of adult education began in the United States. The Lyceum was an association of women and men with some education who wished to increase their own education
while establishing a public school system. This 1826 movement, started by Josiah Holbrook in Massachusetts helped in the development of evening schools, libraries, and endowed lecture series (Corley, 2002). The Cooper Union for the Advancement of Science and Art in New York City and the Peabody Institute in Baltimore were mid-18th century institutions endowed by philanthropists and employers for the benefit of adult education. A summer training program in New York State for Sunday school teachers, the Chautauqua movement, evolved into a traveling lecture series and is the prototype of institutions developed to advance adult education. Abraham Lincoln signed the Morrill Act in 1862. This established land-grant colleges to offer training in mechanical arts and farming. In 1914 the Federal Extension Service of the United States Department of Agriculture was established to give instruction in farming methods that improved farming throughout the world.

The large number of immigrants during the early 19th century required the creation of English and citizenship classes. Education projects were part of the work-relief programs of the Great Depression of the 1930s. The G.I. Bill of Rights, passed after World War II, allowed many veterans to finish their education. The growing importance of adult education was exemplified by the Higher Education Acts of 1966 and 1986 which impacted part-time college students and established financial aid programs for adult students (Corley, 2002). Adult education now became a new field in graduate programs.

The art and science of helping adults learn is Knowles’ (1984) definition of andragogy. As part of the learning design, according to andragogy, adults learn best when learning is experiential. Approaching learning as an exercise in problem solving, they need to understand why it is important to learn the information and learn best if the topic is of immediate worth to them. Kolb and Fry (1975) developed an experiential learning model that contains four
fundamental elements: concrete experience, observation and reflection, formation of abstract 
concepts, and testing in new situations. Kolb and Fry believe that the learning process can begin 
at any stage of the four listed. The process begins with the learner doing a certain action and then 
observing the effect of that action in a particular situation. Second, the learner understands this 
situation to the point of anticipating what will follow from the action taken. Third, the learner 
grasps the general concept under which the particular occurrence falls. The fourth step is to apply 
what has been learned by generalizing action in new circumstances.

Many adults want to improve their technology skills for use in the workplace, at home, 
and for self-satisfaction in gaining new information, exploring new ideas, and increasing their 
ability to make informed decisions. Adult learners need to have both physical and psychological 
needs met in order to be successful in any learning environment (Biswalo, 2001). An atmosphere 
where adult learners are challenged and yet feel safe, are encouraged to become active 
participants in the learning process, and are involved in the selection of objectives for their 
learning are all aspects of an effective learning environment. If the learning environment is 
ineffective, the adult learner will feel anxiety, fear appearing like a failure and be dissatisfied 
(Biswalo, 2001). The adult learning environment should not be threatening or judgmental but 
have a feeling where adults are free to share in the accountability for their learning success.

Online Learning

Online learning as a form of distance education can give nontraditional adults a chance at 
a college education never before available to them. Nontraditional students are those 25 and 
older, working, and raising a family (U.S. Department of Education, 2002). Colleges and 
universities have found it necessary to be flexible and adapt their course offerings and programs 
in order to stay in touch with today’s college student. Instead of offering courses at the
convenience of faculty and departments, higher education institutions are now recognizing the needs, expectations, and wants of students. Nontraditional students must attend classes on weekends or evenings in order to accommodate their work schedules and family situation. The mission of colleges and universities includes serving those students unable to come to the campus or unable to attend full-time by offering classes. According to Burbules (2000) essay concerning the challenge of new technologies and educational institutions, junior and community colleges offer courses at more locations and teach classes during the evenings, weekends and summers in order to interest those students with work or family responsibilities. Technology changes, easier access to computers at home and access to the Internet have changed today’s learning environment. Students do not need to come to the institution’s campus. Asynchronous technology allows learners to take examinations, access a wide variety of materials, accomplish assignments, and be involved with group discussions according to a schedule they develop. Burbules further stated that the face-to-face interplay and spontaneity found in the classroom that does not occur online seems a small sacrifice to some students when the alterative is considered and that alternative is not attending class at all.

Burbules (2000) discussed that large universities often have auditoriums with a thousand students listening to a faculty member lecture from behind a podium, inexperienced student assistants leading smaller discussion sections, and faculty office hours that are limited to brief sessions with the instructor because of the number of advisees assigned to that faculty member. Institutions refusing to consider new technologies will not improve this situation. Online learning offers a way to improve some of those trends by increasing faculty-student and student-student interaction and increasing the opportunities for discovery-oriented learning. Online learning provides adults with a range of technologies designed to give them opportunities to expand their
education and participate in lifelong learning activities. This learning environment allows participation without the limits of regularly scheduled class time and is based on the interest of the learners, not their physical presence. Individuals have the capability of responding to learning activities in their own time frame within the time limits of the course and the information is presented in a variety of ways and presented within a real-world context. Instructional design for successful online learning must include a continuum of strategies.

The traditional classroom setting on college campuses with face-to-face interaction between students and faculty is not the best learning environments for some students based on their age, cultural differences, lack of skill with the English language, perceived lower social status, and self doubts and insecurities regarding their abilities to achieve. These students do not see themselves ever being comfortable as part of the campus learning community (Burbules, 2000). Online learning provides these students with convenience, lower fees, security of anonymity, and a sense of safeness that are perceived as significant advantages when compared to the traditional, high-pressure, uncomfortable classroom setting.

Muirhead (2001) proposes that the adult learning environment in online settings needs to encourage an amalgamation of flexibility and individuality plus be professionally and personally demanding. The needs of nontraditional students who are employed full time, have irregular schedules, deal with family obligations, and want to continue their education are a challenge that can be met through online courses (Peterman, 2000). Wernet, Olliges, and Delicath (2000) examined whether nontraditional students are at a disadvantage when technology-based course management tools are utilized by faculty for teaching and learning purposes. Results proved that the use of technology-based course management tools did not disadvantage nontraditional
learners. This type of learner actually sees a benefit of using technology to help balance life demands of job, family, and education.

Transformational learning theory has been a key theory in adult education since the late 1980s (Merriam & Caffarella, 1999). Kilgore and Bloom (2002) make a case for transformational learning as “a meaning perspective, the way we understand our experiences” (p. 123). It deals with the cognitive process of learning and approaches learning through contemplation, finding inner significance of events and mental creation of experience. The theory of transformational learning is best applied to the area of online learning because this theory deals with change. Merriam and Caffarella (1999) believe that this change is in the “way we see ourselves and the world in which we live” (p. 318). An adult learner’s beliefs, assumptions, and values compile the lens used to make sense of her/his personal experiences. Nontraditional adult students who utilize online learning are seeking to improve themselves, widen their knowledge base, or further their formal education.

Experiential learning is another theory that has application to online learning. It posits the learner must tie things they have learned from recent experiences to those occurring in the past and also to see likely future connotations (Merriam & Caffarella, 1999). Havelynick (2002) proposed the experiential learning is composed of three sub-processes: “recognizing, acknowledging, and reconnoitering” (p. 3). Adult learners proceed through each step; sensing something familiar, accepting past experiences as valuable, and investigating different responses to the situation. A learner going through this process will go through the stage of recognizing patterns occurring during the event, acknowledging his/her own role in making the events occur, and exploring alternative behaviors. The first stage creates a need for change, the second, a change is made, and the third stage allows the learner to explore and set new goals.
Corley (2002) stated that the most important development in adult education is the increasing use of radio, network television, and cable television. “Electronic media offer the means for reaching populations that are homebound or geographically isolated” (p. 2).

**Definition of Online Learning**

Online learning is a form of distance education and happens when the instructor and student(s) are in separate places and some form of technology is used to connect them together (Willis, 2002). The United States Distance Learning Association gives the key features of distance or online learning as follows: (a) separation of instructor and student during the majority of the course process; (b) connection of instructor and student via use of educational media; (c) stipulation of two-way communication between instructor, students, and educational institution; (d) separation of instructor and student in space and/or time; and (e) voluntary student control of learning as opposed to instructor control. Reid (2002) defined online learning as “... the study of credit and non-credit courses from worldwide remote sites that are neither bound by time or physical location” (p. 2). Jackson (2002) discussed online learning as “Technology-Delivered Learning where the learner audience is never (or very rarely) in physical proximity to the instructor” (p. 1). Central Florida Community College (2002) defined online courses as a part of distance learning. These courses occur over the Internet and permit flexibility in time and/or setting limitations not found in traditional, on-campus classes. The Southern Association of Colleges and Schools (2000) and the Higher Learning Commission of the North Central Association of Colleges and Schools (2001) agreed that online learning is a formal educational method where the majority of the teaching occurs when the instructor and student(s) are not located in the identical place. Moore and Kearsley’s (1996) definition described it as “planned learning that normally occurs in a different place from teaching and as a result requires special
techniques of course design, special instruction techniques, special methods of communication by electronic and other technology, as well as special organizational and administrative arrangements” (p. 2).

There is consensus from all of the above authors that: (a) online learning involves a physical separateness between the student and the instructor and (b) some form of technical media is involved. I used this definition of online learning in this study.

Profile of Online Programs

Online learning has been changed in recent years by advancements in technology that have simplified and improved electronic communication. With these improvements, the number of online learning participants has increased significantly over the past decade. According to Drake (2000), “The number of students taking classes online will triple to 2.2 million by the year 2002” and four-year colleges offering online programs will increase to 84% by the same year (p. 1). As adult learners become prominent users of this type of education, the importance of online learning becomes increasingly significant.

There has been a shift in the paradigm of higher education from educational institutions proving instruction to that of achieving learning through whatever means the best learning occurs (Huebner & Wiener, 2001). This article gave an overview of online education and presented the thought that the instructor changes roles from the “sage on the stage” to the “guide on the side” and sometimes swaps back and forth (Huebner & Wiener, 2001). Online learning uses nontraditional methods of producing learning, not just lectures. Computer-based training disks, DVDs, CD-ROMS, laser disks, email, list servers, Web pages, and virtual classrooms are strategies used by instructors for successful online learning instruction. Huebner and Wiener’s research of thirty-two references thoroughly covered the paradigm of online education in the new
millennium. Dwyer and Li (2000) affirmed that online learning would provide opportunities in all disciplines and fields of study for any individual wanting to be involved. Their article listed questions that need to be considered when discussing the efficiency and effectiveness of online learning. Questions included are in the fields of communications, course design, organization analyses, organizational training, education, and professional development.

Jafari (1999) reviewed the course management environment of online learning and how the second-generation management software is being improved to monitor students logging in, reading assignments, and submitting assignments. Course assessment software is being upgraded to notify the instructor if there is a discrepancy between the student’s learning patterns, attendance, quiz scores, and the results of the final exam. The forthcoming third generation learning environment software will reduce overhead time for course maintenance and provide a better and more effective Web pedagogy for online learning and instruction (Jafari, 1999).

Online learning opportunities are increasing throughout the United States. For the year 1997-98, the percentages of public postsecondary, degree-granting institutions offering online courses were: 72% at two-year institutions, and 89% at four-year institutions (Seaman, 2002). Enrollment at the University of Maryland University College in online courses doubled to 63,000 in 2001 (Symonds, 2001). The University of Phoenix’s online revenues increased 76% during 2000 (Symonds, 2001). The U.S. Army is expecting enrollment in its E-learning program to be 80,000 by the year 2005, more than doubling its current numbers.

On a global scale, new universities are emerging to meet the challenge of online education. Examples of the new “mega-universities” (named so because they enroll over 10,000 students) are The Korean National Open University, The Indira Gandhi National Open University, Universitas Terbuka in Indonesia, University of South Africa, The Centre National
d’Enseignement a Distance in France, Open University in the United Kingdom, The China TV University System, Payame Noor University in Iran, and the Universidad Nacional de Educacion a Distancia in Spain (West, 1999).

*Online Pedagogy*

Lieberman and Stovall (1999) presented pedagogic uses of chat for online courses and believe that chat sessions can enhance the learning experience by providing high quality and in-depth discussions between students and the instructor. The rich variety of topics offered at this conference reflected the enthusiasm and experimentation of the growing community of scholars interested in the application of technology to learning (Hannah, 1999). Jarari, Lieberman and Stovall, and Hannah were all online presenters in the online course from Indiana University-Perdue University.

Markel (1999) saw the growth of online education as inevitable and discussed the idea that online education requires a new pedagogy and offers diverse strengths to both instructor and adult student, such as removing the time and distance barriers between the two.

The University of Illinois has developed an online training experience for instructors wanting to acquire the pedagogical and technical skills needed to be success when teaching online (Lieberman and Stovall, 1999). Four courses form the core of the online teaching certification, one elective is required, and a mentorship period must be completed that involves being coached while teaching online. Courses are taught asynchronously. Each course has a weekly modular system, a website, active participation in guided discussions, and is based on the principle of collaborative learning. Since February 1999 when the program started, over 70 instructors in Illinois have participated in one or more of the courses offered.
Western Governor’s University was created as a “virtual university” by pooling the resources available from various colleges, universities, and corporations in the western United States (Neal, 1999). Southern Regional Electronic Campus includes 15 states and 200 institutions ranging from community colleges to research universities (Neal, 1999). There are differences between adult learners and adolescent learners when involved in online learning. Adults seem better suited for the differences in the online environment versus the traditional classroom setting. The Open University in England has expanded into the Internet and allied with several universities in the United States (Markel, 1999). The University of Phoenix, a for-profit university with some 50,000 students in 12 states (Markel, 1999), defined itself as a multiple-media distance learning system although most of its classes are residential.

Technology Continuum

The beginning of online learning can be traced to the idea of correspondence study in the 1880’s. According to Sherron and Boettcher (1997) there are four generations of technologies for distance education. From the 1850s to 1960, there was generally one technology involved using one-way communication with interaction between instructor and student occurring via mail or phone. Print was the main media involved until radio arrived in the 1930s and television in the 1950s. The main shortcoming with these two first generation broadcast technologies was time dependency (i.e., broadcasts from television and radio happened at specific, predetermined times and students had to be available to watch or listen at those specific times).

The second generation of distance learning technology occurred from 1960 to 1985. Multiple technologies were used including audiocassettes, television, videocassettes, fax, and print. This primarily one-way communication and interaction between instructor and student occurred via telephone, fax, and mail. These technologies improved the time dependency issue of
the first generation technologies by allowing students to view course content at any time (Sherron & Boettcher, 1997).

Computers arrived in the third generation technology stage, from 1985 to 1995. Two-way interactive capacities allowed asynchronous and synchronous communication between instructor and students and between students (Sherron & Boettcher, 1997). Electronic mail, computer programs, audio conferencing, bulletin boards, chat sessions, and videoconferencing were the types of media involved. The Internet was used for transmitting text, graphics and video snippets.

Fourth generation media, 1995 to 2005 (est.), uses multiple technologies including the high-bandwidth computer technologies. Live video interactive learning experiences, desktop conferencing, and computer programs on disks, CDs, and the Internet are examples of media being used today. The types and quantity of information exchanged is much greater than previous generations, the time to make such exchanges is considerably less, and the interactivity between instructor and student and among students is increased (Sherron & Boettcher, 1997). This improvement permitted students to progress through different stages of computer use and online participation with each new generation of improvements.

*Figure 1: The time line of the development of online learning.*

<table>
<thead>
<tr>
<th>Print</th>
<th>Fax</th>
<th>Computer</th>
<th>High Band Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>▲</td>
<td></td>
<td>▲</td>
<td>▲</td>
</tr>
</tbody>
</table>

*Three-tiered Typology*

Eastmond (1998) presented a three-tiered typology for courses using Internet technology that progresses along a continuum from lesser to greater technological sophistication.
Type I is traditional distance learning supplemented with Internet activities. Students participate in email exchanges with instructors and other students; complete online research in libraries, databases, electronic journals, and Web sites; and may use online discussion groups such as mailing lists, news groups, Web-based conferences, and real-time chat. This type of course provides the student with experiences to foster self-direction by allowing them to select assignments that fit their professional needs or developmental tasks, and to then select Internet resources to address these issues.

Students in Type I technology classes progress from process management (learning to use the technology to learn) to meaning-making (constructing new knowledge within their personal knowledge structures). These adults find new meanings for the nature of computer-mediated communication and the Internet, and get excited about the new world they had found in cyberspace (Eastmond, 1998).

According to Eastmond (1998), Type II courses use the Internet as the main vehicle of instruction and communication. Students still use a printed course guide and textbooks and exchange assignments through the mail, but the conversational environment is a text-only computer conference with topical threads (sequences of messages). This type of communication is asynchronous, meaning that students do not access and contribute to the conversation at the same time. Students must adjust to not being able to see or hear the instructor or other students and must learn to pace themselves in order to keep up with the course communication requirements.

Eastmond (1998) found that adult students in Type II courses liked these aspects: asynchronicity (accessing the course according to their schedule), group support (feeling camaraderie in this new learning experience), control (feeling independent concerning studying),
reflection (considering their words before replying), text (engaging in intensive reading and writing assignments), interactivity (giving and receiving feedback about on-line messages), and democracy (feeling that each class member had equal “air time”).

Type III on the continuum is virtual courses and institutions. Web-based courses are offered by virtual institutions that provide online a full range of academic and administrative services, from ordering books and registering for classes to reviewing academic records and obtaining counseling (Eastmond, 1998). Most aspects of the courses of this type are online: the course guide, electronic discussions with the instructor and other students, links to Web sources supporting the course content and online activities, and the submission and return of class assignments. This type of course requires the highest level of computer equipment, and students, faculty, advisers, administrators, and support staff must have sophistication in user skills.

