

**ANDRAGOGY: HOW DO POST-SECONDARY INSTITUTIONS EDUCATE AND
SERVICE ADULT LEARNERS?**

by

Darcy B. Tannehill, Ed.D.

B.A., Duquesne University, 1978

M.S.Ed. Duquesne University, 1986

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This dissertation was presented

by

Darcy B. Tannehill Ed.D.

It was defended on

April 27, 2009

and approved by

Dr. Sean Hughes, Associate Professor, Administrative and Policy Studies

Dr. Charlene Trovato, Clinical Associate Professor, Administrative and Policy Studies

Dr. Stewart Edward Sutin, Clinical Professor, Administrative and Policy Studies

Dissertation Advisor: Dr. John L. Yeager, Associate Professor, Administrative and Policy
Studies

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Nontraditional students often have many responsibilities beyond those of traditional students. These responsibilities include: full time employment, marriage, children, and large financial commitments. This research will focus on the undergraduate adult learner and will present how institutions of higher learning have begun to respond to the adult learner, the current state of the adult learner, the needs of the adult learner, and the processes and procedures that institutions of higher education implement to educate and support the adult learner. It begins with the history of Andragogy and a discussion of what current literature is saying about andragogy. Then, the research questions are identified and the research methodology used to gather the information and data. The research results are then presented, and the study concludes with the research findings and a discussion on potential future research considerations of andragogy and how post-secondary institutions can better educate and service adult learners. The overall purpose is to demonstrate the importance of improving these services to improve quality of student service and enhancement of the student experience. Eighty-five institutions responded to the survey on current andragogy styles and the results will demonstrate the importance of increased attention to andragogy and its impact on the student experience.

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PREFACE

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1.0 INTRODUCTION

1.1 BACKGROUND OF THE PROBLEM

The number of nontraditional students attending post-secondary institutions in undergraduate programs has significantly increased over the past twenty years. According to the United States Department of Education's National Center for Education Statistics, 6.8 million students will be over the age of 25 by the year 2010 (Kattner, 2001). There is no sign that there will be any significant decrease within the next ten years. In 2002, thirty-nine percent of undergraduates were twenty-five years of age or older and the statistics show that thirty-eight percent in 2012 will be twenty-five years of age or older (National Center for Educational Statistics, 2002).

While more than 30 percent of today's college students are adult learners, many aspects of the higher education system are not designed with these students in mind (Lumina Foundation, 2007). Nontraditional students often have many responsibilities beyond those of traditional students. These responsibilities include: full time employment, marriage, children, and large financial commitments. Numerous responsibilities place an additional burden on the ability to enroll in college and to persist to the completion of an undergraduate education.

Nontraditional students are more likely than traditional students to leave without earning any degree and more likely to leave education altogether if they leave their first institution (National Center for Education Statistics [NCES], 2002). For students beginning college in

1989, the percentage of nontraditional students who attained their degree within five years was 31.3 as compared to 53.9 of traditional students. Of the remaining students, 32.5 percent of nontraditional students and 19.2 percent of traditional students were no longer enrolled in post secondary education after five years ([NCES], 2002).

The increase in the number of nontraditional students has resulted in the increase of nontraditional undergraduate degree programs and an increased interest in nontraditional students on the part of many institutions. Institutions vary in the programs they offer to nontraditional students as well as in the support they provide to them while they are seeking their degrees.

Institutions of higher learning have begun to respond to the adult learner through a number of initiatives, including: providing different services, offering a variety of class delivery formats both on campus and online, and increasing the application of adult learning theory (andragogy) into the delivered instruction. Many institutions are no longer ignoring the adult learner and are beginning to gain an understanding of what they need to do to enroll and retain these learners.

This research will focus on the undergraduate adult learner and will present the current state of the adult learner, the needs of the adult learner, and the processes and procedures that institutions of higher education implement to educate and support the adult learner. First paragraph.

1.2 SIGNIFICANCE OF THE STUDY

The increase in the number of nontraditional students desiring to pursue or pursuing an undergraduate degree program has resulted in an increase in the number of nontraditional programs being offered by colleges and universities. Institutions that previously only offered traditional programs now offer nontraditional programs. Institutions have expanded offerings to off campus locations, created departments for recruiting and retaining nontraditional students, and expanded program formats to include weekend, accelerated, and online course offerings.

The review of the literature suggests that nontraditional students require particular types of services to persist in college and have a preference with regards to acquiring information. The literature shows that the staff assigned to work with nontraditional students should be specifically trained. It also shows that institutions offer varying levels of programming and support for nontraditional students.

1.3 STATEMENT OF THE PROBLEM

Many colleges and universities have financially benefited from the influx of non-traditional students. But, what structures and strategies have been implemented to educate and retain the nontraditional student? Is there institutional support for the education of the nontraditional student? This dissertation will survey college and university administrators who have the primary responsibility of educating the nontraditional students at their institution. Second paragraph.

1.4 RESEARCH QUESTIONS

1. Do institutions utilize the principles of andragogy to educate its adult learners?
2. Do institutions provide specialized support for the adult learners, specifically:
 - a. services,
 - b. program delivery options, and,
 - c. the awarding of credit for prior learning through College Level Examination Program (CLEP), advanced standing, advanced placement, transfer of credits, portfolio review, and the American Council of Education (ACE) Guidelines for Corporate Training?
3. Do institutions apply best practices, as defined by andragogy, for adult learners?
4. What are the most common principles and services, as defined by andragogy, utilized by institutions as categorized by the Carnegie classification?

1.5 DELIMITATIONS AND LIMITATIONS OF THE STUDY

1.5.1 Delimitations

The results of this study will be based upon the responses of the administrators primarily responsible for nontraditional students at their respective institutions.

1.5.2 Limitations

This study will survey administrators at 358 University Continuing Education Association member institutions located in the United States. The results of this study will be derived from surveys and depends upon the willingness of the respondents to participate in this research project.

1.6 DEFINITIONS OF TERMS

Adult learner-the same as nontraditional student

Andragogy-theory of adult learning that purports adults learn differently and prefer to learn by specific methods of instruction

Barrier-something impacting the nontraditional students that creates difficulty for or prevents completion of their educational program

Nontraditional student-a person having any or all of the following characteristics: older than 24, married, having children, holding full time employment, having financial independence. Also referred to as adult learner

Primary Administrator-institutional representative responsible for nontraditional programs and services

Retention strategies-services or programs that assist students in persisting in educational programs at post-secondary education institutions

Traditional student-a person between the ages of 18 and 25 who has not yet assumed any primary responsibility for his/her own life

1.7 SUMMARY

The number of nontraditional students seeking undergraduate degrees has increased significantly over the past twenty years and shows no signs of decreasing in the future. This increase has resulted in the creation of new programs, the expansion of programs, new formats, and new departments for nontraditional students. However, institutional support for adult learners varies in terms of both curriculum design and educational and support services.

2.0 REVIEW OF THE LITERATURE

2.1 INTRODUCTION

The participation of the adult learner, also referred to as the nontraditional student, in post-secondary education has been on the rise for the past fifty years. There has been a particularly rapid rise since 1970. According to the United States Department of Education's National Center for Educational Statistics, in 1998, the numbers of nontraditional students, defined as being age twenty-five or older, was over six million (Towell and Neeley, 1999). This compares with slightly more than two million in 1970 and shows a three hundred percent increase (Towell and Neeley, 1999). During the same time, the numbers of traditional students (those less than age twenty five) grew from six million to slightly more than eight million (Towell and Neeley, 1999). This represents a significantly smaller growth pattern of traditional students when compared to that of non-traditional students and changes the ratio of nontraditional students to traditional students (Towell and Neeley, 1999).

Adults are the fastest-growing segment of all the population groups in higher education (Benshoff and Lewis, 1992). There are seven primary reasons why nontraditional students return to school. Zamanou (1993) lists them as follows: 1) the need for academic credentials for career advancement, 2) for a career change, 3) life transitions such as divorce or the death of a spouse, 4) currently unemployed and seeking a future employment opportunity, 5) for education sake, 6)

as a requirement of a current job, and ,7) for social activities. Women are most likely to identify life transitions as the primary reason for returning to school while men cite factors related to employment (Zamanou, 1993).