Adult students involved in Type III courses revealed challenges similar to those the typical adult student faces: having professional or personal tasks take precedence over course participation; struggling to find time and space for school work; dealing with family annoyance at having the telephone line tied up for network connections; and needing to take distance courses because of employment restraints. Students felt that online conversations with other students contributed to their own learning; liked hearing from all of their classmates, not just the vocal ones; and enjoyed the freedom to express themselves in an environment of partial anonymity. Also contributing to the learning process was the wide range of pertinent experiences and opinions of the students enrolled in this type of class (Eastmond, 1998).

Obstacles reported were the technology itself, demanding study schedules, and difficult content (Eastmond, 1998). Benefits were flexibility of time and location, interesting content, and
an enhanced learning environment. Most students experienced with Type III courses wanted to take more Web-based courses in the future.

Learning Participation

Rawlins (1979) asserted, “Higher education institutions are faced with special challenges from the emerging recognition of adult students who constitute a valuable resource, which education and society cannot afford to neglect” (p. 142). Cantwell, Archer, and Burke (2001) believe there are two related shifts in the type of students seeking a college education. More nontraditional adults are entering into the undergraduate study arena and they are accomplishing this by using non-traditional modes of entry. Due to gender discrimination, lack of money, and dropping out of high school, these students are not able to enter college through the traditional entry points, but used nontraditional ones such as the Tertiary Preparation Course open to all age groups. Cantwell et al. found the nontraditional students succeed independent of socioeconomic background.

Justice and Dornan (2001) explained, “Older students are more likely to attend for intrinsic reasons (e.g., self-esteem or cognitive interest), whereas younger students cite more external motivations (e.g., social relations or parental expectations)” (p.237). Older students and women are also more achievement oriented than men.

Zepke and Leach (2002) described six assumptions concerning adult learning that are also valuable for the online learning area:

- adult learners bring valued life experiences to their learning;
- they learn best where they can pursue their own preferred learning goals and methods;
- curriculum is orientated towards practice;
changes to existing social conditions are envisaged and created; and

difference is recognized and valued (p. 310).

Online learning is one avenue available that institutions of higher learning can use in order to reach nontraditional adult students. According to Olsen (1999), state legislators bear most of the responsibility for decisions that lead to more and more students taking online education classes over the Internet. Legislators are not interested in funding more facilities, not interested in improving video-conferencing programs, not especially interested in teacher salaries, and not willing to replace adjuncts with full-time faculty members. Instead they are very interested in spending money on a form of education that may destroy, according to the chairman of the American Association of University Professors’ accreditation committee, the tradition of higher education as a community of scholars defining “who and what we are” (Olsen, 1999).

*Online Versus Traditional Setting*

Educators must remember that students will have varying skill levels in both the traditional setting and the online learning environment. Pertaining to this issue, it is critical that educators provide a means to meet the instructional needs of each student (King, 2001). King recommended that integrating online conferencing into traditional face-to-face classroom discussion could complement the students’ verbal expression abilities, learning, and development. King also provided seven recommendations for instructors attempting to blend the two types of learning environments. First, the instructor’s institution must provide support of and access to web-based technologies. Second, the instructor must utilize the time required to document instructions, provide demonstrations, and prepare the conference site. Third, the instructor needs to consider the past technologic experiences of the students and plan accordingly in order to avoid frustration and wasted time for the learners. Fourth, the online conferencing
does not need to distract the students from their studies. Fifth, instructors need to use a constructivist approach to the online learning situation. This will enable the students to discover the power of the online environment on their own. Sixth, the instructor’s role is to facilitate the experience and let the student-centered learning build the action. Finally, instructors need to follow-up the online experience with live discussions about that experience. Being able to ask questions, offer suggestions, and discuss the high and low points in a face-to-face setting will positively influence the online learning situation.

Levin, Levin, & Waddoups (1999) stated that the first reaction of educators when using a new instructional medium is to simply transfer all aspects of traditional teaching methods (instructional format, contexts of learning, student activities, and assessment techniques) to the new medium. Levin et al. (1999) believed that the instructional goals and new constraints of the online learning environment point toward using other, more appropriate instructional formats. Two activities that worked in the face-to-face traditional classroom setting were usually the lecture format and group activities. This style of delivery is not often appropriate for the online learning environment that is more learner-centered. Their study used a mixed approach of quantitative and qualitative methods to evaluate teaching and learning in a master of education online degree program at the University of Illinois at Urbana-Champaign. Case studies, observations and face-to-face or telephone interviews were completed on four selected students. The results showed that multiplicity played an important role in the learner’s involvement in the online program. They completed both formative and summative evaluations of this online learning program at the University of Illinois and were able to compare multiple learning contexts, instructional media and formats, assessment procedures, and learning activities as to the effects of each on student learning.
When considering the performance of online learners, it is important to consider those aspects of a successful online class that not only motivate students but also keep the interest of those students enrolled. Basic characteristics of students as individual learners in an online setting influence their success in completing the online coursework. Online students are older, highly motivated, willing to call the instructor for assistance, voluntarily seeking further education, self-disciplined, and have a more serious attitude toward learning (Willis, 2002). Farrell (2001) discussed five elements of an online course that help the course remain successful. First, the online students must meet the instructor and have contact information provided in case a student needs more private communication with the instructor. A photograph of the instructor included with the course outline will help create a comfortable atmosphere for the students by giving a face to the instructor’s name. By providing telephone contact information, the instructor lets the students know that she/he cares about each student and is willing to communicate during off-hours.

The second element of a well-designed online course is a course description that will engage the student in the course content and secure her/his attention. A course description needs to create energy and excitement that will motivate the students to want to learn by providing solid reasons why the material is valuable and useful to know. Third, a course schedule of assignments must be included. This will allow students to plan their time management accordingly to include study time, work time, and a social schedule. The fourth element is a clear description of the instructor’s classroom policies. The following items need to be included: attendance in online discussions; grading policies; participation in chat rooms or discussion boards; weighting of various assignments; and policy for submitting assignments late. Last, a clear disclosure of the institution’s policy on cheating and plagiarism must be included with a
description of the seriousness of these offenses and the effect of such on course grade and academic standing.

Farrell added that in an online course, the instructor’s lecture notes replace the traditional lecture and need to be stimulating and informative. PowerPoint presentations of online course material become boring and do not hold student interest very long. Farrell stated “Rather, there needs to be a mix of media within the outline. Course notes, mixed with audio files, video files, links to web pages, and reference notes to the textbook provide diversity for the student and a more interesting delivery” (p. 3). Farrell’s article was based on her research and teaching interests that include asynchronous learning, computers and systems.

Moore and Kearsley (1996) proposed that one crucial factor in the success of online learning is student participation. This can occur if the instructor provides opportunities for students to discuss the subject, give a presentation on the subject, and interact with the instructor and other members of the online class. For online learning classes to be effective in getting student involvement, the instructor must plan structured activities such as simulations or quizzes, allow time for students to ask or answer questions related to the course, and encourage students to share their views concerning the topic being studied. Another aspect important in attaining student involvement is timely feedback from the instructor. If not given feedback concerning their involvement in the class, students will “have limited opportunities for comparing their progress with others in the course” (p. 149).

*Online Learning Context*

According to Peterman (2000), the face-to-face communication that is taken for granted in the typical classroom setting is missing in the online environment. Nonverbal interaction gives the instructor valuable information as to the students’ understanding of the material presented.
Peterman also suggested that online courses develop conference threads as a means to lead student interaction and replace classroom discussion. Use of email, telephone, fax, and regular mail (snail mail) are other methods used by online instructors to keep the lines of communication open between student and instructor and between student and student. Feedback is a concern for both faculty and students participating in online courses. For those attending the face-to-face class that meets once a week, feedback routinely occurs after seven days have passed. Students participating in online courses seem to demand feedback more quickly than those in traditional classes (Peterman, 2000). Threaded discussions and chat rooms are two online settings that can provide the student with instant feedback. Faculty members have begun to establish virtual office hours for those students wanting instant feedback to specific questions (Peterman, 2000).

Traditional classrooms usually do not suffer from any down time to correct technical problems. If the instructor is ill, someone else may cover that class and time is not wasted. Institutions offering online classes must shut down equipment for upgrades from time to time. If the upgrades occur during the typical times that online students are completing their assignments, frustration occurs. Most online students use late evening hours after the household has settled down for the night or weekends while not doing their normal job duties to complete online assignments (Peterman, 2000).

Furst-Bowe and Dittmann (2001) found that women are going to college for job-related reasons and “they are deliberately selecting programs delivered via distance education because of the convenience associated with online courses or other distance learning courses that are offered near their homes” (p. 410).
**Barriers**

Barriers to online learning must be acknowledged and appropriate strategies employed to overcome them. Galusha (2003) identified 6 categories of barriers to online learning. The first is cost and motivators to students. The cost of studies, changes in home life schedules, and lack of support from employers all impact nontraditional online learners. Second, lack of feedback and little or no actual contact with the instructor can negatively impact the success of this type of student. Lack of student support and services, the third category, traditionally found on college campuses puts the nontraditional learner at risk of failure. Fourth, a feeling of isolation and alienation impacts online students who wish to be a part of a larger school community. Much of the social interactions present in the face-to-face classrooms is missing in online courses. A student has no idea what classmates look like let alone sound like. A fifth barrier is students’ initial lack of experience with online study materials. Novice online learners may drop out unless they have guidance in developing new study skills (Galusha, 2003). Lastly, the sixth category is lack of training with technical issues such as computers and the Internet. This will lead to frustration on the part of the nontraditional online student.

As industry, training establishments, governments, academic institutions, and international organizations look for new markets both locally and globally, understanding the barriers that could cause an individual to not engage in online learning becomes very important (Anakwe, 1999). This study highlighted the importance of culture in academic and industry’s use of online learning by looking at an individual’s culture and (1) receptivity toward distance learning, (2) media preference for distance learning, and (3) course type preference.

Nugent (2001) was a Master’s degree student in an online program with a major East Coast University admired for its online programs. He discussed three specific barriers to his
online learning experience: not meeting with the other students and the professor face-to-face; feeling a sense of distance and not having a sense of the characteristics of those other students in the online class; and having no sense at all of the personality of the instructor. Grubb and Hines (2000) discuss four barriers that interfere with successful online learning. The first is insecurity in dealing with personal and school related issues that need to be juggled along with time commitments to family and work related issues. The second issue is the fear of dealing with other students of diverse cultural backgrounds located in distant sites while trying to learn new, challenging academic content. Technical concerns are the third issue online students must confront. If the online learner cannot access appropriate support sites or does not have the required skills to succeed in an online course environment, this barrier will be insurmountable. The fourth and last barrier discussed by Grubb and Hines is lack of feedback or contact from the instructor. Grubb and Hines found a link in the area of barriers to online learning. They proposed, “These barriers have a common thread in that they all refer in some way to communicating, engaging, and interacting with others” (p. 366). Online course delivery and design strategies must be incorporated into this learning environment to reduce these barriers.

Gender Issues

Sherman, End, Kraan, Cole, Campbell, Birchmeier, and Klausner (2000) discussed the parity of gender use of the Internet and provided three reasons why gender equality will not occur for several more years. “First there is wide variation by geographic region in ratios of male to female Internet participation” (p. 886). In the next few years, even if the United States reaches parity in Internet usage, other countries will not. Asia and Europe will have a 60% male, 40% female ratio, the Middle East, 85% male vs. 15% female, Africa, 72% male vs. 28% female, and South America, 70% male vs. 30% female (Sherman et al., 2000).
Secondly, different definitions of online participation are used for Internet studies. Sherman et al., (2000) stated that whatever definition used, women spend less time online than men. Differences in interest, attitudes, and social roles of females/males influence the level of Internet use.

Finally, a discrepancy in using computer technology may be related to the difference in Internet use between males and females. Women find computers less appealing than men (Sherman et al., 2000). The American Association of University Women issued a report that concluded distance or online education is more difficult for women than men (Carlson, 2001).

Sherman et al.’s, (2000) research study examined gender differences in Internet use in a college environment. A total of 889 underclass students (69% female and 31% male) participated in this study. Data from three cohorts from three different years were collected and analyzed. Men reported higher levels of participation in four of five areas surveyed. Those areas were browsing the World Wide Web, participating in Multiple User Dimensions (MUDs), interacting in chat groups, and reading and posting to Usenet newsgroups. Women had significantly higher use of E-mail than men. Men had more positive attitudes toward computer use than women. This study disagreed with the idea that gender parity will soon occur with Internet use.

Odell, Korgen, Schumacher, and Delucchi (2000) also examined the gender gap in Internet use among college students and found that the gap has disappeared among undergraduates. Their study of eight hundred forty three students (385 male and 458 female) found that more females use the Internet for E-mail and school research. According to Odell et al., there is little difference between male and female time spent online.

The overall consensus about gender and online learning is that the parity between male and female use remains an issue even today. Males find online participation easier to do than
females. This participation rate thus leads to the issue of learning styles. Are there differences in learning styles between men and women and older adults and younger ones?

**Learning Styles**

Merriam and Caffarella (1999) discussed two terms related to learning styles: cognitive style and learning style. Cognitive style is “characterized as consistencies in information processing that develop in concert with underlying personality traits” (p. 205). Learning styles are thought to be a more comprehensive term in that the learning environment is considered when analyzing learning styles. Thinking styles is the new term that is similar to learning styles but it deals primarily with children. In regard to nontraditional adult students, Truluck and Courtenay (1999) provided information on the learning style preferences of older adults and stated that older adults prefer structure, need more mobility, prefer learning by auditory means, like formal design, and learn either alone or with others.

**Student Behavior Online**

King, Harner, and Brown (2000) examined the relationship between students’ perceptions of current technology, their ability to self regulate themselves while participating in distance learning, and their self-efficacy. In an online learning environment according to King, Harner and Brown, this type of student behavior is important in order for students to succeed in the class. Students engaging in self-regulatory behavior set goals for themselves, watch to see if they achieve these goals, use their self-judgment skills to stay on track, and monitor their reactions during the course. This type of student usually enjoys online learning classes and will enroll in future classes of this nature. They are also more likely to contact the professor via e-mail, telephone, or setting up a face-to-face appointment (King, Harner, & Brown).
Nontraditional students in the 25+-age range were found to be learning-oriented rather than performance-oriented in a study conducted by Burley, Turner, and Vitulli (1999). The results showed that learning-oriented students want to acquire new knowledge and skills for the sake of learning while performance-oriented students want to prove their competence to others. Learning-oriented students exhibited strong positive correlation to choosing new, difficult tasks and a negative correlation to choosing easy tasks. According to Burley, Turner, & Vitulli, as students age, external evaluation becomes less important while awareness of the usefulness of knowledge increases. This concept is important to online learning in that the more information and understanding the instructor has of her/his students, the better the instructor can develop the related course work to fit the needs of the learners.

**Virtual Student Life Issues**

To some educators and administrators, the student life experiences are another area of concern when discussing traditional learning versus online learning. Student-to-student and faculty-to-student interactions outside the classroom occur very frequently on a college campus. Student associations and clubs, advising sessions, informal discussions over lunch or coffee, all of these face-to-face interactive sessions are missing with the online experience. Comparing residential campus life to the online setting, Maeroff (2003) posed the question of what colleges and universities should offer online students other than the courses themselves. Traditional colleges and universities provide sports, campus publications, libraries, dormitories, counseling, and many other amenities. According to Maeroff, “Some students, especially older ones in career-oriented programs, don’t want the amenities” (p. 272).

Dubanoski, Goodman, Braun, Roberts, and Lenzer (1999) countered this idea with the argument that online courses can be as effective for students who can function with limited
faculty/student and student/student interactivity as traditional based courses. This study evaluated the international and national usage of a telecourse and public broadcasting series concerning gerontology. Participants in this quantitative study included 40 faculty who taught the course, the training specialist from the American Association of Retired Persons’ Learning Center, two international public broadcasting users, and twenty-nine administrators. The results support the concept that online learning is one part of a more powerful learning environment than just the classroom.

Another student issue is the price of textbooks. University bookstores often increase the costs by some percentage in order to garner a profit (Personal interview, Bookstore Manager of Macon State College in Macon, GA, April 21, 2003). Online learners today can purchase textbooks easily online from different vendors. A firm in Ohio offers Web-based on softbound books. Atomic Dog Publishing offers textbooks priced 60% to 75% below the publishers’ price for many textbooks. Students can avail themselves of this online service without having to leave home.

Another important aspect of online learning is the issue of Program Planning. Without this type of planning, online learning can be frustrating for online educators.

*Program Planning for Online Instruction*

Caffarella (1998/1999) discussed an interactive program planning model for adults that is unique and different from other planning models in five ways. The first difference is the combination and breadth of the tasks and components included. Adult learning principles and practices are included into this model as the second difference. The third difference is suggested ways adult education practitioners use this model. Fourth, practical ideas are the focus for use of the model, and lastly, the fact that program planning is a negotiated process is included.
According to Caffarella (1998/1999), “Program planning often becomes a negotiated activity between and among educators, the formal leadership of the organizations or units involved, the learners, and other stakeholders in the process” (p. 27). Caffarella assigned tasks to each of the twelve components of her Interactive Model of Program Planning.