Just as nontraditional students have primary reasons for returning to school, there are primary reasons for not returning to school. These are: lack of time, lack of interest, it is unaffordable, no further education is needed, inconvenient locations, and too strict admissions standards (Zamanou, 1993). The increased presence of the nontraditional students in many colleges and universities has certainly changed the composition of the student body. This increase in numbers brings to light a number of issues that must be considered. Nontraditional students bring with them a different set of responsibilities, needs, and concerns as well as additional barriers to persistence. Many institutions have created and are continuing to create unique methods in which to deliver instruction, support services, and other special programs to assist the adult learner. A theory of adult learning, andragogy, puts forth the thought that nontraditional students may actually learn differently than do traditional students.

2.2 ANDRAGOGY

The most prominent name in adult learning and the person responsible for defining the theory of adult learning or andragogy is Malcolm Shepherd Knowles. Knowles devoted most of his life to adult education and pioneered the field of adult learning in the United States during the second half of the 20th century (Bash, 2003). He was a significant factor in reorienting adult educators from “educating people” to “helping them to learn” (Smith, 2002). While the concept of

andragogy, based upon both humanistic and behavioral psychology, has been used since the 1830s it was Knowles who popularized the term and concept (Smith, 2002).

Knowles' theory takes a learner centered approach with five areas: the learner, the learner's experience, readiness to learn, orientation to learning, and motivation to learning (Bash, 2003). The learner as adults are self-directed learners who are anxious to demonstrate that they are taking responsibility for themselves in the learning process; the learner's experience assumes greater volume and different quality since the learner has had a variety of work and life experiences and even previous educational one (Bash, 2003). Readiness to learn means that the adult learner becomes ready when they experience a need to know or do something; orientation to learning refers to the curriculum that should be life-centered, task-centered, or problem centered and should focus on life situations; and, motivation to learn which for adult learners, is internal as they are looking for increased self-esteem, recognition, a better quality of life, and greater self-confidence (Bash, 2003).

Defining the characteristics of adult learners even further, Knowles stated that since they are autonomous and self-directed, they need to have a sense of control over their own learning and should be actively involved in the learning process, even serving as facilitators themselves (Bash, 2003). Furthermore, adult learners have accumulated a foundation of life experiences and knowledge that may include work-related activities, interest-based activities, family responsibilities, and previous educational experiences (Bash, 2003). Adults acquire their self-identity from their experience; adults are what they have done and they have a deep investment in its value (Knowles, 1980). When adults find the worth of their experience being minimized, it is not just their experience that is being rejected but they feel rejected as persons (Knowles, 1980). Additionally, adult learners are goal-oriented, usually knowing upon enrollment what

goals they wish to accomplish but at the same time due to their busy schedules, are less adaptable to change in the middle of courses or programs (Bash, 2003). Adult learners are also relevancy-oriented and tend to feel that they must see a reason for learning something or understand the connection between the learning event and some aspect of their life which means that the learning has to be applicable to their work or other responsibilities to be of value to them; they may be reluctant to spend time and energy on any assignment that does not offer them some additional benefit (Bash, 2003). Adult learners are also practical and may not be interested in knowledge for its own sake, at least in the beginning, and finally, all learners but particularly adult learners express the need to be shown respect, expect to be treated as equals based upon their experience and understanding, and assume that they will be allowed to voice their opinions freely in class (Bash, 2003). Adult learners are also much more assertive than younger students and if they perceive they are not being treated with respect, will act upon those perceptions (Bash, 2003).

Knowles (1989) made some distinctions regarding the differences between pedagogy and andragogy and these are detailed in the following table.

Table 1. Assumptions, Pedagogy, and Andragogy

Assumption	Pedagogy	Andragogy
The need to know	Learners need to know that they must learn what they need to know to pass and not what will apply to their lives	Adults need to know why they need to learn something before undertaking to learn it.
The learner's self concept	Dependent on the teacher	Adults want to be viewed as capable of self-direction but are not sure how to do that in a classroom setting
Role of experience	Learner's experience is of little importance	Adults have a larger quantity of experiences and a different in quality of experiences
Readiness to learn	Learners become ready to learn what the school requires them to learn if they want to	Adults are ready to learn things they need to know or to be able to do in order to cope

	pass	effectively with their real-life situations
Orientation to learning	Subject-centered: acquiring subject-matter content	Adults are life task centered/problem centered
Motivation	Motivated to learn by extrinsic motivators—grades, teacher’s approval/disapproval, parental pressure	Adults respond to extrinsic motivators such as promotions, salary increases but the stronger motivators are intrinsic—increased self-esteem, quality of life, and job promotion

The difference between pedagogical assumptions and andragogical assumptions is that the pedagogical model is an ideological model which excludes andragogical assumptions while the andragogical model is a system of assumptions which includes the pedagogical assumptions (Knowles, 1990). Andragogy is an attempt to build a theory of adult learning anchored in the characteristics of adult learners (Smith, 2002). Knowles (1989) also created a Self-Diagnostic Rating Scale which covered his concept of the competencies required for the role of adult educator/trainer. The Scale covers the roles of learning facilitator, program developer, and administrator and allows each professional to rate what they believe is required for their role versus where they currently rate themselves (Knowles, 1989). Knowles’ insights into adult learning and the educating of the adult student are important to those who develop programs for adult learners and those who teach those learners. Knowles was the first to chart the rise of the adult education movement in the United States; the first to develop a statement of informal adult education practice; and the first to attempt a comprehensive “theory” of adult education via the idea of andragogy (Smith, 2002).

The concept of educating the adult learner requires an understanding of much more than the learning process. In order to create a comprehensive learning experience, it is necessary to understand how adults learn, what they are interested in learning, and where they learn (Merriam

(1993). There needs to be a focus on the foundations of adult education, adult development, adult learning, and qualitative research methods (Merriam and Brockett, 2007). Furthermore, according to Merriam (1986), being responsive to adult learners means not just knowing something about how people learn and but to understand how an adult learning situation differs from one with children. Some of these differences include: the self-directiveness of adults, the desire for the immediate application of learning, that adults draw from the past experiences, that adults learn from each other, and that adults prefer to participate in the planning and the evaluation of learning activities (Merriam, 1986).

The impact of education on the adult learner often extends far beyond the acquisition of credits or the advancement of a career. The knowledge gained through the educational process can serve as an impetus for more substantial and internal changes in the learner. This can be further understood by the concept of transformational learning. Transformational learning is learning that produces change, changes that are more far-reaching and have a significant impact on the learner's subsequent experiences; transformational learning shapes people and makes them different in ways both they and others can recognize (Clark, 1993). Transformational learning refers to the process by which we transform our taken-for-granted frames of reference to make them more inclusive, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action (Mezirow, 2000). Mezirow's primary purpose is to develop a comprehensive theory of adult learning that has as its centerpiece the structuring of meaning from experience and is directed toward personal development (Clark, 1993). Mezirow defines learning as follows: "Learning is understood as the process of using a prior interpretation to construe a new or a revised interpretation of the meaning of one's experience in order to guide future action" (Jack Mezirow, n.d). According to

Mezirow, there are three phases to transformational learning: critical reflection on one's assumptions, discourse to validate the critically reflective insight, and action; he stated that the process results from an individual who experiences a crisis that cannot be resolved through previous problem solving strategies (Jack Mezirow, n.d.). The process is as follows:

- 1) the person goes through a self-examination which includes a critical assessment of assumptions,
- 2) new options are explored for forming new roles, relationships, or actions,
- 3) a plan of action, which includes acquiring new skills and knowledge, trying out new roles, renegotiating relationships, and negotiating new relationships, is formulated,
- 4) confidence and competence is built, and
- 5) the person reintegrates back into his/her life with the new transformed perspective (Jack Mezirow, n.d.).

According to Mezirow (n.d), the hallmark of adult learning is “becoming critically aware of how and why our presuppositions have come to constrain the way we perceive, understand, and feel about our world; of reformulating these assumptions to permit a more inclusive, discriminating, permeable, and integrative perspective, and of making decisions or otherwise acting upon these new understandings.