Table 1: Interactive Model of Program Planning

<table>
<thead>
<tr>
<th>#</th>
<th>Component</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Become knowledgeable about program content</td>
<td>Know culture of organization</td>
</tr>
<tr>
<td>2</td>
<td>Use negotiating skills effectively</td>
<td>Form and use coalitions</td>
</tr>
<tr>
<td>3</td>
<td>Identify program ideas</td>
<td>Decide what sources to use</td>
</tr>
<tr>
<td>4</td>
<td>Sort and prioritize ideas</td>
<td>Use clear criteria for choosing idea</td>
</tr>
<tr>
<td>5</td>
<td>Develop program objectives</td>
<td>Write clear objectives</td>
</tr>
<tr>
<td>6</td>
<td>Prepare for the transfer of learning</td>
<td>Determine key players</td>
</tr>
<tr>
<td>7</td>
<td>Format evaluation plans</td>
<td>Specify evaluation method</td>
</tr>
<tr>
<td>8</td>
<td>Determine formats, schedules and staff</td>
<td>Choose most doable program</td>
</tr>
<tr>
<td>9</td>
<td>Prepare budgets and marketing plan</td>
<td>Estimate expenses</td>
</tr>
<tr>
<td>10</td>
<td>Design instruction plans</td>
<td>Develop clear learning objectives</td>
</tr>
<tr>
<td>11</td>
<td>Coordinate facilities and on-site events</td>
<td>Create positive climate</td>
</tr>
<tr>
<td>12</td>
<td>Communicate value of program</td>
<td>Brag about accomplishments</td>
</tr>
</tbody>
</table>

(Caffarella, 1998/1999).

This table delineates each component and one of the tasks assigned.

Cervero and Wilson (1994) asserted that the power relationships students have in the world play an essential part of what the student brings to any educational situation. In the area of online learning, program planners must be aware of who is representing the learner, at what time
they are to be included in the process, and in what areas these opinions are to be integrated. Cervero and Wilson (1994) maintained “learners are people with particular interests who are engaged in networks of interpersonal, organizational, and societal power relationships that are an integral part of the planning process” (p. 144).

Important tactics that will help ensure the success of the online experience are addressing the wants of the participants at the beginning of course design to the final evaluation of the teaching at the end and using specific objectives giving materials, methods, media, testing information, and discovery methods (Huebner & Wiener, 2001). Short (2000) suggested that adult students do a free assessment of their learning style and computer skills in order to judge if online learning is appropriate for them. Both assessments are available online and provide feedback to the future student’s success dealing with online learning.

Dereshiwsky & Moan (2000) offered a number of ways that Web-courses can be made interesting to the student and actively engage their involvement throughout the term. The authors suggest mailing a welcome letter and startup CD-ROM to students one to two weeks before the class starts. Weekly, biweekly, and monthly activities are required from students online and the instructor sends out a newsletter twice a week to all students participating. The end result is students enthusiastically involved in online activities that are relevant and interactive. These students will be more likely to experience the maximum benefits of the online learning environment.

Kemp (2000) offered planning concerns related to the online environment. These include: offering support to the students before, during, and after online instruction occurs; ensuring appropriate communication happens among students and between students and instructor; helping students with their time management skills; determining that students are actively
involved in the learning process; influencing how students interact at different locations between online class sessions; accommodating those students missing a session or who cannot follow a preset time schedule; coordinating activities with all persons involved in the online course; controlling the use of media by the students; and being aware of potential technical problems and being prepared to deal with such issues by using other media or actions. Ignoring any of these planning concerns may lead to confusion and unacceptable results with the online learning experience.

Part of the solution to help students engage in online learning is the formation of online learning communities. These communities can encourage online learners to get actively involved in the online course environment.

**Online Learning Communities**

The distance that separates the online learner from peers and instructor influences the relationships of the course. A common link is missing when instructor and students live in different geographical areas and time zones. Palloff and Pratt (1999) noted:

> In the online classroom, it is the relationships and interactions among people through which knowledge is primarily generated. The learning community takes on new proportions in this environment and consequently must be nurtured and developed so as to be an effective vehicle for education. (p.15)

Poole (2000) observed that community building occurs differently in online courses than in traditional classroom settings. For online learning courses there is no physical connection between classmates, yet students find ways to connect. Using each other’s names in bulletin board messages and using keystrokes that resemble smiley faces are ways of developing a community feeling among online learners. Even though facial expressions and gestures cannot
be read during online course work and once a feeling of trust develops among class members, students’ written responses are such that emotion, meaning, and sarcasm become evident. Poole’s study examined the nature of student participation and proved that Web-based delivery did not prevent or negatively influence the development of the online class as a community.

The characteristics of online learning communities are well-designed courses that provide learning experiences allowing nontraditional students to collaborate, communicate, and build a learning community with fellow classmates (Ginsburg, 1999). Nontraditional students will then be able to learn from other students informally, gain knowledge from their instructors, and learn new ideas from study groups. The instructional goals of the course may be the same but the instructional activities will be different for online courses than for the traditional classroom face-to-face setting. Synchronous and asynchronous communication, videoconferencing capabilities, and shared workstations (e.g., whiteboards) lend themselves to helping online learners to feel a part of their learning community, reduce the feeling of isolation, boredom, and frustration that sometimes affects distance learners, and will help to reduce the dropout rates for online classes (Ginsburg, 1999).

Successful online learning communities show a large amount of interdependence among autonomous individuals with an informal leader helping to guide discussions, dividing tasks among members, and encouraging collaboration. According to Land (2002), learning communities help students to communicate ideas and swap views with distant students from around the world whose perceptions of course material might be radically different than their own. Community members are from different backgrounds, locales, schools, and countries who are unified in mutual learning goals and who must develop relationships rapidly in order to work together successfully in spite of the physical distance between them.
Online learning communities parallel the types of learning communities found on traditional college campuses where efforts are made to ensure enrichment of students’ experience above and beyond the classroom setting (Bauman, 2002). This is achieved through support services (library, writing centers, tutors), cultural enrichment (concerts, speakers, films), and common physical spaces (cafeteria, student union, library). Online students do not have the benefit of such informal interactions among students and instructor.

Bauman (2002) offered guidelines for the formation of online learning communities not only within individual online classes but also outside of the online class. For an individual online class, the instructor should: communicate often with class members (not just emails but using chat rooms and class discussion web pages); make the class interaction as public as can be in order to allow students the opportunity to pose questions; make space for non-class-related interaction using a discussion page created for that purpose; know the strengths and weaknesses of the technology being used for that online class and stick to the simplest tools available; and interact with students by asking questions in the class discussion pages set up for that purpose. In order to create learning communities outside the online class setting, the instructor should: consider the support services needed for the online class, such as the library; and make available opportunities for intellectual and cultural enrichment online. Bauman concluded that Web pages and discussion lists be used to engage students in a conversation about real-time cultural events held in the students’ own communities.

Some online learning communities react with high levels of commitment, energy, proficiency, and imagination when engaged in a task for the course while others are not able to function as efficiently. Moore and Kearsley (1996) noted:
These groups give time far in excess of what should be expected, are task-oriented, productive, and continue to communicate informally by E-mail and in other ways, seeming to have fun working together. (p. 135)

Collison, Elbaum, Haavind, and Tinker (2000) discussed web-based collaborative learning community characteristics that help such communities to be successful. These four authors are members of The Concord Consortium, a research and development organization located in Concord, Massachusetts. This non-profit group is dedicated to revolutionizing education by the use of information technologies. Although their research is based in the Virtual High School (a network of high schools in the United States that provide over 200 netcourses), the material they present is applicable to online postsecondary courses. Characteristics of successful online communities are:

- Participants post regularly.
- The online community meets its members’ needs, and participants express honest opinions.
- Participant-to-participant collaboration and teaching are evident, and spontaneous moderating occurs among the participants.
- Reasonable venting about technology, content, and even the facilitator is acceptable and evident.
- Participants show concern and support for community. (p. 77)

Students involved in the online educational setting benefit from being a member of a learning community. Learning communities provide support and encouragement to members and give feedback on assignments. Groups promote the feeling that help is available if needed from other community members (Willis, 2002). According to Bensusan (2001) students can easily tell
the difference between teaching (typical lecture format) and learning (students finding information on their own through inquiry) and interaction (talking to and sharing ideas on a topic with group members). This leads to the topic of the effectiveness of online learning.

According to Cahoon (1998), personal computers are becoming cheaper so more adults will be able to participate, learning systems are becoming more distributed to allow students and instructors to operate personal Web servers, Web-based instruction will become smarter as a result of research into intelligent tutoring systems, and speech recognition and alternative input devices will make the Internet more accessible to adults not able to work effectively with on-screen text. Online learning provides students the opportunity to complete their college work at any time of the day and any day of the week. The effectiveness of this method of learning is important when considering the types of students involved in online learning.

Effectiveness

When considering the attitudes of online learners, it is important to look at the learning styles of online students compared to traditional setting students. A study by Diaz (2000) using the Grasha-Riechmann Student Learning Style Scales (GRSLSS) compared student characteristics and success in an online course versus a traditional setting. Results showed that students in traditional settings had lower scores on the Independent learning style scale and higher scores on the Collaborative and Dependent learning style scales. Online learning students showed the opposite with higher scores on the Independent learning style scale and lower scores on the Collaborative and Dependent learning style scales. Use of the t test showed that these differences between the two learning settings were not attributed to chance; that is, they were statistically significant.
Two other important characteristics of a successful online class involve student evaluation and feedback and the mood for the class. Evaluation is important for the student in order to reassure them the instructor knows who they are and provides feedback to them in a timely manner. Student participation in weekly discussion sessions, weekly assignments, quizzes, and projects can be part of the student evaluation process. Feedback is critical in an online classroom setting. Since online students are not face-to-face with their instructor, they need regular positive feedback on a timely schedule to know the instructor is paying attention to them and they are performing as required (Farrell, 2001).

While online learning education has advantages for both the instructor and student, there are aspects of this type of learning that take away from the collegial social atmosphere present in traditional classroom settings. Students may not feel a part of the class because of a lack of face-to-face contact, become isolated from the instructor and their peers, and withdraw from the online learning experience. Palloff and Pratt (2001) believed that the role of a group or learning community in an online class is crucial to the success of that class because “it provides social connections that allow students to get to know one another as people” (p. 138).

Hanna, Glowacki-Dudka, and Conceição-Runlee (2000) suggested that learning communities in online courses help students to interact through social relationships and this is crucial for learning. It provides “rich opportunities for creating teams for problem solving, project development and discussion” (p. 13). They further believe “Learning communities are commonly formed in an interactive online environment when a group of learners forms to expand its collective knowledge and skills, thus supporting the growth of individual knowledge and skills” (p. 14). The origins of online learning communities are based on efforts to prevent the isolation of students.
Accreditation Issues

One unresolved issue concerning online learning is approval of online learning degree completion programs by accreditation boards (Stallings, 2000). There is increasing acceptance of this educational approach through institutional foundation endorsement, board of education approval, government funding, accreditation association approval, legislative support, and an increasing worldwide demand for online learning, training, and education. Park University in Missouri has being participating in online learning for twenty years with thirty-seven sites in twenty states. The students primarily served by this segment of Park University are in the military and the enrollments have exploded from 29 to over 1,750 students per term in less than three years. When the North Central Association (NCA) accreditation team arrived in the summer of 1999, Park held all of the class visits and individual/group and student/instructor interviews online. The actual learning environment involvement of the accreditation team and Park’s years of experience with online learning provided a concise, coherent framework within which the team could adequately evaluate the quality of learning provided by Park’ online instruction (Stallings, 2000). As a result of Park University’s forward thinking, NCA approved degree completion programs in computer science, criminal justice, and management.

Accreditation approval by the NCA given in 1999 to Jones International University provoked a strong reaction from the American Association of University Professors. Many professors do not consider a student’s degree obtained from an online university equal to an education received at a traditional college setting. As an example, AUPHA claimed that NCA was not very careful in examining the virtual institution as they are when looking at traditional education. NCA’s response involved the idea that those who believe face-to-face interaction is the only way to obtain quality education will question online education at every turn. Many
faculty and students feel that online programs actually improve faculty/student and
student/student interaction (Stallings, 2000).

One Board of Education in the State of Maine was involved in a frustrating example of
trying to implement change by working to establish a virtual college within its boundaries.
Written criteria for this college were based on laws governing the licensing of a traditional
institution. The visiting team wanted binders of printed materials and conference room meetings;
a virtual tour was not requested. The team was not ready to look at a virtual university with
virtual classrooms and most support services for students and faculty available anytime,
anywhere. Accreditation issues for online institutions will be a testing ground for higher
education, accrediting bodies, and interested institutions (Stallings, 2000).

Critical Issues

Those elements crucial to the understanding of the online learning discussed so far
include the area of adult education, transformational theory, online learning, online pedagogy,
gender, and online learning communities. There are opposing viewpoints that must be considered
when discussing the area of online learning and barriers to successful participation by adult
students. This ensures a fair and unbiased look at the topic.

Dissenting Views

Valenta, Therriault, Dieter, and Mrtek (2001) identified technological issues (using the
computer and online connections), lack of administrative support (lack of materials), restrictions
on interactivity (student difficulties in making friends online), bigger student work load (online
courses need more work), and costs (equipment and phone charges) as negative features of
online learning.
Armstrong (2000) provided another view of online learning and its effect on traditional universities and colleges. Internet Mediated Distance Learning (IMDL) is considered by him to be a disruptive technology. Disruptive technology initially leads to an “inferior” product being produced that does not meet the standards of the industry (in this case, traditional education) but has different benefits and a lower cost. Not many institutions of higher learning jumped on the idea of online learning in its infancy. New demands from emerging markets, however, caused the disruptive technology of online learning to improve and eventually to meet the expectations of the mainstream market. In the United States today, higher education is a $240 billion-a-year market. Community colleges and other institutions have shown that there is a need for formal online learning and a growing market among adult learners for this convenient, easily accessed, low-cost form of education (Armstrong, 2000).

Statistical comparisons between teaching methods have been done for many years. Comparisons between traditional lectures, correspondence courses, telnet courses, radio courses and television courses found that there is no significant difference in the amount of learning that occurs (Howell, 2002). The strength of Howell’s work is that it offers several ways to effectively use educational technologies for effective online learning. His references were varied but some seemed out-of-date. For an article written in 2001, the use of sources from the 1980s seemed inappropriate.

An article by Weigel (2000) presented another side of the online learning debate. One question posed by Weigel concerns the reasons institutions of higher learning are drawn to online learning. Are colleges and universities embracing online education because they want some of the market action or do they really believe it will expand and intensify the learning experience of adult students? He disputes the “No Significant Difference” finding found when comparing
learning outcomes of lecture-based classroom education to online education results. His idea is that using as a benchmark the traditional educational setting when evaluating a new and different delivery system for education is a flagrant exercise of misuse. Weigel felt that online learning as it exists today is simply “porting the classroom.” To him an online class is simply a course with an enhanced program of study including lecture, reading assignments, discussion groups, practice tests, and email use that is placed on the Web.

**Ethical Issues**

Standards of conduct and ethics are another area of concern when dealing with online learning. Adult learners need to understand how copyright and fair use law relates to their use of the Internet when doing research for online courses. Fair use involves never passing off someone else’s work as their own while plagiarism deals with not citing the sources of information used (Goett & Foote, 2000). One of my recent dental hygiene students turned in an assignment dealing with OSHA (Occupational Safety and Health Act) Guidelines for the safe practice of clinical dental hygiene. This information deals with blood-borne pathogens and sterilization/disinfection methods to ensure safety of both patient and operator. The student turned in a very well written report and gave a Web site at the end of her paper. In grading the paper, I went to the Web site and found that the student had downloaded and printed the exact information as it appeared on OSHA’s site. When questioned about plagiarism and unethical behavior, the student was nonplussed that I had a concern about her behavior. She felt she was covered because she had given a Web site source for the information. The student received a grade of F for the assignment and redid the paper. Both grades were averaged for the final grade.

Hughes (2000) discussed another ethical point of adult education. Instructors must take on the responsibility of the effects their pedagogical teaching ways have upon the student. We as
educators must not trample the student’s preferred way of thinking and knowing but give them the tools to better investigate events, texts, ideas, and values.

The issue of access to online learning relates to the socioeconomic status of the student seeking such courses. According to Home (1998), the “issue of financial barriers requires further study in this era of rising costs and decreasing educational support” (p. 90). Role contagion may interfere with successful learning. This is where women find it difficult to complete their role as a student due to worries about their other responsibilities, such as mother, wife, employee, or businesswoman.

Summary

Adult education has changed throughout the centuries. From the use of the written word and alphabet to the use of print, faxes and phones, and on to the Internet, adult education is never static. Technology changes, easier access to computers at home and access to the Internet have changed today’s learning environment. One current form of adult education used worldwide today is that of online learning.

Based on the literature review, the evolution of online learning from the correspondence style course of the 1800’s to the Internet online courses of today is a four-generation event. The first generation from 1850 to 1960 of one technology online learning using one-way communication by way of the phone or mail system gave way to the second generation from 1960 to 1985 using multiple media technologies that were still one-way communication methods. Computers arrived during the third stage from 1985 to 1995 and allowed two-way interactive capabilities with asynchronous and synchronous communication between student and instructor and student-to-student. The fourth generation uses high-bandwidth computer
technologies to improve the types and quantity of information exchanged, shorten the time to make such exchanges, and increase interactivity between participants and instructors.

Various authors have researched and discussed online learning in general but not specifically the area of perceptions of nontraditional students. Studies have shown online learning courses to be successful if they motivate and hold the interest of participating students. Online students are older, highly motivated, willing to call the instructor for assistance, voluntarily seek further education, self-disciplined, and have a more serious attitude toward learning (Willis, 2002).

The issue of nontraditional students and their perceptions of online learning is significant in today’s academic environment as more and more colleges and universities decide to develop and participate in this method of instruction. In order for this type of educational course delivery to remain a viable method of achieving not only educational institutions’ goals but also the goals of nontraditional students, this area of how online education is perceived by them must be thoroughly researched. The development and use of online learning communities is proven to be one successful method to improve nontraditional students’ perceptions of online learning. This study will endeavor to add to the body of literature that pertains to online learning, specifically concerning the area of online learning as perceived by nontraditional adults over the age of twenty-five.

This study found some of the perceptions that prevent nontraditional adult students from succeeding in online courses. This in turn will provide us with information essential for creating an atmosphere that will allow nontraditional adult students to do well in the online learning environment.
CHAPTER 3

METHODOLOGY

This chapter describes the design of the study, including how the participants were chosen and the methods of data collection and analysis. The conceptual framework for the study was based in the literature of online learning and adult education theory. This study attempted to build further understanding of the topic by the use of qualitative methods using the personal interview style of data collection.

A qualitative approach was used in order to allow the participants to relate their individual perspectives concerning their experiences with online learning and to discover their transformational learning experiences in regard to their own growth and development in the area of online learning.

Purpose of the Study

The purpose then of this chapter is to outline the methodology process used to determine factors that influence online learning success of nontraditional adult learners. The research design of this study was a qualitative study, which created data through the use of in-depth qualitative interviews and field notes. Participant interviewing was the technique employed to record participants’ reactions to their online learning situations. Open-ended questions within loosely structured interviews were conducted with as many participants necessary over the course of six months to achieve saturation on the topic of online learning. Saturation of the topic occurred when the same themes or ideas begin to repeat in each new interview.
The procedure used for analysis of the data collected in this study was the constant comparative analysis method. This method entailed comparing one piece of data with another piece to establish differences and likenesses, (for example, one quote about not being computer literate as a nontraditional student with another quote by a different student or by the same participant). “Data are grouped together on a similar dimension. This dimension is tentatively given a name; it then becomes a category” (Merriam, 1998, p. 18). By comparing one section of data with another to find variations and similarities, this method will uncover patterns in the data. Units of data (any meaningful segment of data) are sorted into groupings that have something in common. The data should provide information relevant to the study and be able to stand alone without further information needed (Merriam, 1998). Immediately after each interview is completed, I transcribed them word for word. The stages of data analysis included generating tentative categories and codes for each interview and comparing interviews (Merriam, 1998).

**Qualitative Research**

Qualitative research is the method of research that deals with soft data, such as descriptions of people, conversations or places. This type of data cannot be explained or discussed using statistical methods (Bogdan & Biklen, 1998). According to Schwandt (2001), “Broadly speaking, qualitative methods are procedures including unstructured, open-ended interviews and participant observation that generate qualitative data” (p. 213). Researchers using the qualitative method are interested in understanding the behavior of their subjects from the viewpoint of the subjects’ frame of reference. Data are collected through continued contact with the study’s participants whatever the setting (e.g., computer lab, classroom, home). Qualitative researchers do not have a specific hypothesis to test but they do have a focus for their research. They are trying to understand the meaning of human performance (Schwandt, 2001) and how
people find meaning in their experiences. According to Merriam, (1998), qualitative research seeks to understand the phenomenon being studied from the participant’s point of view or emic, has the researcher as the data collector and analyst, includes fieldwork, uses inductive reasoning, and has a richly descriptive end product. In-depth interviewing is the most characteristic feature of qualitative research.

*Five Aspects of Qualitative Method*

According to Bogdan and Biklen (1998), there are five aspects for this research type that define qualitative style. Not all of these aspects need occur in a study for it to be classified as qualitative; it is really a matter of degree or what aspects are actually there. The first aspect of qualitative research is that the researcher is the key instrument and the research occurs in the actual setting where the event occurs. The second aspect concerns the descriptive nature of qualitative research. Numbers and statistics are not employed here because the data comes from the description, words, or pictures the researcher has collected. Third, qualitative research is concerned with the actual process of data collection, not the end result. Fourth, the data collected during a qualitative study is evaluated with the inductive method as opposed to the deductive method. The premise developed by the qualitative researcher is grounded in theory and developed as the study progresses. Lastly, qualitative research is concerned with the point of view of the subjects and what meanings people use to make sense of what is happening to them.

*Design of the Study*

The purpose of the study was to understand how nontraditional adult learners view online learning, what factors influence their participation, and what barriers are perceived to exist that interfere with their successful online learning. The online student population is growing by at least 30% and 75% of traditional colleges and universities are using online degree programs
Participant Selection

In relation to aging, the developmental period of the life span of age 25+ years was my focus age group. Nontraditional students are those 25 and older, working, and raising a family (U.S. Department of Education, 2002). Many older adults want to pursue degrees and study other subjects in order to stay mentally active, to continue to personally develop, to make up for opportunities missed at a younger age, to foster a greater sense of achievement, to learn for the joy of learning, to help maintain their independence and well-being, to pursue meaningful and purposeful activity, and to achieve goals related to personal competence (Ellis, 1996).

When a researcher desires to comprehend the situation that is being studied, the sample of participants must be chosen from people who have something to contribute to the study. “Purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned” (Merriam, 1998, p. 61). Participants who could contribute a lot to my data collection and perceptions of the problem will be sought. The sample will be purposeful.

There were two criteria for those involved in this study. The first was that the participant be a nontraditional, post-secondary student, 25+ years of age. This is the common, accepted definition of nontraditional students age wise. Then second was the nontraditional student is currently or must have been enrolled in a formal online learning course within the past three years. Students enrolled at a southeastern college located in Macon, GA were the source of my participants. More female than male students (representative of the student population at the
college) were selected based on the above-mentioned criteria. Some of these students will be currently enrolled in at least one online class and some will have failed to complete online classes within the past three years. I used the snowballing effect of gathering other participants by asking current participants for referrals. This is the most common form of purposeful sampling (Merriam, 1998). At the end of each interview I asked the participant to name other nontraditional adult learners they knew who were either currently participating in online learning or had done so recently.

Data Collection

The study was completed by conducting interviews using a list of questions created to extract information that will help explain the problem studied in this study. Use of the constant comparative method of data analysis means that the questions may change slightly during the process. Each participant will be informed that I will spend about one hour per interview and there may be a follow-up session required.

Based on a review of the adult education and online literature, research questions used for the interviews were designed to lead the conversations of the interviews toward discussion of online learning (See Appendix A). A semi-structured interview format was used to enable me to “respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic” (Merriam, 1998, p. 74).

Interviews

The interview process in qualitative research is designed to be open-ended and fluid in order to allow the researcher to discover the experiences of the participants in their own words. Bogdan and Biklen (1998) contend:
In qualitative research, interviews may be used in two ways. They may be the dominant strategy for data collection, or they may be employed in conjunction with participant observation, document analysis, or other techniques. In all of these situations the interview is used to gather descriptive data in the subjects’ own words so that the researcher can develop insights on how subjects interpret some piece of the world. (p.94)

Small talk is usually how interviews begin and then can be guided to specific topics and the interview is a purposeful conversation conducted between two people, directed by one of these people with the idea of gathering information from the other (Bogdan & Biklen, 1998). The interview is used to produce rich data containing words that reveal the participant’s view of the topic and a good interviewer will convey interest by using nods of their head and appropriate facial expressions to show attentiveness to the subject.

Patton (1987) believed that long-winded responses and getting off track will hinder the amount of time available for conducting the interview. The interviewer must control the interview process. Patton believes that “Control is maintained by (1) knowing what it is you want to find out, (2) asking the right questions to get the information you need, and (3) giving appropriate verbal and nonverbal feedback” (p. 130). Each word is important in understanding the participant’s way of viewing the topic and a good interviewer should listen attentively.

**Interview Guide**

Patton (1987) stated there are three approaches to collecting qualitative data, each with its own preparation, conceptions, and method of use. According to Patton, (1987), “The three choices are: (1) the informal conversational interview, (2) the general interview guide approach, and (3) the standardized open-ended interview” (p.109). I selected the second method, the general interview guide approach, because it is designed to ensure the same information is
gathered from a number of participants by covering the same content. The interview guide allows the interviewer to explore topic related areas and ask probing questions to further elicit information from the interviewee. Patton (1987) explains: “Probing is an art and skill that comes from knowing what you are looking for in the interview, listening carefully to what is and is not said, and being sensitive to the feedback needs of the person being interviewed” (p. 126). The literature search did not provide appropriate questions for my research interview so I developed a Researcher’s Interview Guide (Appendix A). A pilot study was conducted from this guide and based on the responses gathered, this Interview Guide of five questions will be used for the participants to be interviewed. Bogdan & Biklen (1998) set forth that: “Even when an interview guide is employed, qualitative interviews offer the interviewer considerable latitude to pursue a range of topics and offer a chance to shape the content of the interview” (p. 94).

Field Notes

Field notes offered another dimension to the interviewing process. Oftentimes comments made before and after the interview are missed by the tape recorder as well as physical movements of the participants, and impressions of the interviewer. Bogdan and Biklen (1998) declare: “The tape recorder misses the sights, smells, impressions, and extra comments said before and after the interview” (p. 108). I kept an account of such material to help in the triangulation of the data collected during the interview process.

Data Analysis

Interviews and field notes formed the database for this qualitative study. Analysis of the data amassed and the continual organization of the research are important factors in the success of this research. Factors were researched in-depth through observation and interviews of participants meeting the following criteria: twenty-five+ years of age and enrolled in or
previously enrolled in an online class. This topic of barriers to online learning as perceived by nontraditional students lent itself easily to the qualitative method of research. Rich, deep data were derived from the in-depth interviews and observations that completed on participants in this study.

The constant comparative method of data interpretation and analysis was employed to find themes, categories, relationships, and other events that affected students’ experiences in online courses (Merriam, 1998). Interview data and categories were compared. Interview notes were used to build a triangulation among data collected. Reflective memos were completed after each interview. This process of recording thoughts helped me concentrate on the interview content and think about what was being discovered concerning online learning and nontraditional adults.

Validity and Reliability

Denzin and Lincoln (1994) stated there are four criteria applied to disciplined inquiry: 1) “internal validity, the degree to which findings correctly map the phenomenon in question; 2) external validity, the degree to which findings can be generalized to other settings similar to the one in which the study occurred; 3) reliability, the extent to which findings can be replicated or reproduced by another inquirer; and 4) objectivity, the extent to which findings are free from bias. The findings of this research and how they match the participants’ construct of reality are considered internal validity (p.100). Janesick (1994) described validity as having “to do with description and explanation, and whether or not a given explanation fits a given description” (p. 216). The question is then, does the explanation make sense and is it credible?

To ensure internal validity I used four research strategies: triangulation, member checks, peer examination, and listing my own biases and perspectives. Triangulation involved using
more than one form of data collection because no single form of data collection can show all there is to know and learn about the research problem. Member checks were completed by allowing all participants to review the tentative themes interpreted from their interviews and asking if they agreed with the results. Peer examination allowed several of my colleagues to make comments on the findings derived from the interviews.

According to Bogdan and Biklen, (1999) reliability is the expectation that there “will be consistency in results of observations made by different researchers or the same researcher over time” (p.35). In the qualitative setting, this definition does not hold necessarily true. Researchers come from different backgrounds and will tend to assess the topic being researched from their own perspective. For example, a psychologist may look at the self-concept of adult learners in an online learning setting while a sociologist might look at the social interaction of the same class of adults. The breadth and correctness of the data concern the qualitative researcher more than their results being duplicated by other researchers. Reliability then is more of a fit between what the researcher recorded as data and what actually occurred in the situation being studied.

Trustworthiness is what makes an investigation and its findings noteworthy to the reader (Schwandt, 2001). Lincoln and Guba (1985) developed four criteria concerning trustworthiness. The first is credibility. Similar to internal validity, it addresses the fact that the researcher must give assurances to the participants that the reconstruction and representation of the data will match the participants’ views of their life and experiences. The second criterion is transferability. Similar to external validity, the researcher needs to provide readers with enough information on the case studied so the reader can transfer similarities to a new case. Third is dependability. This is close to reliability and means the researcher must insure that the process was documented, rational, and obvious. Finally, confirmability, similar to objectivity, means the data collected is
not just a figment of the researcher’s imagination. Field notes were used as well as triangulation of data. The data was presented in a rich, descriptive manner that conveyed the experiences of my subjects.

Validity, reliability and trustworthiness were assured through the use of member checks, peer examination, auditing, and submersion in the research situation for a long enough time to ensure an understanding of the perceptions of online learning by nontraditional students.

Limitations

The scope of my research was deliberately limited to investigating online learning as perceived by nontraditional adults attending a four-year college. Since this college is located in the Southeastern United States, the results obtained may not be the same as from other geographic areas of the U.S. The results of this sample are not generalizable to all nontraditional adult learners engaged in online learning but logical inferences may still be made from this data collected. Future changes in online learning will include technologies like streaming video, digital, video, intelligent software agents and virtual reality. These changes will transform the realm of online learning as it exists today.

Biases

In any qualitative study, it can be expected that a certain amount of researcher bias will arise. Given that my first experience with online learning was a failure, one would expect a negative bias to be evident in my research. I am also a nontraditional student who has continued to be engaged in online learning. Most recently, I have enrolled in a course from the University System of Georgia concerning online learning that will use Palloff and Pratt’s Building Learning Communities in Cyberspace (1999) as the text. I was hoping to offer a course online by spring 2004 but will not be able to develop such a course by that time frame. I have begun to shadow an
I am a registered dental hygienist with 8 years of full-time private practice experience and 22 years of part-time experience in the field. I have been an educator for 26 years at a four-year college located in the Southeastern United States. I hold two Master degrees, one in Education (University of Kentucky, 1977) and the second in Health Care Policy and Administration (Mercer University, 1996). As a dental hygiene professional and educator, I am fully aware of the Code of Ethics of my chosen profession. Those ethics include honesty, adherence to the highest moral standards in all I do, and standards of right conduct. In 2002 the college closed our Dental Hygiene Program and I moved to the position of Program Director of a Health Services Administration Program. I carried those same ethical behaviors with me to my new position.

When computer technology arrived on the campus in the early 1980s, I resisted learning how to use such new fangled equipment. Today I have a home computer and a laptop too. You are never too old to learn new ideas.

Pilot Study

I completed a pilot study by conducting two participant interviews. The type of participants for my sample selection was non-traditional adults involved with Web-based instruction in some manner. Specifically, they met the following criteria: 1) they were 25 years of age or older, 2) they participated in some type of a Web-based learning situation, and 3) they have a computer at home with access to the Internet. One participant was a full-time instructor in the Health Information Technology Program at a four-year college in the Southeast. The second is a staff member in the Advising Center of the same institution.
The interviews in my pilot study were a contrast in content. One participant was not computer literate and provided rich data for my topic. The other was extremely computer literate so that interview provided only limited information. During the fall semester of 2001, the interviews were conducted in an office setting on the campus of a four-year Southeastern college and were taped with a standard tape recorder. The interviews lasted for a little over an hour (75 minutes) with 2 hours and 30 minutes of data collected. After transcription, a total of 34 pages and 400 lines of data were produced.

Angelina is a forty-nine year old instructor at a four-year college. She is currently enrolled in a Master degree program through the Web. Her experience with computers began in the 1970s when punch cards were used to feed information into the computer. She has seen many changes in computer technology but is not comfortable with Web-based instruction.

Dirk is a forty-five year old computer “geek” who has six computers in his home. He is an Instructional Technology graduate from a four-year college and is currently enrolled in two Web-based courses in business. He is very computer literate but still discussed some barriers he perceives in his situation.

The interviews took about an hour and a half and covered the questions listed in the data collection part of this chapter. There were times when the sessions went in a direction not expected. One participant had recently been enrolled in an online class; the other was currently enrolled in an online bachelor’s degree program from a Southeastern four-year college.

I transcribed the tape recordings of the interviews and completed some preliminary analysis. I kept track of my reactions during the two interviews and found that the questions asked did indeed cover the information I hoped to understand about online learning, perceptions, and nontraditional students. The following are categories found in both interviews: a feeling of
isolation; lack of experience with the Internet; problems with computer literacy; lack of motivation; problems with visual and mental acuity; and dependence on younger people for assistance in using the computer. The perceptions of online instruction provided by this study’s participants and supported by the literature review include physiological factors, such as visual acuity and mental acuity, and psychological factors, including lack of experience with computers and the Internet, a feeling of isolation, and dependency on younger people. Computer literacy and motivation were also part of the responses.

The limited information gathered from such a small number of participants interviewed led this author to conclude that more research is needed in online learning perceptions of nontraditional adults. A broader range of participants in age and online learning instruction experiences will hopefully support the initial findings of this study.

I chose the qualitative method for my research because it is an interesting approach for studying the topic I have selected for my dissertation. Researchers have experiences and qualities that serve to filter and form the research from the beginning. I had a very negative experience with online learning several years ago and know that this experience could affect the collection and interpretation of data. As a researcher I cannot eliminate this bias but I feel I can manage by acknowledging this from the beginning. Identifying personal subjectivities through the process of the research is one way of controlling bias (Pushkin, 1988). The results of my research provided a humanistic understanding of online learning. With the application of the methodology described, the researcher learned how nontraditional adult learners perceive online learning.

Summary

The purpose of this chapter was to understand how the nontraditional adult learner perceived the educational setting of online learning. A qualitative approach was used to allow the
participants to express their feelings and experiences. Data was gathered from personal interviews, transcribed, and evaluated.
CHAPTER 4

FINDINGS

The purpose of this study was to understand how nontraditional adult learners perceive online learning. This qualitative study included face-to-face interviews of twelve nontraditional students who are or have been involved in online learning. The interviews were completed in a variety of settings including faculty offices, classrooms, a conference room, and an on-campus Faculty Development Center. The investigation is guided by three research questions.

1. How do nontraditional adult students relate to online learning?
2. What factors influenced their successful online learning experiences?
3. What factors contributed to their non-successful online experiences?

The constant comparative method of analysis was applied and three sets of interrelated findings were inductively compiled from the data. This chapter is divided into two parts. The first describes the profiles of the participants and the second section presents the findings of the study.