Zemke and Zemke (1995) wrote that “adults can be ordered into a classroom and prodded into seats, but they cannot be forced to learn but adults who see a need or have a desire to know something new are quite resourceful.” Furthermore, when the conditions are right, adults seek out and demand learning experiences as they are self-directed to learn (Zemke and Zemke, 1995). The key to getting adults to use their natural motivation is to tap into their most teachable moments: those points in their lives when they believe they need to learn something new or

different (Zemke and Zemke, 1995). There is a window of opportunity during which most adults are receptive to learning and after that window closes, they cannot be forced or enticed into learning (Zemke and Zemke, 1995). There must also be opportunities for practice for if a new skill is acquired but there is no opportunity provided for practice, the skill will quickly fade (Zemke and Zemke, 1995). Zemke and Zemke (1995) also state the following:

1) adult learning is problem-centered. Adults do not normally undertake the learning experience just to learn. It is more often due to a life-changing event such as marriage, divorce, a new job or a similar circumstance,

2) adults learners can also be motivated by appealing to personal growth or gain. Though immediate use is most often the key motivating factor for adult learners, some evidence suggests that adults accept training if they see it relevant to the rest of their lives or it increases or maintains their sense of self-esteem or pleasure, and,

3) motivation to learn can be increased if curiosity about a subject can be stimulated and it demonstrated early on that the learning will be applied immediately, and there is a low risk for the learners.

Zemke and Zemke (1984) further found that the more life changing events an adult encounters, the more likely he/she is to seek out learning opportunities and that the learning experiences adult seek out on their own are directly related, at least, in their perception, to the life-change events that triggered the seeking. Also, learning is a means to an end, not an end in itself and increasing or maintaining one's sense of self-esteem and pleasure are strong secondary motivators for engaging in learning experiences (Zemke and Zemke, 1984). Motivating adult learners is not something that can be externally forced. Internal motivators work much more effectively and are stronger for the adult learner than anything that is forced upon them. They

need to have a reason to pursue education, they want to control their own learning experience, and they want to be able to use their newly acquired knowledge in the real world immediately.

Experiential learning theory (ELT) draws from the works of a number of 20th century scholars who gave experience a central role in the theory of learning and development, namely John Dewey, Kurt Lewin, Jean Piaget, William James, Carl Jung, Paulo Freire, Carol Rogers and others (Kolb, 2005). Experiential learning theory is a model of the experiential learning process and a model of adult development. It is based upon six propositions shared by the aforementioned scholars:

1) learning is best conceived as a process and this process should include feedback on the effectiveness of the learning efforts,

2) all learning is relearning or redefining what is already known and integrating with new and more refined ideas,

3) learning requires the resolution of conflicts between opposed modes of adaptation to the world,

4) learning is a holistic process of adaptation to the world that includes thinking, feeling, perceiving, and behaving,

5) learning results from transactions between the person and the environment through assimilation and accommodation, and,

6) learning is the process of creating knowledge (Kolb, 2005).

The common theme in working with the adult learner is the concept of experiential learning, the immediate application of theory to practice, and the need for the adult learner to be respected and to be an active participant in the learning process. Indeed, the concept of

andragogy advocates that the adult learner has a specific set of characteristics that impacts their participation in the learning experience.

2.3 THE ADULT LEARNER

For all of the discussion regarding adult learners, their needs, and the different methods needed for effectively instructing them, who are they? The average nontraditional student is age 25 or older and is returning to school on a part-time or full-time basis. Nontraditional students are motivated to return to school by a variety of reasons, including: job/career change, career enhancement, or simply personal enrichment (Kerka, 1992). Adult learners tend to be achievement oriented, highly motivated, and relatively independent with special needs for flexible schedules and instruction appropriate for their developmental level (Benshoff and Lewis, 1992). They prefer approaches to learning that are more active and value the opportunities to integrate academic learning with their life and work experiences (Benshoff and Lewis, 1992). Nontraditional students also see their education as an investment so they possess a stronger consumer orientation (Benshoff and Lewis, 1992).