Online Learning

The Internet has impacted many aspects of our lives, such as medicine (telemedicine), buying goods (online shopping), personal communications (email) and entertainment (Web sites). It has made education available to anyone who wants and can afford it, anytime, for any purpose such as education, training or leisure. More colleges and universities are now including online courses as part of their curricula in order to attract more students and increase funding. Corporations are using online courses to train employees worldwide because it is efficient. There
are questions to answer concerning online learning and its effectiveness. This study investigated nontraditional students in the geographic center of a U. S. state to determine their perceptions of online learning.

Participant Profiles

Twelve interviews were conducted for this study initially, one per participant. As the study progressed and themes were interpreted from the data, member checks were completed. The number of interviews more than doubled because I had to return to five participants again to clarify some points of their interviews. The member checks allowed the participants to agree or disagree with the findings. The majority of participants are between 35 and 60 years old and all have been or are currently enrolled in online courses in their chosen curricula of study. Ninety-two percent or 11 of the participants are enrolled in college at the present time, from technical colleges to four-year colleges to graduate school. One has recently graduated and is looking for employment in the teaching field.

The participants were eager to participate in the data collection process of this research project. The average length of time per interview was ninety minutes. All interviews were tape recorded and then transcribed by the author to maintain the integrity and validity of the content of each one. Participants did not hesitate in giving their candid feelings, opinions, experiences, and suggestions dealing with the topic of online learning. Some of the participants gave leads to other nontraditional adult learners they felt would be good candidates for interviewing.

Table 2 describes the characteristics of the interviewees including their age range, highest degree earned, enrollment status in online classes, gender, race, and occupation. There were 5 male participants and 7 female; 9 White and 3 African American participants; and 50% were employed at the time of the interviews.
Table 2: Participant Profiles

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age Range</th>
<th>Degree</th>
<th>In Online Class*</th>
<th>Gender</th>
<th>Race</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LaVerne</td>
<td>63</td>
<td>MS</td>
<td>No</td>
<td>F</td>
<td>W</td>
<td>Hygienist</td>
</tr>
<tr>
<td>Angelina</td>
<td>58</td>
<td>MS</td>
<td>No</td>
<td>F</td>
<td>W</td>
<td>Teacher</td>
</tr>
<tr>
<td>Babs</td>
<td>54</td>
<td>AS</td>
<td>Yes</td>
<td>F</td>
<td>AA</td>
<td>Student</td>
</tr>
<tr>
<td>John</td>
<td>49</td>
<td>MS</td>
<td>Yes</td>
<td>M</td>
<td>W</td>
<td>Executive</td>
</tr>
<tr>
<td>Courtney</td>
<td>46</td>
<td>AS</td>
<td>Yes</td>
<td>F</td>
<td>AA</td>
<td>Student</td>
</tr>
<tr>
<td>Trey</td>
<td>38</td>
<td>MS</td>
<td>Yes</td>
<td>M</td>
<td>W</td>
<td>Professor</td>
</tr>
<tr>
<td>Madelyn</td>
<td>37</td>
<td>PhD</td>
<td>No</td>
<td>F</td>
<td>W</td>
<td>Teacher</td>
</tr>
<tr>
<td>Dirk</td>
<td>35</td>
<td>BS</td>
<td>Yes</td>
<td>M</td>
<td>W</td>
<td>Manager</td>
</tr>
<tr>
<td>Glen</td>
<td>33</td>
<td>BS</td>
<td>No</td>
<td>M</td>
<td>W</td>
<td>Administrator</td>
</tr>
<tr>
<td>Armond</td>
<td>29</td>
<td>MS</td>
<td>No</td>
<td>M</td>
<td>W</td>
<td>Teacher</td>
</tr>
<tr>
<td>Monica</td>
<td>28</td>
<td>BS</td>
<td>No</td>
<td>F</td>
<td>W</td>
<td>Student</td>
</tr>
<tr>
<td>Lisa</td>
<td>26</td>
<td>AS</td>
<td>Yes</td>
<td>F</td>
<td>AA</td>
<td>Student</td>
</tr>
</tbody>
</table>

*denotes enrollment in online class during study

Individual Participants

LaVerne

LaVerne is an early sixties White health care professional who has enrolled in several online courses. She initially was not comfortable with accessing online material and depended on her husband to complete the connections for her. LaVerne had previously been employed in local dental offices and as a clinical faculty in a Dental Hygiene Clinic but now she teaches online
classes at a Georgia college. She provided comments from both sides of the topic when interviewed. We completed the interview in the 2nd floor Conference Room at an area college. LaVerne finds it hard to connect with her online students and misses the face-to-face interaction provided by traditional classroom settings. She believes it is important to maintain the human touch as part of communicating with others.

Angelina

Angelina is a White woman in her early fifties with a family. She divorced after many years of marriage due to “another woman” being involved with her husband. This was his second affair and she decided she had enough of his behavior. Angelina met and married her second husband recently and is very happy. She is a certified medical records coder and she completed her Master’s degree online from a college located in Minnesota. Over 90% of her courses were online with 10% being completed on campus. She found it difficult when she began to do online courses because she felt she was computer illiterate and her son initially had to help her with the computer access part of her courses. Angelina eventually stopped needing her son’s help and now has taught courses online herself.

Our interview took place in my office on the campus of a Middle Georgia college. Angelina was very informative about her online experiences. She now lives in Florida and teaches online classes in her specialty area.

Babs

Babs is a petite, dynamic, energetic woman. An African-American in her early fifties, she is a registered nurse employed full-time at a local hospital and a professional singer. She sings at times with the local symphony orchestra and has a beautiful mezzo-soprano voice. Her family
supported her decision to earn her Bachelor’s degree. Most of her classes are at night and she has taken some online classes.

The interview took place in my office. Babs considers herself to be a bold person who is willing to try all kinds of new things. In regards to her computer, when she makes mistakes and freezes all the programs, her son comes over and removes all of her programs and then reboots the computer from the ground up. She is very enthusiastic about her online experiences.

John

John is a bearded, middle-aged, White businessman employed by a local health care company in Georgia. A motorcycle enthusiast, he and his wife ride cross-country every year on his Gold Wing. He is the Vice-President of a company that manages area assisted living facilities and nursing homes. He recently spent 48 hours straight providing counseling to employees of one nursing home in a small Georgia community where an employee was shot and killed by her estranged husband in the facility parking lot as she was going to work. John is a dedicated, conscientious healthcare manager who puts the welfare of his employees first and treats all of them with utmost respect.

This interview took place in a classroom of an area college. I have known John for five years and find him to be an articulate and well-groomed man. As his role in management increased in responsibility, John found he needed to improve his knowledge in one area. He enrolled in several online courses at a technical college a few years ago to help him understand computers and software. These courses helped him to understand the inside components of computers and taught him some aspects of software but he is not that enthusiastic about online learning as you will see in his interview. Although he is middle-aged, John believes you can teach an old dog new tricks and he still remains interested in taking online courses again and
even teaching some courses online. He has recently enrolled in a graduate doctoral program with online capabilities.

Courtney

Courtney is an African-American female undergraduate student in her late forties with one child. She was raised in rural South Georgia by a very superstitious family and still will not sweep dirt out her front door after sunset (brings bad luck). Indoor plumbing was not available to her family during her youth and she has memories of “slop jars” and walks to the outhouse in the dark of night. Courtney will soon finish her Bachelor’s degree in Health Services Administration. She is employed full-time at an area Mental Health facility and can only take classes during the evening hours. As part of her college experience, she enrolled in online courses and is very honest about her experiences with this type of learning experience.

Her interview occurred in my office at an area college. Her nine-year old son came with her to the interview. He was very polite, quiet, and did not interfere with our interview process. She has brought him to past conferences during registration so his presence did not affect our interview. Courtney really likes the convenience of the online classes and actually prefers that type of class to the face-to-face type.

Trey

Trey is a White male educator in his late thirties teaching at an area two-year college. He is the caretaker of his family’s farm and talks about spending quality time thinking when he is on his tractor mowing the grass. He leases out his land to area cotton farmers and is well versed on the ins-and-outs of planting, maintaining, and harvesting cotton. As he is pursuing a doctorate degree, he has taken several online courses himself and also teaches online courses. He provides not only the student viewpoint of online learning but also the instructor side of the issue. This
interview occurred in the Faculty Learning Center at a college mentioned in the previous interview. Trey has a background of using and understanding technology so he felt online courses would be easy. His online experiences, however, were not as easy as he expected so he has an understanding now of how students get frustrated at times with online courses.

Madelyn

Madelyn is a White educator in her middle thirties with teaching experience in elementary school and college. She has a family and during her interview, talked about how much she did not like the fact she was not able to be with her child and husband that much while she completed her doctorate. She often stayed after work at the elementary school where she taught to work on her dissertation “because it was quiet and I could get things done.” As part of her doctorate degree, she took several online courses. One was taught by her major professor and was an enjoyable experience. Others were not so enjoyable because there was very little interaction between her and the instructors.

This interview was completed in her office at the area college where she is employed. Madelyn says she is always going to do what she thinks needs to be done in order to get something out of any online class she has taken or will take. She is an avid reader and learner and has since left the college setting to teach in an elementary school in the area.

Dirk

Dirk is a nontraditional White male with a family consisting of a wife and child. He earned his Bachelor’s degree online from a college located in the middle of the state and is now completing his Master’s degree at another institution. His experience with online courses in the beginning was not that pleasant but he is a computer geek and figured out how to improve his experiences as he continued on for his degree. Dirk found his priorities changed as he went from
a full-time student to a full-time employee. His emphasis shifted from his studies being the most important issue to his work becoming more important than his studies and his 4.0 GPA lowered to a B average.

We met in my work office for the interview. Dirk was very vocal about the pros and cons of online learning. He has since completed his Master’s degree in Information Technology and is employed in the academic resource center at a college in Georgia.

Glen

Glen is a White thirty-something married man, father of two employed in the nursing home business his father-in-law owns. When he first enrolled in Health Services Administration courses, he was very reserved, hardly ever smiled, and never took off his baseball hat. As a result of the interaction between his classmates and instructors, he became more self-confident. When Glen graduated, he was dressing in nice clothes, smiling all the time, and very personable. He is really enthusiastic about online learning, having completed his Bachelor’s degree with some online courses as part of the curriculum. He had no problem accessing online classes and found it enjoyable to do these classes on his own time at night at home. He did not miss the face-to-face contact found in a normal classroom setting.

This interview took place in a classroom of an area college. Glen has since left the area with his family and now runs a nursing home in North Georgia that is owned by his father-in-law. He most recently successfully sat for the Nursing Home Administrator’s Examination that takes four hours to complete. It is an online test divided into a national and state board exam parts. It is possible Glen will return to the Middle Georgia area to manage several nursing homes.
Armond

Armond is a White male college graduate in his late twenties with a Master’s degree. The father of a five-year old mixed race child, he and his father spend a lot of time repairing the young girl’s home in a nearby community. Armond did not perform well in undergraduate school. As he states, “I made it by the skin of my teeth.” When enrolled in graduate school, he looked at his other family members who all have graduate degrees and are employed in successful careers and decided it was time to prove to them and himself that he had the ability to achieve good grades. He is currently unemployed but has taken online classes as part of his graduate degree and was not entirely satisfied with his experience. As part of a temporary job with a company in Atlanta, Armond taught several online courses for company employees from all over the world. His discussion of his teaching experience is very revealing as to what he thinks online course should and should not be.

His interview took place in the 2nd floor Conference Room of an area college. Armond was really very animated about the subject of online learning and sees the future of it as very open and exciting. He likes the versatility of this type of learning and hopes to find employment teaching in an online setting.

Monica

Monica is a mid-thirties White woman employed at a hospital in the eastern part of the state. She is single, likes her independence, and yet still has strong family ties. While she was a nontraditional student earning her Bachelor’s degree, her father had open-heart surgery and Monica was overwhelmed by the possibility that he might die. He rebounded from the surgery and she finished her degree on time. She enrolled in several online courses as part of her studies. Her interview was accomplished in my office at a Middle Georgia area college. She feels she is
more of a person-to-person person instead of a computer person. Her AOL online connection would not let her get to WebCT so she had to open her Explorer and then get into WebCT. Her initial online experience was not that positive for her.

Lisa

Lisa is an African-American twenty-six year old single mother with thee children. She was in the honor classes in high school and found she did not really have to study to maintain her good grades. She is pursuing a Bachelor of Science degree and has taken online as part of her course work. We met in my office for the interview. She was very enthusiastic about her experiences with online and really stressed the importance of being self motivated when enrolled in such courses. Family responsibilities did interfere at times with her completing online course work so she often came to the computer lab on campus to work in peace. Lisa plans to seek employment in the health care field at the completion of her degree.

Findings

The purpose of this study was to determine the perceptions of nontraditional adult learners in the area of online learning. This study examined at what features nontraditional adult learners perceive influence their participation and what factors exist that interfere or facilitate their online learning. Three research questions were developed to disclose the nature of this issue and were specifically related to online learning, factors that led to successful online learning and factors that contributed to unsuccessful online learning. Findings are presented with each specific question.

Relating to Online

The first research question was: how do nontraditional adult students relate to online learning? Over half of the participants had little to no experience with computers before they
took online classes and found it difficult to adapt to the lack of face-to-face interaction that is normally found in non-online classes. Understanding how to adapt to their new online situation became critical for the participants to succeed in their courses. Two themes concerning this issue were found in the data. The first theme is how the new online situation influenced learners’ reactions to learning. The second theme was the range of strong emotions felt by the participants, from nervousness to frustration.

Adapting to Online

The first theme to emerge from the data was how learners adapted to the online situation. Nontraditional adult students struggled to adjust to their new online learning courses. What had always allowed them to succeed in the traditional situation of face-to-face learning did not work with this new environment of online education. This theme was evident among the majority of the 12 participants. It was particularly evident with Angelina, a White Masters student in her fifties. She can best be described as a student who likes to think before she engages with the subject matter and other students. Therefore, she would get online in the morning to read other student comments and would synthesize the data and respond later in the day. Online learning is a large part of her Master’s degree Program. She states, “It’s independent, yet you’re in contact with other people at all times. I can get on every evening when I go home and there’s something posted that I can talk to someone about.” Angelina has no problem not meeting face-to-face with her classmates and instructor. Her reaction to the new learning environment was flexible enough that she adapted to online learning easily. She likes being able to see other student responses online and having time to think about their responses before she in turn enters into the discussion. She offered:
Where things are posted and you, and like if I got on say at 10:00 and posted something or just read the others and think, “Boy, I’m going to have to think about that” and question a while. Then maybe go on at 7:00 in the evening, there may be two or three people post responses and I can look at them and say, “OK, I can understand where that person’s coming from. That person must be where I am as far as my knowledge of the subject.”

Having to adjust to online learning is a theme evident in the stories of the majority of participants and is supported by Dirk’s story. His learning process was one of comfort with the traditional face-to-face education with lots of interaction with the professor. When he began online learning classes in his graduate degree program, he found he had to adapt to this learning situation for him to be successful in this new milieu of learning. He offers:

I guess we’ll get into the crux of my problem with on-line learning now, is the fact that when I received my Bachelors degree, I did it all traditional, sitting in a classroom. That’s the way I find I learn best obviously. My grades speak to that. Here, I feel like I’m taking a correspondence course instead of on-line learning. I have been given a book. I have been told that every four weeks, I will be evaluated on a certain portion of that book and that’s it. I’m not being taught anything. I am taking a correspondence course and learning on my own.

There is absolutely no interaction. But my first taste of this is not a good one.

Dirk continues with his comments about this learning environment and having to adjust to it with online graduate classes:

I guess what I expected was a little different than what I’ve seen. What I have seen or I guess what I expected was more use of technology. So I guess what I expected was more,
okay, do a lesson, send it in. Because right now what I find myself doing is cramming for
the tests and memorizing for the tests and not really learning. I studied all along because
there were little milestones all along. Here there are no milestones. I don’t have to send in
any lessons. I don’t have to do anything other than just go up and take a test every four
weeks. So like I said before, I’m still trying to find my way in this. Obviously, my
expectations aren’t being met, so I am having to adapt my way of thinking to their
delivery.

Another good example of a participant adjusting to the online learning arena was John, a
White Middle Georgia area health care executive responsible for the operation of six nursing
homes. John was performance-oriented at first. He needed to learn computer skills in order to
keep his job. After having a not so successful experience with an online computer course at a
Middle Georgia technical college, John stated: “I learned that by and large, I’m a hands-on
learner. I like the stimulation of the classroom. I would probably do well in subjects I tend to
read on my own, but I probably prefer face-to-face learning.” He stated further:

I think that online learning lends itself to factual material, objective material; I don’t
know that it lends itself to learning persuasion, or how to be in front of a group or how to
coach an employee or how to walk through a disciplinary process.

This was also echoed or evident with LaVerne, a White health care professional. LaVerne
is a learner used to paper copies. “I am traditionally a person who likes to have paper in hand to
see what it is I am working with,” she offers. Not used to computers and going online, she had
her husband set it up for her and “then I would get on and go to the Web site and start my
lesson.” LaVerne prefers face-to-face learning and says:
I’ve done education in lots of different manners. Everybody says online is the way to go; it’s more convenient, at your own time, your own pace. Whenever you want to do it and you can find different prices and you can find continuing ed courses on different subjects and I thought I would give it a try, but in having done that, I still like the face-to-face camaraderie you have with other classmates or coworkers or peers and/or the instructor. She also believes this about computers and online learning:

I think they are great for those who relate to that kind of studying or learning and have that time and want to do it that way and who are computer oriented and love computers. However, in all things that you do, you have to put people and machines together. That’s what technology is all about. Because nursing and everything else has changed from the people touch to a machine doing something.

LaVerne is a dental hygienist, very science-based and she likes things that are hands-on. Patience is not one of her personal characteristics when it comes to learning. “I need an instant feedback and to wait for an answer because it has to come through email or some other means, it may be that it’s no longer even important at the time when you get the reply back.” She feels this way about online:

It will do to education when it’s strictly online and kind of robotic what email has done to personal letter writing. When’s the last time you got a personal thank you? Or maybe even when was the last time you got an email thank you? If you got a thank you it was probably zipped through the email and that really is just a very informal way of sending something and you don’t feel like they took the time to compose their message. I have paragraphs and periods and I have to have it spelled right and I’ve got to have the words
spelled out. I cannot use abbreviations unless it’s an approved abbreviation. It has to look like a letter.

Different adjustments were made by Babs, an African American nontraditional student with a son who fixes her computer every time she downloads something that messes up her computer. She says this about herself:

I’m bold! I am willing to try new things. I enjoy the online period. I do use it a lot in my personal life. I found that I can find . . . it is a resource you shouldn’t deny yourself. So I have become a little more computer savvy. There are still a lot of gray areas with me but I know the mechanics and I can do many things. I’ve even learned how to do even more things by having taken online.

Babs finished her nursing degree in 1995 and is now completing her Bachelor of Science degree in Health Services Administration. Her experience with online learning began initially with her teaching herself how to navigate the Web. “I could do a paper and I can cook at the same time. I could do laundry and I could go back and do my online work and you don’t feel the pressure of fitting into the classroom that you have to get through a certain amount of material right then or you’re trying to hear the lecture.” Babs states that: “I was just so excited because of the resource and the ability to just gather information and go places that I’d never been. I’m always excited about that kind of thing.” She is also a professional mezzo-soprano and can download music. “I even found sites where I can print my sheet music right then. I have learned a lot of things that I can do online. I’m adventurous, even at my age.”

One more example of learning environment changes made by the learner to adapt to online learning is provided by Monica, a White college student nearing the end of her degree program. She does not recommend anyone take online and goes on to say:
To me the point of having an online learning class is to be able to do it at your convenience. I didn’t like it. I mean it just wasn’t convenient for me. Well, I don’t like online. I like the one-on-one classroom, face-to-face. If I have a question and I don’t ask it, I’m going to forget. Even if I write it down, I’m going to forget in what context it was in relation to, so I would not do an online class again unless I absolutely had to. That’s just how I like my learning environment to be: face-to-face.

Range of Disquieting Reactions

The second theme to emerge when asked how they related to online learning was that the participants had a range of disquieting reactions. Initially eight of the participants responded by being nervous or frustrated. The most typical response was nervousness. Nervousness was exemplified by Angelina, a White woman in her early fifties. She is a certified medical records coder and she completed her Master’s degree online from a college located in Minnesota. Over 90% of her courses were online with 10% being completed on campus. She found it difficult when she began to do online courses because she felt she was computer illiterate and her son initially had to help her with the computer access part of her courses. She stated:

There’s a certain amount of nervousness. Because this seemed like a very big undertaking and I don’t feel like my education and working with computers is that extensive. I don’t feel truly computer literate as some people and friends that I have. Just to talk about computers and understanding networking and this sort of thing, when I initially got on I felt like I had to go very slowly. Ok, you’re enrolled, get on-line but there wasn’t anyone who said ok, this is how you have to do it. So it’s that initial nervousness about I’m here, I’m in the course but how am I ever going to figure out how to do what I need to do to complete the course? See what I’m saying?
The majority of the participants had emotional reactions of nervousness or frustration to the online learning arena. An example of a participant being frustrated with online learning is Trey. He is White, thirty-seven years old and is in his fifteenth year of teaching at a college in Georgia. He has not only taught online classes but has taken some in his doctoral program. He states:

Since I come from a background that I do know technology, it wasn’t a question of a technology curve of learning the program or learning how to get in and navigate my way around. I felt that going into an online course wouldn’t be any big deal because I would know my way around and wouldn’t have to read the instructions on how to do this, that and the other. I found that NOT to be the case so I immediately can understand how an online student that has limited to no exposure with technology would get very frustrated quickly. Web CT, that was what the program that was used for online courses that I took, it’s not laid out the best in the world. In terms of students navigating around here and there for the different things, things they need to access on there and go into, I found that even with my level of knowledge of what I thought I knew about computers, it was aggravating. I’d get frustrated because it wouldn’t do some of the things it needed to do. The instructor did not give detailed instructions on how to do these things either. I guess it was assumed you’d know how to navigate your way around because there was limited direction to no direction on how to do it. Therefore, it was difficult. Posting, all the other students I found were in the same case with me and they would post things on there that they had even more limited knowledge that I did of how to get around. They were frustrated. That’s one thing that’s kind of interesting in that I went into it thinking I knew everything in terms of the technology and I wouldn’t have a problem. That was the first
and foremost issue. Secondly, that the instructor was not a primary source in terms of, OK, tell me where I need to go, what I need to do in order to understand this technology, so those were a couple of things I found.

Another example of frustration is found with John, a White, middle-aged health care businessman who originally thought online learning would be fun. He struggled with the courses he enrolled in at a local college and finally had to withdraw from online and go to face-to-face classes. John is quite candid about his experience and says:

And the experience was not positive. Matter of fact, I couldn’t. After about three weeks of trying it, I just went back to the teacher and said “You all just put me in a regular class and I’ll just catch up the three weeks I missed ‘cause this really isn’t working for me.” So it was really kind of a frustrating experience.

Another participant LaVerne, an early sixties White health care professional who has enrolled in several online courses, also offers a good illustration of how the emotion of nervousness was displayed. In many ways she echoed the sentiments of Angelina. Her online experience led LaVerne to understand how some people enjoy this type of learning environment but she, on the other hand, does not. She stated:

I think I understand more about how some people can really enjoy it. Also, by my own personal experience I know how nervous I was when dealing with online learning. For those that have even less knowledge about computers, it would be very frustrating. So I can see both sides and I certainly would not advocate that online not be offered because there are some who very much want and need that because of their lifestyles. To go to one extreme versus having another option I think is detriment to the student who really likes the art of face-to-face conversation.
This sense of frustration was evident in Madelyn’s story. She completed online classes as part of her graduate degree program but often felt frustrated with how the experience occurred. Madelyn, a White college professor, states:

I completed the online classes because they were just a part of the program. I didn’t really care for them. I did not care for it because aside from sometimes not interpreting the assignment correctly, I missed the comradery with the other students; just being able to question them, talk out problems, talk to the instructor. Not that I wanted someone to tell me how to do it, but just having someone to bounce ideas off of I think was important.

Madelyn also expressed frustration at how her online courses were conducted and specifically discussed one of her classes with a professor she felt did not put in the time required to conduct what she considers a successful online class. She stated:

Another class with a professor who was not my major professor and basically all I did was check in with him. I really felt he never really read my work and I don’t know that I really learned anything from that class. I felt like it was just another duty of his. I felt so frustrated with the lack of interaction from the professor.

This sense of frustration is also evident within Armond’s story. A White father of one child, he was excited about taking online classes but found them not to be what he expected.

So when I came into an online course, I was really looking forward to this. I want to see how this works. I want to see how this is done. This is an area I might want to go into and by the end of the first course I thought, what am I doing? I’m not learning anything. I felt so frustrated and it really sucked all the motivation out of me because I didn’t get
anything out of it. When I left that course, I didn’t feel any more intelligent that I was before I went into it. I just happen to have carpal tunnel syndrome from writing papers. Armond continues discussing his sense of frustration at how his online courses were structured and states:

What I experienced was a real lack of thought that went into these courses and what amazed me is that several of the people in the program, their background was distance learning. This guy had a PhD in telecommuting and online education and I’m like, and this is the best you can come up with? I could have done better than this as far as the design.

In summary it was noted that 2 themes emerged in answer to the first research question as to how nontraditional adult learners relate to online learning. These themes were how the online situation influenced learners’ reactions to learning and the range of strong emotions felt by the learners. The previous section offered examples of each. When the participant profiles were arranged by oldest to youngest age, it became apparent that the older learners had a much more difficult time adjusting the online learning environment. All of the participants learned something about themselves from their online learning experiences, whether it be adjusting their learning environments while involved in online learning or dealing with their emotional reactions to online learning.

Successful Online Learning

The second research question was: what factors influenced their successful online learning experiences? Two themes concerning this issue were found in the data. The first is computer skills and their importance to the success of participants when enrolled in online classes. The second theme is the motivation of the nontraditional adult online learner.
Computer Skills

The first theme to emerge in response to this research question related to the computer skill level of the participants. The more comfortable students were with computers, the more comfortable they were with online learning. This theme was evident among the majority of the 12 participants. It was particularly noted with Dirk, a nontraditional White male with a background in technology. Dirk is very computer literate and in relation to online says: “I’m comfortable with learning. I’m comfortable with the technology. I am a computer literate person. My Bachelor’s degree is in computers. I am pursuing a Master’s degree in computers.” He continues, “The Web site has a long list of things they expect you to have on your computer, and know about computers and all of this before you enroll in this class. For me, again, that is not a problem.”

Another good example of a participant with excellent computer skills is Glen, a White thirty something married man, the father of two who is employed in the nursing home business. He is very positive when it comes to online learning and says:

It’s actually pretty nice. Because I like computers. I do a lot of work with computers so it’s real easy for me to understand new programs and stuff like that. I feel at ease working on a computer whereas I know a lot of people, not necessarily my age but maybe a generation above me aren’t as comfortable on the computer and it might make things more difficult for them, but for me, really it was a lot nicer, cause I could go home and not have to worry about coming in to the college campus to take the class. I could do it all from the comfort of home.

This theme is also typical of Armond’s story. Armond, a White male college graduate in his late twenties with a Master’s degree, has a degree in Information Technology at the
undergraduate level and is very computer literate. He has not only taken online courses but taught several also. As far as computer skills, he is very comfortable working with computers and states:

I’ve taken 4 to 5 online courses. As far as the topic goes, they were courses in my field of Instructional Technology. I had a course learning that was going to teach basic HTML to developing Web pages. I had another course in instructional design. I had another course in telecommunications and things of that nature.

Babs finds her computer skills have improved to the point that she really enjoys online learning. As an African American professional singer, she downloads sheet music from the Web and accesses her online classes any time she wants. She opines:

But I have thus since developed more computer skills and I find that online is excellent. You can manage your time better, especially if you are a nontraditional student, if you’re working, if you have children. But at any time of day or night that you feel comfortable studying, you have the ability and the access, whereas, you would have to wait to come to the campus to take your classes.

Monica, a White late twenties student, believes that computer skills have helped her succeed with online learning and states: “I’ve just kind of learned computers on my own and how to do different programs. At work, I have a computer and do everything on it; Excel, Word, Outlook, and access databases.”

Motivation Level

The second theme to emerge in response to this research question related to the motivation level of the participants. Motivation, a need or desire that causes a person to act on an issue, is a critical issue in online learning. All participants mentioned motivation as a viable
reason they were successful in their online endeavors. Angelina, an older White woman working on her Master’s Degree believes that motivation played a large role in her successful online courses. She states:

I think you are going to find that we’re a generation that is motivated in continuing to learn. We have more things at our fingertips than say our parents did when they were our age. We have better access to continuing our education and by that I don’t mean formally, just because we want to keep learning about things. Our generation’s grown up being very mobile, and it’s nothing for us to think about going out and going to the community college to take a course on anything, basket weaving or tax preparing or anything.

Another good example of a participant with a strong motivation factor for success is Dirk, a nontraditional White male who considers himself a computer geek. He says: “One of my motivation factors is the fact that the University System of Georgia has a tuition remission program and I can attend class for free.” He wants ultimately to teach in the Informational Technology Program at an area Middle Georgia college.

Another participant with a strong motivation to succeed in online learning is John, a White middle-aged healthcare executive. An extrinsic factor in John’s motivation to become involved with online learning comes from the fact his company is looking at providing online education to its employees and he will be one of the providers. John says one of the things that appeals to him about online learning is the flexibility in his schedule. He also spends a lot of his time reading so it’s a good way to incorporate his reading time with his academic time.

Armond’s story is another example of the necessity of staying motivated while doing online courses. A White college graduate with a mixed race child, he admits to not studying
during his undergraduate education experience but changed his attitude for his graduate work. He likes online education and finds motivation a key element in his successful attainment of his Master’s degree. Armond states:

As far as being online, doing online things, I learned keeping that consistent motivation when you look at your calendar and you see all these little tasks put in front of you and all these due dates and they’re getting progressively harder, you just kind of look at one big picture and go, “Oh my gosh, I have 8 papers to write, I’ve got X number of books to read, I can’t do this. This is too much.” That’s what I noticed, that I’ve got to work on developing that motivation.

The last example of the importance of motivation when enrolled in online courses comes from Lisa, an African American student with a family of young children. She loves working with computers and tends to complete her work at night, after her children are asleep. She says:

When it comes to online classes and completing course work, it’s a whole different ballgame. You have to be very, very, very self-motivated to stay on track and complete your assignments on time.

More than half of the learners involved in this study voiced opinions concerning the importance of being able to understand and work with computers as a factor in their successful online learning experience. Motivation to succeed is also a strong component of online learning success as evidenced by the preceding data. On the opposite side of successful online learning are those learners who are unable to effectively participate in the environment of online learning.
Unsuccessful Online Learning

The third research question is: what factors contributed to their non-successful online experiences? Three themes concerning this issue were found in the data. The first theme is lack of computer literacy and how it led to non-successful online experiences. The second theme is how technical problems with WebCT interfacing caused participants to be unsuccessful in their online experiences. The third theme is instructor problems that occurred.

Lack of Computer Literacy

The first theme to emerge from the data was lack of computer literacy. This theme was evident among the majority of the twelve participants. It was particularly noted with John, a bearded, middle-aged, White businessman employed by a local health care company in Middle Georgia. John has very little background in the use of computers and says:

Well, I had very little background. What I learned about computers is, if you are going to fool with computers, you need to have some kind of background because they rarely work right all the time. I’ve never had a piece of equipment work perfectly. They tell you all you have to do to load the printer is to put the disk in and then all that. So basically, I went to the technical college, I even took a course on how to work with computers and took a final exam on how to put a computer together. Disassemble it, load it, and do the whole thing. So I got to the point where I could disassemble the computer, put one together, load the software and programs, add memory cards, sound cards, the whole thing. But all that didn’t help me with this online course I can tell you. So I was trying to make an effort to cross what they do call the digital divide.

Another good example of a lack of computer literacy affecting participants’ success with online learning is evidenced by Trey, a White male educator in his late thirties teaching at an
area two-year college. He is the caretaker of his family’s farm and talks about spending quality
time thinking when he is on his tractor mowing the grass. He says:

Since I come from a background that I do know technology, it wasn’t a question of a
technology curve of learning the program or learning how to get in and navigate my way around. I felt that going into an online course wouldn’t be any big deal because I would know my way around and wouldn’t have to read the instructions on how to do this, that and the other. I found that NOT to be the case so I immediately can understand how an online student that has limited to no exposure with technology would get very frustrated quickly. WebCT that was what the program that was used for online courses that I took, it’s not laid out the best in the world. In terms of students navigating around here and there for the different things, things they need to access on there and go into, I found that even with my level of knowledge of what I thought I knew about computers, it was aggravating. I’d get frustrated because it wouldn’t do some of the things it needed to do. The instructor did not give detailed instructions on how to do these things either. I guess it was assumed you’d know how to navigate your way around because there was limited direction to no direction on how to do it. Therefore, it was difficult. Posting, all the other students I found were in the same case with me and they would post things on there that they had even more limited knowledge that I did of how to get around. They were frustrated. That’s one thing that’s kind of interesting is that I went into it thinking I knew everything in terms of the technology and I wouldn’t have a problem. That was the first and foremost issue.

Another participant, LaVerne, an early sixties White health care professional, also offers a good illustration of how lack of computer literacy interferes with
online success. LaVerne was not comfortable with accessing online material and depended on her husband to complete the connections for her. She feels that the nontraditional student who has not been exposed primarily to computers yet really loves them probably finds it frustrating to go online. They have to learn what the computers can do, how to use them, how to manipulate them and learn how not to get so frustrated when the computer eats everything that they’ve put on the screen. She says, “I think the computer defeats itself by making you more frustrated in utilizing the machine and not benefiting from the material that you are getting from it.”

This was also typical of Courtney’s story. Courtney, an African-American in her late forties, is an undergraduate student enrolled in online courses. She is very honest about her experiences with this type of learning experience, believes that lack of computer literacy can be a stumbling block for nontraditional adult learners going online for the first time. She says:

Yes, because you are going to be on your own, you just need to be computer literate. It’s not really that hard but if you don’t know anything about computers, it probably would be really, really hard. Make sure you are computer literate. Because my experience and it goes back to the Math class I had, with the timed tests, you need to be very familiar with the keys and everything with the computer because if you make one mistake, you can kick it out and you’d have to start all over again. Make sure you save your material. If you are not able to finish it, you need to save it just to make sure you can go back in. When you are taking anything timed, you just need to be very prepared. So make sure you know it so you can get through it, because with tests, you can’t go back and redo it. You need to make sure you have all the information you need to go ahead and complete it. Just be computer literate because it can throw you.

Lisa, an African American mother of 3, is another participant who had trouble
with computer literacy. She does not like online testing and found to her horror that when she submitted her essay question answers, the instructor never received them. She says:

By it being my first time in doing online, it was a special way to submit. If you go and do it under Microsoft Word, yet you got to go back and do it as an attachment, then put it in a file and then send it. I had to play around with it and I just got it and it’s the end of the semester. I just figured out how to send it that way. It’s like a little box you have on the screen. I used to try to put all my information there. But it won’t let you. It’s a timed message and it loses everything. That’s what happened to my extra credit report so I never got credit even though I did it because it just went away.