Research shows that adult students study more hours per week than do traditional students and that they have higher GPAs than younger students (Bendixen-Noe, 1998). Adult students are also more internally motivated to learn, prefer informal learning, and are more goal-oriented than traditional students (Bendixen-Noe, 1998). Faculty who work with older students perceive them as more motivated, pragmatic, self-directed, goal oriented, competent, and their “best” students as they responded, reacted, provided opinions, and participated in the process of

education (Bendixen-Noe, 1998). Beder and Darkenwald (1992) (in Bendixen-Noe, 1998) cited eight differences in teaching adults as opposed to teaching their younger counterparts:

- 1) greater use of group discussion,
- 2) less time spent on classroom discipline,
- 3) more variety of teaching technique,
- 4) less time spent on giving directions,
- 5) more relating of material to life experience,
- 6) more flexible instructional activities,
- 7) more adjustments made in instructional content in response to student feedback, and,
- 8) less emotional support provided to individual students.

In return, these adult students identified the characteristics of effective instructors to be:

- 1) using relevant material,
- 2) encouraging participation,
- 3) being open to questions, and,
- 4) showing concern for student learning (Donaldson, Flannery and Ross-Gordon, 1993 in

Bendixen-Noe, 1998).

Learning is an interactive process for both children and adults but the distinction of adult education is that the student brings a rich array of previous experiences and demands practical application for the education process (Tweedell, 2000).

2.4 FACULTY AND THE ADULT LEARNER

The education of the adult learner does not just include theoretical concepts. While andragogy is based on the learner and the learning experience no learning experience can exclude the role of the faculty member in the learning process.

According to Mezirow (1991), an adult educator must assist the learners in becoming less dependent upon the educator by teaching them how to utilize learning resources, particularly the experiences of their fellow students, and by engaging in reciprocal learning relationships with others beyond that of the educator. The educator must also assist the learners in defining their learning needs and objectives, planning their learning program, and evaluating their progress (Mezirow, 1991). The learner needs the educator to assist them in understanding the perspectives of others who have alternative ways of understanding and to become effective problem solvers so that appropriate choices or decisions may be made (Mezirow, 1991).

Helping adults elaborate, create and transform their meaning schemes (beliefs, feelings, interpretations, decisions) through reflection on their content, the process by which they were learned, and their premises (social context, history, and consequences) is what andragogy is about (Mezirow, 1991). According to Mezirow (1991), the goal of adult education is to help the learner to become a better critical thinker, to teach them how to understand their experience in relation to the theory and how to apply theory into experience. Once the learner is able to keenly reflective upon both their experience and the theory, the process should create new ways of thinking and processing, the goal of transformational learning. Transformational learning can not only change the thinking and life of the learner but the lives of those who live and work with them, and may involve social change as well.

Mezirow (1990) believed that adult educators should not just respond to initial learner interests and self-defined needs, but that they must do so with the intent to move the learner to an awareness of the reasons for these needs and how the learners' meaning perspectives may have limited the way they customarily perceive, think, feel and act in defining and attempting to satisfy their needs. Furthermore, the adult educator must serve as a role model for critical reflection (Mezirow, 1990). Critical reflection and awareness of why we attach the meanings we do to reality may be the most significant distinguishing characteristics of adult learning (Merriam, 1993).

Applying the principles of andragogy to the classroom has an impact on both the faculty member's method of facilitation, the delivery of the instruction, and the classroom environment. According to Mezirow (2000), in a model seminar, there are a set of commonly accepted norms that support the ideal conditions of discourse; there is no outside coercion, everyone has an equal opportunity to contribute, participants are informed on the topic to be discussed, and there are norms of courtesy, active listening, studying issues in advance, and taking turns to talk. Curricula, instructional methods, materials, assessment, and faculty and staff development should address both the learner objectives and the goal of adult education (Mezirow, 2000). Green (1998) suggests that educators use problem centered learning such as open ended questions, case studies, and simulations that are not just about tasks and the memorization of content. Also conducive to learning is a comfortable environment, one in which the instructors are able to put their egos aside and allow the students to challenge their thoughts (Green, 1998). The keys to adult learning are to allow the students to direct themselves through the instructional process by integrating new and relevant information with previous experiences (Green, 1998).