**Technical Problems with WebCT Interface**

The second theme to emerge from the data was technical problems encountered by participants as they tried to interface with WebCT and how those problems could negatively impact the online experience. This theme was evident among the majority of the twelve participants. It was particularly evident with Angelina, a White fifties-something Masters student. After many frustrating times of not being able to access her online Masters’ courses, she learned to check ahead of time to ensure she would not have technical problems with accessing her online courses and made sure she had the proper software:

Haven’t had to go out and purchase anything. That would be a very big consideration. Make sure ahead of time not only what class you are getting into but before they say check online, and they give you the syllabus online and on the syllabus it says make sure you have Acrobat reader or you have Adobe this or that, that you don’t have to stop everything to run out and buy this or find out from someone how you attach this to your computer.
Another good example of a participant having technical problems was John, the White middle-aged executive. He found technical problems aggravating and states, “They may just have had a glitch but when I do it again, I’d want to make sure there were going to be minor technical problems on the Web page.” He also felt strongly about his instructor availability during the course of his online class. He says, “One of the problems was the professor was available online but they weren’t available by telephone. That was a kind of an irritant really.” He strongly believes that there are still problems with the current technology associated with online learning. He doesn’t want nontraditional adult learners venturing into the online experience for the first time to have problems with the course because of the technology or the procedures for then to use the technology. He states, “The only problems I would ever want you to have would relate to the content and your understanding of it. I think the technology should facilitate your schedule. The technology should not be a barrier to your learning.”

The theme of technical problems was also evident with Dirk, a nontraditional White male with a family consisting of a wife and child. An Information Technology graduate, he believes one of the technical problems with online learning is the instructions given on the Web sites for the courses. He says:

Gonna have to become more user friendly. Even the one that I am going through uses something called e-college to deliver their tests and things like that. You still have to know something about computers to go in and navigate around it. There’re instructions there, but even the instructions are a little over the heads of some people.

Another example of technology problems interfering with online success is Monica, a mid-thirties White woman employed at a large hospital in the eastern part of the state. She is single, likes her independence, and yet still has strong family ties. She experienced a technical
problem related to her online server. She could not access the Web page for her course easily and that caused frustration on her part. She describes her situation:

If you have AOL, you could not do it through WebCT. You have to open AOL, and then open your Explorer and go to WebCT that way to get to your class. Oh, it’s horrible. It took me like three days to figure out why I was not able to get access.

Another example of technology interfering with online learning is LaVerne, a White part-time college instructor. She finds the actual computer screen technology interferes with her learning. As she ages, her eyes tend not to distinguish colors so easily and she comments:

“Screen fonts, you know how some of them are cast in colors, you know, different screen sizes and they’re different shades; their color on them, whether or not they are color focused, it just looks better on some screen types than print does against some screen types better than others.”

Trey, a White college instructor, is an example of a nontraditional adult learner who has had technical problems in the past with online situations. He is very clear about technology causing problems with online learning and offers:

“Make sure that you understand the technology. That you know that you have got to have a dependable Internet connection; you’ve got to have dependable hardware, you know, dealing with the computer and so forth. This business of ‘Well, my friend has one I can borrow it’ or whatnot, I mean, you can’t depend on a lot of those things. I mean you need to have something that is pretty much a sure fire thing. So that would be first and foremost.”

Another example of a learner having difficulty with the Web interface is Angelina. She started out a very timid online learner and says:
I don’t feel truly computer literate as some people and friends that I have. Just to talk about computers and understanding networking and this sort of thing, when I initially got on I felt like I had to go very slowly with step-by-step directions. OK, find the school’s Web. After you find the Web, then find your class. Then after you find your class, follow the instructions for getting on-line. After you get on-line, then you’re faced with another screen that has choices of things like resources, bulletin board, Unit 1, Unit 2, Unit 3, Unit 4 and assignments. That was kind of along the left side and most of the screen was filled up by the instructions, the first instructions from the teacher saying this is what we’re going to talk about. Basically, here’s my syllabus and you need to do this and that. I’d see some writing that was a different color than the other and like it was highlighted and so I figured I had to click on that to get more information. I click on that and that sends you into something else. But then there would be certain instructions. I’m going, where did they get that from? Where did this. . . I don’t remember reading anything about this. Well, I finally figured out if I go back to that first page, under resources or assignments, you click on that and that will give you the whole assignment in very big detail. Read this, read that. Go into this site, Internet site, and find this article. Review an article and report on the bulletin board a summary of that. It’s like, ok, how do I find this and it’s just the learning the little things like that because there’s no one to tell me. Ok, you’re enrolled, get on-line but there wasn’t anyone who said ok, this is how you have to do it. So it’s that initial nervousness about I’m here, I’m in the course but how am I ever going to figure out how to do what I need to do to complete the course? See what I’m saying?
A final example of technology problems interfering with online success is Lisa, an African-American twenty-six year old with three children. She talks about technical problems with online testing and says:

The computers can mess up at any time and I know on a couple of tests, I know I have chosen one answer because I usually write my answer down on paper and then when I go and get my test graded, it will be a whole different answer and I’m like, how did that happen? But you know, you just have to go with the flow because you really don’t like to fool with that stuff. I talked to somebody else who said that it lost part of the essay question and sometime when you try to submit, you have to know how to submit. By it being my first time in doing online, it was a special way to submit. If you go and do it under Microsoft Word, yet you got to go back and do it as an attachment, then put it in a file and then send it. I had to play around with it and I just got it and it’s the end of the semester. I just figured out how to send it that way. It’s like a little box you have on the screen. I used to try to put all my information there. But it won’t let you. It’s a timed message and it loses everything. That’s what happened to my extra credit report so I never got credit even though I did it because it just went away.

The third theme was problems with the online instructor. The majority of the participants felt that instructors contributed to the learners lack of success with online by not having prepared a suitable course Web site, having learners do projects that were just something to do and not relevant to the online course, and by not keeping the Web site up-to-date with changes in material that occur every year.

An example of a learner concerned about online instructors preparing suitable Web sites is Glen, who says that online instructors need to back up everything and check their site often.
“If you go somewhere else during the day that has Internet access, log on there and try to get onto your site and make sure everything is up and running.” This would help keep the site more organized and easily available to learners.

According to Burley, Turner, & Vitulli, as students age, external evaluation becomes less important while awareness of the usefulness of knowledge increases. This concept is important to online learning in that the more information and understanding the instructor has of her/his students, the better the instructor can develop the related course work to fit the needs of the learners.

A good example of a participant feeling that instructors have students do online projects that are just something to do is Lisa. She was quite adamant that instructors “Keep it brief, simple, and to the point.” She felt that adult learners can tell when they are assigned “busy work” and those online instructors should “lead a class into getting something out of it. Not just fill in the spaces.” Gibbons and Wentworth (2001) state that:

Nontraditional students bring a variety of life and work experiences to the virtual classroom and are most responsive to learning models that provide an opportunity to apply theory to their experiences. The open and collaborative sharing of experiences within the context of the course material serves to enrich the learning process for themselves and their peers. (p.3)

This theme was also noted with Amanda, who felt online instructors should not consider it simply a front-end heavy arrangement. She states:

It’s also you have to keep it going. You have to keep working because I think whatever groundwork you are laying, now add to it. Develop it even further. As far as I can see,
some have the fall the same as the summer and spring. I think continually adding to online courses is the key thing.

Melanie believes that online instructors need to provide clear directions on what is expected and “not assume because this is a college student, that he or she will understand what to do.” Baldwin and Sabry (2003) conclude, “The underlying thesis is that learners learn more effectively when information is presented in a manner that fits in with their preferred method of acquiring and processing information” (p.336).

This is particularly evident with Trey, a participant who has not only taken courses online but has taught courses online. He said:

Instructors need to realize that an online course does not mean that hey, I have got all this free time now, that I can do something else. I can go do something that I want to do. I want to go play golf or I want to work on my research that I’m doing and hey, I’ve got 50 people sitting up here in this online course and they’re struggling and I hardly ever check in to answer any of their questions because I don’t see that as a valid course that I am teaching.

Trey suggests an orientation session for those students who know little or nothing about online learning. Bring the students in for a face-to-face meeting to show them what they are expected to do in the class. Trey strongly feels:

Instructors need to realize that when you teach an online course, first and foremost, it is true you are not going to a class that starts at 9:00 on Mondays and Wednesdays and ends at 9:45 or 10. But rather it’s availability, checking in with that course, letting students know when you are going to be gone, and not be able to check e-mail on the WebCT. “I’m going to be out on a conference or I’m not going to be available.” It’s those
gestures that can really make the difference between a positive experience and a negative experience.

In summary it was noted that 3 themes emerged in answer to the third research question as to what factors contributed to the nontraditional adult learners’ non-successful online experiences. These themes were lack of computer literacy, technical problems when interfacing with WebCT, and online instructor problems. The previous section offered examples of each.

Summary

Online learning exerts a strong influence in the area of adult education in the United States. Participants in this survey were very willing to share their online learning experiences. Each one had unique reactions to this learning environment and was either very in favor of online learning or did not like it at all. Every one of the participants fully explained their background and how it helped or hindered them as they engaged in online learning.

Computer literacy (or the lack of it) was one of the major effects on the success (or nonsuccess) of nontraditional adult learners engaged in online learning. Motivation played an important part also in this area of learning, especially when these adult learners have outside interferences, such as family, that hinder their progression. Problems with interfacing with the WebCT and with online professors certainty had an effect on the online experiences of the participants. Data from this study supported the value of understanding how nontraditional adult learners perceive online learning as a part of their educational experiences.
This qualitative study was designed to identify how nontraditional adult learners perceive online learning. The investigation was guided by three research questions. First, how do nontraditional adult students relate to online learning? Second, what factors influenced their successful online learning experiences? Last, what factors contributed to their non-successful online experiences? In response to these questions and by using the constant comparative method of analysis, three sets of interrelated findings were inductively complied from the data.

Findings of this study suggested that nontraditional learners overall favor the online learning method of education. Once their fear of the unknown was conquered and they gained knowledge of how to use the computer, many participants found they preferred the online learning method. The findings of this study indicated that online learning is a very viable method of educating nontraditional learners.

This chapter contains the conclusions reached at the end of this study, a discussion of the conclusions as they relate to the current literature, implications for practice and suggestions for conducting future research on this topic.

Conclusions and Discussion

The three conclusions of this study were the result of interviewing twelve nontraditional adult learners over a twelve-month period, analyzing the interview data, and doing member reviews by each participant. The participants fit a typical profile of an adult learner. The new majority of adult learners (over twenty-five, working full-time, residing off campus, attending
college part-time) is pursuing education for career development, personal and professional reasons, upward mobility, and job security (Eastmond, 1998). The participants were all over the age of twenty-five and worked full-time jobs while attending college. They work in a variety of settings, including clinical health care, elementary education, mental health, hospitals, post-secondary education, music, and secondary education. The three conclusions are:

1. Nontraditional adult learners will be successful with the education method of online learning if the climate is set to address the specific needs of this population.
2. The competence and style of online instructors affect the success of nontraditional adult learners.
3. The type and user-friendliness of online learning plays an important role in the success of nontraditional adult learners.

**Conclusion One: Nontraditional Adult Learners Will be Successful With the Education Method of Online Learning if the Climate is Set to Address the Specific Needs of This Population**

The majority of nontraditional adult learners will be successful with the educational method of online learning due to their life experiences, level of maturity, and commitment to furthering their educational levels. Online learning presents a unique opportunity for nontraditional adult learners who want to further their education but cannot go to a college campus due to personal circumstances or job responsibilities. The participants in this study believed overall that, once they got over their techno-phobia concerning the online environment, their learning ability vastly increased due to the freedom of that learning situation. After completing several online courses, they found themselves searching the Internet for more sites of information related to their life needs in general.
The context of learning is important for the success of the nontraditional adult learner. Kolb and Frye (1975) state that the learning cycle can be considered a spiral in that the learning process can begin at any point of the four developed by Kolb. A learner completes a particular action, thus beginning the cycle at the concrete experience point. Reflective observation occurs when students learn by watching and listening, the second element of Kolb’s model. Abstract conceptualization requires students to learn by thinking, point three on the learning cycle spiral. The fourth element occurs when the adult learner tests her/his knowledge gained in new situations that occur. All of these elements occur in face-to-face classes and online learning situations. Online learners are presented with audio, video and written text by various methods of presentation, equipment, and programs. Online courses capitalize more on the learners’ watching, thinking, and listening abilities than face-to-face classes do due to the method of delivery of course materials with online classes. The fact that online offers learning anytime, anywhere, and at any rate the learner wants to do, reflective observation and abstract conceptualization occur more in this environment.

Online learning has its advantages. It provides flexibility in the learning environment of nontraditional adult learners and allows them to communicate without regard to age, gender, or race. According to Kramarae (2001), “Others have suggested that when we enter online interaction we can, if we wish, leave behind cultural labels and expectations” (p 39). Some learners become who they want to be regardless of their educational degrees, gender, body size, beliefs, or age and interact as equals in the online setting (Kramarae, 2001).

Access to the latest up-to-date information is provided and there is collaborative interaction among students. Some actually prefer the isolation from other students. Milliron (2004) believed we need to embrace online learning as a part of lifelong learning. Professional
development, career advancement, personal growth, all can be done online. He envisions new and stimulating horizons for online learning by starting students on their own learning journeys that will help them lead better, freer and more fulfilled lives.

Not all nontraditional adult learners respond well to the online environment. Students have to be self-motivated, able to work alone on assignments and assessments, and understand that the online approach to learning is not easier than the traditional classroom setting. More than one-third of the participants in this study were not pleased with their online learning experiences initially but conquered their fears and ended up being successful by completing the courses with a passing grade. Obstacles reported were the technology itself, demanding study schedules, and difficult content (Eastmond, 1998). According to Peterman (2000), the face-to-face communication that is taken for granted in the typical classroom setting is missing in the online environment. Nonverbal interaction gives the instructor valuable information about the students’ understanding of the material presented. The ability to meet established deadlines and basic computer and Internet searching skills are required to be successful in the online environment. Learners have to manage time, life activities, and relationships, deciding what family member or friend needs to be handled first, what issues can be removed from their area of concern, and what responsibilities can be put off until a later time.

Adult education and online education literature discuss the importance of understanding the preparedness of adult learners. “Online learners should be recognized for who they are and where they stand in achieving their educational goals. Their readiness to learn and orientation to learning are inexorably tied together, as both of these assumptions center on learners’ life tasks and problems” (Gibbons & Wentworth, 2001, p.4). Gibbons and Wentworth (2001) further state that:
Nontraditional students bring a variety of life and work experiences to the virtual classroom and are most responsive to learning models that provide an opportunity to apply theory to their experiences. The open and collaborative sharing of experiences within the context of the course material serves to enrich the learning process for themselves and their peers. (p.3)

Nontraditional students in the 25+-age range were found to be learning-oriented rather than performance-oriented in a study conducted by Burley, Turner, and Vitulli (1999). The results showed that learning-oriented students want to acquire new knowledge and skills for the sake of learning while performance-oriented students want to prove their competence to others. Learning-oriented students exhibited strong positive correlation to choosing new, difficult tasks and a negative correlation to choosing easy tasks. Baldwin and Sabry (2003) conclude, “The underlying thesis is that learners learn more effectively when information is presented in a manner that fits in with their preferred method of acquiring and processing information” (p.336).

Burbles (2000) believes that online learning provides adults with a range of technologies designed to give them opportunities to expand their education and participate in lifelong learning activities. This learning environment allows participation without the limits of regularly scheduled class time and is based on the interest of the learners, not their physical presence. Individuals have the capability of responding to learning activities in their own time frame within the time limits of the course and the information is presented in a variety of ways and presented within a real-world context.

One important aspect of online learning is the ability to bring together in a collaborative mode, students, faculty, specialists, and practitioners from different geographic locations. The self-motivated, self-starter type of nontraditional adult learner is best suited for the online
environment. The ability to organize an online course around the learner’s personal schedule is a positive feature of online learning.

**Conclusion Two: The Competence and Style of Online Instructors Affect the Success of Nontraditional Adult Learners**

Online instructors are critical to the success of nontraditional adult learners in the area of online learning because how the instructor approaches online teaching influences the learner. Current technologies along with improvements in the Internet have allowed a major restructuring of traditional education processes and how faculty members are involved in these processes. The procedure of having course materials for online instruction prepared by content experts employed by software companies puts faculty in the role of facilitator, not responsible for course material as has been the typical role of faculty at institutions of higher education. If online instructors use materials prepared by a company or other source, their understanding of and enthusiasm for the course content may not be as strong as if they had prepared the online material themselves (Markel, 1999). Since the goal of post-secondary education is to create learners who are capable of making decisions, doing independent thinking and analysis, and being creative thinkers, having instructors who are not as enthusiastic as they should be about teaching in the online setting will negatively influence the learners. One participant, Amanda, was very adamant about the lack of enthusiasm shown by her online instructor when she enrolled in several college courses that were sequential. Another, Trey, commented that the interaction he had with his online instructor was very bland and lacked any enthusiasm for the topic being taught. The majority of participants in this study commented on how the visibility in online chat rooms and the tone of the instructor’s messages and comments online influenced how they felt about doing their best efforts in these courses. If the online instructor was prompt with her/his
reply (within a few days of original posting), the participants felt recognized by the instructor. If the instructor took longer than that, the learners became uneasy and felt invisible.