Conner (2004) echoes the thoughts of Green regarding the need for experiential and self-directed learning but goes on to state that people will not learn until they are ready to learn and that they must overcome inhibitions, behaviors, and beliefs about learning.

Faculty teaching adult learners must understand the seven design elements of andragogy which are:

1) the importance of climate setting, both physical and psychological. Any physical setting which suggests one-way transmission is pedagogical and not andragogical. An example would be a lecture room with rows of chairs and a lectern. Characteristics of a good andragogical psychological setting are a climate of: mutual respect, collaborativeness, mutual trust, supportiveness, openness and authenticity, pleasure, and humanness,

- 2) involving the learners in mutual planning,
- 3) involving participants in diagnosing their own needs,
- 4) involving learners in formulating their learning objectives,
- 5) involving learners in designing learning plans,
- 6) helping learners carry out their learning plans, and,
- 7) involving learners in evaluating their learning (Miller, 1987).

Miller (1987) makes a number of suggestions for faculty to consider in adjusting their instructional approach to accommodate the adult learner. It is important to get to know the learner not just by name but to also know their circumstances and their experiences; this personalizes the classroom experience and provides a supportive learning environment (Miller, 1987). Theory should be tied to practice by allowing students to develop assignments that can be applied to their work settings or allowing field studies instead of library research (Miller, 1987).

In the delivery of the content, it is beneficial for a variety of formats and delivery techniques (e.g. discussions, question and answer sessions, multimedia) to be used (Miller, 1987). And, finally, Miller (1987) states that feedback should be provided frequently not just on formal assignments but informally and that feedback from the students should be allowed as well.

In Knowles (1989), "Principles of Adult Teaching," he shares the thoughts of Green, Connor, and Miller but goes on to add that students should want to learn, they should accept some responsibility for the learning process, and should understand the purposes of the course in which they are enrolled. He also believes that the teacher should have a flexible plan for the course (Knowles, 1989).

There are methods that faculty can use to accommodate the adult learner. These include:

1) for adults who are anxious about being back in the classroom, the faculty member can assist by creating an easy, informal, friendly atmosphere where students can contribute what they know,

2) if adults resist change due to a set way of doing things, provide opportunities for analyzing situations which can lead to an inner motivation to change rather than just telling them to change; allow them to tell you how they do something,

3) for adults who are frustrated or unfamiliar with administrative functions, streamline roll-taking, record-keeping, and other tasks not related to learning,

4) many adults are preoccupied with outside responsibilities so relate the content to real-life situations and allow the students to select topics that they can investigate to solve a real-life issue,

5) adults approach learning with a strong sense of responsibility so keep the class challenging and stimulating, give the students the opportunity to evaluate the class and make

suggestions, and be prepared to accept the negative evaluations; make changes as needed during the course,

6) adults bring a broad background of experience to the classroom so use the personal experiences of the students and allow the students to learn from each other, and,

7) since adults need to feel that time is well spent and that the material is relevant and practical, keep the content and approach practical and the class organized and prepared (Miller, 1987).

According to Zemke and Zemke (1984), one of the most important elements is the comfort of the learning environment and high on the irritation scale for adult learners are long lectures and periods of sitting as well as the absence of practice opportunities. Faculty also need to remember that adults have something real to lose in the classroom setting—self-esteem and ego (Zemke and Zemke, 1984). The key to the instructor role is control and balance of the presentation of new materials, debate and discussion, sharing of relevant student experiences, and the clock (Zemke and Zemke, 1984). It seems that instructors are best able to establish control when they risk giving it up, shelve their egos, and stifle the tendency to be threatened by challenges to plans and methods; this leads to gaining the kind of facilitation control needed to effect adult learning (Zemke and Zemke, 1984).