Kumarawadu (2004) approved of the online learning environment and believed that overall learning can be enhanced by online. He felt that online learners use this environment to fulfill a learning need and sums it up by stating: “It can be extrinsic, imposed through the need to acquire new knowledge or skills, or it may be intrinsic, more of an internal force which encourages individuals to achieve personal objectives” (p. 2). For instructors to be adequately prepared to teach online, Kumarawadu states:

Content in the online setting must be presented in ways that help or motivate students to attend to the information. All of these changes have occurred due to the Internet but the most important effect has been in the area of education (Gurak and Duin, 2004). Online learning is one form of education that had a major growth period in the 1990s. Porter (1997) declares that learners will gain many benefits from this type of education and says “They may learn independently, at their own pace, in a convenient location, at a convenient time, about a greater variety of subjects, from a greater variety of institutions or educators/trainers” (p. 13).

Adult learners need to have both physical and psychological needs met in order to be successful in any learning environment (Biswalo, 2001). Peles Biswalo, an international author of adult education articles, published this article in *Convergence*, a peer-reviewed publication of the International Council for Adult Education, Toronto, Canada. For an effective online learning environment, an atmosphere where adult learners are challenged and yet feel safe, are encouraged to become active participants in the learning process, and are involved in the selection of objectives for their learning needs to exist. If the learning environment is ineffective,
the adult learner will feel anxiety, fear appearing like a failure and be dissatisfied (Biswalo, 2001). The adult learning environment should not be threatening or judgmental but have a feeling where adults are free to share in the accountability for their learning success. Muirhead (2001) proposes that the adult learning environment in online settings needs to encourage an amalgamation of flexibility and individuality plus be professionally and personally demanding. The needs of nontraditional students who are employed full time, have irregular schedules, deal with family obligations, and want to continue their education are a challenge that can be met through online courses (Peterman, 2000). Many adults want to improve their technology skills for use in the workplace, at home, and for self-satisfaction in gaining new information, exploring new ideas, and increasing their ability to make informed decisions. Adult learners need to have both physical and psychological needs met in order to be successful in any learning environment (Biswalo, 2001). Online instructors need to incorporate current adult education theories into their online course preparation activities. Zepke and Leach (2002) describe five assumptions concerning adult learning that are valuable for the online instructor to consider:

1. Adult learners bring valued life experiences to their learning.

2. They learn best where they can pursue their own preferred learning goals and methods.

3. Curriculum is orientated towards practice.

4. Changes to existing social conditions are envisaged and created.

5. Difference is recognized and valued (p. 310).

Transformational learning theory has been a key theory in adult education since the late 1980s (Merriam & Caffarella, 1999). Kilgore and Bloom (2002) make a case for transformational learning as “a meaning perspective, the way we understand our experiences” (p.
It deals with the cognitive process of learning and approaches learning through contemplation, finding inner significance of events and mental creation of experience. The theory of transformational learning is best applied to the area of online learning because this theory deals with change.

When considering the performance of online learners, it is important to consider those aspects of a successful online class that not only motivate students but also keep the interest of those students enrolled. Basic characteristics of students as individual learners in an online setting influence their success in completing the online coursework. Online students are older, highly motivated, willing to call the instructor for assistance, voluntarily seeking further education, self-disciplined, and have a more serious attitude toward learning (Willis, 2002).

According to Burley, Turner, and Vitulli (1999), as students age, external evaluation becomes less important while awareness of the usefulness of knowledge increases. This concept is important to online learning in that the more information and understanding the instructor has of her/his students, the better the instructor can develop the related course work to fit the needs of the learners. An increasing number of nontraditional adult learners are employing this type of learning as evidenced by the American Association of University Women’s report (2001) that sixty percent of online learners are nontraditional and female.

**Conclusion Three: The Type and User-Friendliness of Online Learning Plays an Important Role in the Success of Nontraditional Adult Learners**

The technology of online learning plays an important role in the success of nontraditional adult learners. Online technology has improved over the last decade but it always needs to be user friendly, easily accessible, and dependable. Professors need to recognize the potential of the Internet to deliver post-secondary education where, when, and how the adult learner wants it.
The challenge with the adult learner and the Internet is the existence of sites that are full of misinformation. Online courses contain downlinks to other sites for learners to click and explore. The nontraditional adult learner must be able to decipher what is valid and what is not.

Wernet, Olliges, and Delicath (2000) examined whether nontraditional students are at a disadvantage when technology-based course management tools are utilized by faculty for teaching and learning purposes. Results proved that the use of technology-based course management tools did not disadvantage nontraditional learners. This type of learner actually sees a benefit of using technology to help balance life demands of job, family, and education.

The learning situation of the nontraditional adult learner is an important consideration for the online learning educational experience. More educational opportunities are available now than for any other generation of learners in history. Nontraditional learners have a convenient alternative to the face-to-face classroom setting; they can access classes online. Online learning puts the responsibility of learning more on the student and requires knowledge of computers, Internet technology and related equipment. Students will have problems logging on, assignments may not get posted correctly, Web sites and hyperlinks may not work, and other technology problems may occur.

Galusha (2003) stated that the lack of training with technical issues such as computers and the Internet will lead to frustration on the part of the nontraditional online student. Obstacles reported were the technology itself, demanding study schedules, and difficult content (Eastmond, 1998). Educators must remember that students will have varying skill levels in both the traditional setting and the online learning environment. Pertaining to this issue, it is critical that educators provide a means to meet the instructional needs of each student (King, 2001). King recommended that integrating online conferencing into traditional face-to-face classroom
discussion could complement the students’ verbal expression abilities, learning, and development. King also provided seven recommendations for instructors attempting to blend the two types of learning environments. First, the instructor’s institution must provide support of and access to web-based technologies. Second, the instructor must utilize the time required to document instructions, provide demonstrations, and prepare the conference site. Third, the instructor needs to consider the past technologic experiences of the students and plan accordingly in order to avoid frustration and wasted time for the learners. Fourth, the online conferencing does not need to distract the students from their studies by overloading them with side activities to complete. Fifth, instructors need to use a constructivist approach to the online learning situation. This will enable the students to discover the power of the online environment on their own. Sixth, the instructor’s role is to facilitate the experience and let the student-centered learning build the action. Finally, instructors need to follow-up the online experience with live discussions about that experience. Being able to ask questions, offer suggestions, and discuss the high and low points in a face-to-face setting will positively influence the online learning situation.

Implications for Practice

Research on the topic of online learning has proven the future of education will be tied closely to the use of online technology for all types of learners, especially the nontraditional adult ones. More and more people will need to be familiar with this format and how it works. This study served to point out positive aspects that currently exist and weak places in this type of educational delivery that need to be addressed and remedied in the future.

Adults of all ages often take classes to improve their skills, get college credit, improve their job performance, maintain professional licensure, or just for enjoyment (Seaman, 2002).
Lifelong learning is said to be an individual wanting to keep her/his mind acute and mentally self active to slow the deterioration of the brain. Adults can find opportunities for learning at home, at work, in higher education, and in leisure activities (Bruce, 1999). Educational institutions, online course vendors, businesses, professional organizations, churches, and nonprofit organizations use online to help educate their students, employees, and members. Participating in learning opportunities can enrich the lives of older adults and assist them in living better quality lives. Many older adults want to pursue degrees and study other subjects in order to stay mentally active, to continue to personally develop, to make up for opportunities missed at a younger age, to foster a greater sense of achievement, to learn for the joy of learning, to help maintain their independence and well-being, to pursue meaningful and purposeful activity, and to achieve goals related to personal competence (Ellis, 1996). A survey of older adults in the United States (Ellis, 1996) showed that 30% of older Americans own personal computers and 28% of that number had accessed the Internet in the month before the study was conducted.

The information learned from this study can be used to improve credit and noncredit courses that use the online learning venue for delivery. As industry, training establishments, governments, academic institutions, and international organizations look for new markets both locally and globally, understanding the barriers that could cause an individual to not engage in online learning becomes very important (Anakwe, 1999). As the educational venue for learning has changed over the years and online learning is now a viable method of education for all learners and specifically the nontraditional adult learner, collegiate professors and online vendor companies need to have a broad understanding of how nontraditional adult learners relate to this new online learning environment. This study provided some insight as to how this type of learner succeeds or fails with online course material and thus provides insight to those who design
online courses and/or material for such courses and teach such courses. The use of the Internet for online learning has brought many challenges to creators of educational programs. Companies dedicated to developing software and hardware for supporting online learning have increased over the past several years. Designers of online software and materials must keep in mind objectives, activities, and assessment methods relevant to the online learners intended learning outcomes. Masie (1997) states, “The growing skills gap in the technology arena will require dramatic and creative solutions. The successful training entrepreneur will recognize that topic, technology, learner background and business model should determine class size and instructional methods” (p.2).

This study provided adult educators in the college setting, computer trainers at community centers, employers, employees, software and computer manufacturers, and nontraditional adult students involved in online learning environments a better understanding of online learning issues. If adult educators comprehend the factors hindering nontraditional students from succeeding in an online learning situation, they will be able to design aspects of online courses that will help their nontraditional students succeed. Computer trainers at community centers and employers will be able to provide online courses with modules that will assist the nontraditional student in online courses. Employees and nontraditional students will approach this learning medium with less trepidation and fear. Software and computer manufacturers will benefit by understanding what factors in their software and/or equipment that need to be altered in order to help nontraditional students succeed in the online learning environment. Suggestions offered to online instructors from the participants in this study were as follows: be aware that your students have different learning styles, from those who love to learn independent from instructor and other students to those who learn by reading the material, those
who learn by listening to lectures and to those who must be face-to-face in the classroom for learning to occur; be sure to do an orientation for your online students to let them understand how to access the technology; keep developing your course material and keep it updated; stay focused on the course content and keep to the point by avoiding “busy work”; always back up your content and everything else in case of a power failure; and know that your student will cheat online.

The findings of this study contributed to the understanding of how nontraditional adult learners perform in the online learning environment and lend support to the increased use of online learning as a way of reaching more nontraditional adult learners who may not have physical access to a college campus. The study findings suggested that nontraditional adult learners can overcome those factors that impede successful online learning and use online learning offerings as a way to achieve their educational, personal, and life goals.

Recommendations for Future Research

This study has provided some answers to the research questions developed to investigate the online learning environment in relation to nontraditional adult learners. This is a typical of a qualitative study and results suggest several possibilities for future research.

First it would be interesting to further investigate how online learning improved the overall quality of the participants’ lives. The interview questions used to have the participants describe their interaction with online learning allowed them to only discuss how they interacted with that learning situation and what they felt were critical issues in their success or failure of such courses. It would be interesting to further investigate the phenomenon of online learning as it changed their lives. By further understanding the impact online learning has on nontraditional
students, educators could duplicate the characteristics found that enhance successful online learning and incorporate those findings into their online courses.

Second, I feel additional research should be conducted to investigate the relationship of gender to the success of the online participants. Our society believes that males are better equipped to handle the areas of math and technology while women do better in healthcare and teaching (Odell, Korgen, Schumaucher, and Delucchi, 2000). The participant group for this study was 60% female and 40% male, typical of the gender ratio at the Southeastern college campus where this study was done. Further research based on gender characteristics would determine if gender does or does not influence success in online learning.

Third, a study concerning the socioeconomic status of nontraditional adult learners and progress in online learning should be completed to show if differences in the numbers of lower socioeconomic status online enrollees and their successful completion of online courses exist when compared to middle and upper level groups. Considering the effect of racial and/or ethnic status of nontraditional adult learners and the area of online learning would be another area that should be investigated. The researcher could look at lack of availability of online technology, lack of access to current, updated computers and equipment, and level of self esteem for subjects and their participation in a study concerning success in online learning.

Fourth, it would be interesting to repeat this study in fifteen years to see the difference in nontraditional adult learners who have been raised with the new technology of computers and the Internet as enhancement in their grade, middle, and high school education. Computer technology and the Internet are used throughout primary and secondary education in the United States and other countries. Children are becoming accustomed to using this technology and are more at ease
with it than most adults today. If this study were repeated in fifteen years, the issue of computer literacy would not be as important as it is now.

The purposeful sample used for this study was characterized by participation of nontraditional adult learners in online learning courses. Given that colleges and universities enroll students of all ages, from high school to retirees, and that this study concentrated on the nontraditional adult learner, there is a vast area to investigate of younger college students. Therefore, it is recommended that future research include traditional adult learners in online learning courses.

The sample of participants used for this study was generated by the snowball method of developing a sample base. Of those involved, 8 out of 12 participated in the health care field in some form or other. All were students involved or had been involved in online learning courses. Three were in healthcare management positions, two in teaching health care courses while the remaining three were students in a healthcare management program. One of those three actually provided direct patient care at an area hospital. It would be most interesting to revisit this group at a later date to study how their lives have changed due to their participation in online learning.

Finally, it would be important to apply this methodology and theoretical framework to nontraditional adult learners in other areas of the United States and the World in general. A study comparing technologies used for online in other countries with that of this country may provide additional suggestions that could be incorporated into teaching online. Repeating this study with a sample of nontraditional adult learners from other content areas, such as business, arts, education, social sciences and mathematics would generate data from a different perspective than the one in this study.
In conclusion, the transformational learning that occurred as a result of completing this research is life-changing for me. From a woman who disliked every aspect of online learning at the beginning of this study, I am now scheduled to teach a totally online class for the fall of 2006. This class will be on Ambulatory Care and I am excited about putting it online. Not only that, but I have enrolled in several online classes as this study was ongoing. Two courses were related to obtaining Continuing Education Units in order to keep my dental hygiene licenses current, one was to update my American Red Cross Instructor certification, and since I am teaching Holistic Medicine in the fall also, one was a course on Alternative Medicine.
REFERENCES


perspective. *International Journal of Organizational Analysis, 7*(2), 224-244.


Barclay, R. W. (1997). Get the best from your program planners. *Adult Learning, 9*(1),
39-43.


http://www-personal.umd.umich.edu/~marcyb/tcc-1.html


*Ed at a Distance Magazine and Ed Journal* [On-line serial], 14 (11). Retrieved June 21,
2002 from


and Learning (M. M. Watts, Ed.).* (4), 75-81...

Biswalo, P. (2001). The systems approach as a catalyst for creating an effective learning


Central Florida Community College. (2002). Distance learning mission, definition, and goals. Retrieved June 28, 2002 from

http://www.cfcc.cc.fl.us/distance/mission.htm


http://www.usdla.org/html/journal/NOV00_Issue/story04.html


http://www.uwplatt.edu/~edp/plexus/fall00/nontrad.html


http://www.nl.edu/ace/Resources/Documents/FreireIssues.html

Home, A. M. (1998). Predicting role conflict, overload and contagion in adult women
university students with families and jobs. *Adult Education Quarterly, 48*(2).

Education, 26*(1).


Impairment & Blindness, 95*(9), 517-525.

the education of adults, 32*(1).

for distance learning*. Retrieved November 8, 1999, from Indiana University Web
site: http://as1.ipfw.edu/99tohe/keynote2.htm

Jackson, R. H. (2002). Defining eLearning-different shades of “online” . . . a definitional
protocol. *The 8th Hong Kong Web Symposium*. Retrieved June 22, 2002 from

Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pg. 216-254).


http://www.usdla.org/html/journal/OCT00_Issue/story03.html


http://tip.psychology.org/knownes.html


http://www.usdla.org/html/journal/FEB02_Issue/article05.html


Reid, J. E., Jr. (2002). *What every student should know about online learning.* Retrieved June 5, 2002 from: [http://www.ion.illinois.edu/IONresources/onlineLearning/reid.html](http://www.ion.illinois.edu/IONresources/onlineLearning/reid.html)


130


APPENDICES
Appendix A

Research’s Interview Guide

1. What is your experience with online learning?

2. Describe the learning situation encountered in your online learning experience.

3. Give examples of challenges you have encountered in your online learning situation.

4. How has your background influenced your performance in online learning?

5. What advice do you give to other online nontraditional adult learners?

6. What have you learned about yourself through this online experience?

7. What would you like instructors to know about teaching online?
Appendix B

CONSENT FORM

I agree to participate in the research titled *Barriers to Online Learning as Perceived by Nontraditional Adults* which is being conducted by Charlene Goodwin, Adult Education, University of Georgia, (478) 757-9416 under the direction of Dr. Laura Bierema, Adult Education, University of Georgia, (706) 542-2214. I understand that this participation is entirely voluntary; I can withdraw my consent at any time without penalty and have the results of the research, to the extent that it can be identified as mine, returned to me, removed from the research records, or destroyed.

The following points have been explained to me:
1. **The reason** of the research is to determine what barriers exist that interfere with successful online learning experiences for nontraditional adults.
2. **The benefits** that I may expect from participation in this research are my satisfaction in having the opportunity to express my ideas regarding my experience with on-line learning courses and having the potential ability to contribute to the increased understanding professional educators and students may develop by using the results of the study. There are no financial benefits from participation in this study.
3. The procedures for this study will be:
   • The investigator will interview each participant for approximately one hour. This interview may be face-to-face, conducted on-line, or over the telephone. The interview will take place at a mutually agreed upon time and place. The interview will be audio taped.
   • The investigator will ask each participant a list of open ended questions regarding their participation in an on-line course.
   • Participants may be asked further questions at a later date that will provide clarification of content arising from the original interview. These meetings may be by phone or email.
4. **No discomforts or stresses** are expected.
5. **No risks** are expected.
6. **All information obtained during this study will remain confidential.** This information will not be released in any identifiable form, without my consent, unless required by law. All data will be coded for anonymity. If information about you is published, it will be written in a way that you cannot be recognized. All data will be stored at my residence. All data, including audio tapes, will be destroyed within six months of the completion of the study.
7. The researcher will answer any further questions about the research, now or during the course of the project, and can be reached at (478) 757-9416.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.
Please sign both copies of this consent form. Keep one and return the other to the investigator.

________________________________________  __________________________
Signature of Investigator Date

________________________________________  __________________________
Signature of Participant Date

For questions or problems about your rights please call or write: Chris A. Joseph, Ph.D., Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Ga. 30602-7411: Telephone (706) 542-6514; E-Mail Address IRB@uga.edu.