It has been established that adult learning takes place more effectively through facilitation versus lecture. So, what constitutes good facilitation? According to Knowles (1975), it requires: the facilitator to focus on what is happening to the student instead of him/herself, that the facilitator give up the protective shield of being an authority figure and expose him/herself as an authentic human being, the facilitator to be clear about what resources were available and which were not, and the facilitator to join the students as a co-learner. In addition to what has already

been presented for educating adult learners, Zemke and Zemke (1995) suggest that a good facilitator also establishes goals and clarifies expectations and also understands that adults have their egos on the line in the classroom

Siebert (2000) writes that teaching adult learners requires more advanced teaching skills than teaching traditional students and that a skillful instructor devotes much of the first class meeting to reducing the fears and concerns, and then develops strong intrinsic interest in the course by connecting each student's plans for the future and past experiences with the course material. Siebert (2000) goes on to explain that to facilitate learning in adult students, an instructor needs many diverse skills, including creating a non-competitive atmosphere that encourages cooperative learning. Siebert (2000) suggests that the faculty members make the time during the first classroom meeting to introduce themselves to their students and have the students introduce themselves to each other; this allows not only for information exchange but helps the learners to become more comfortable talking within the classroom setting.

Siebert explains that the focus at the beginning of the class should be on the students, their concerns, and their experiences and not on the content of the syllabus or course material. This allows for the students to develop a more positive attitude toward the course and the instructor (Siebert, 2000). Siebert (2000) further states that research has shown that adult learners do better in courses where instructors: create a relaxed and safe atmosphere, accommodate different learning styles, present information using both visual and auditory methods, talk with students and not at them, recognize student uniqueness, validate cultural differences, let students influence course coverage, match teaching method to content, build on students' experience, encourage self-motivated learning, include team learning projects, avoid

setting up competition, support theory with real-life examples, make class sessions interactive, and provide frequent positive feedback.

While much of the attention is focused on the methodology of andragogy, there is, within Knowles's writing, another consistent and significant message about relationship, the suggestion that the essence of facilitation lies not in one's approach as much as in the relationship that exists between learner and facilitator (Pratt, 1993). Knowles says that andragogical approaches require a psychological climate of mutual respect, collaboration, trust, support, openness, authenticity, pleasure, and humane treatment, and that it is the responsibility of the facilitator to provide a caring, accepting, respecting, helping social atmosphere (Pratt, 1993).

Not all faculty members wish to teach adult learners or are even capable of providing the necessary support and classroom environment. And, some faculty members should remain teaching traditional aged students and not even consider entering a classroom of adult learners. As discussed, faculty members who are most successful in instructing adult students are those who are:

- 1) able to understand that the students may have experiences worth sharing in the classroom,
- 2) able to admit being wrong in front of the students,
- 3) able to provide a supportive and nurturing classroom environment,
- 4) competent in delivering content in an interactive manner with the opportunity for real-world application,
- 5) capable of quickly making content adjustments during the course,
- 6) open to questions and being questioned,
- 7) open to getting feedback from the students on how the course is going,

8) able to operate in an environment of mutual respect and openness.

For some faculty members, this knowledge is gained through their experiences and their personalities are easily adapted to this type of classroom environment. For others, keeping in mind that most faculty members are never taught how to teach but are hired because of the subject matter expertise, they need to receive some education on providing their students with learning opportunities.

Training faculty members on the concept of andragogy and the characteristics of the adult and the application of this knowledge to the classroom setting should be supported by the entire institution. Training may be comprised of seminars, both in the classroom and online, that introduce the concept of andragogy and the characteristics of adult learners. These training sessions should not simply convey the concepts but should be delivered based upon the concept of andragogy. Therefore, they must be interactive, must offer the opportunity for application, need to engage speakers who are experts in teaching adult learners, and must allow the participants to use their experiences as learning opportunities. Immediate feedback needs to be provided to the participants. Furthermore, they should be provided with a comfortable and supportive learning environment. If the course is held on ground, the classroom should be arranged in an interactive manner and not set up for lecture. If the course is offered online, it must not be simply text but must include discussion questions that allow for interactivity, real world application, and facilitation.

Marino (1997) states that, “Even as returning students must adapt to the requirements of the academy, the academy must adapt to the needs of the significant number of returning students.” Marino (1997) researched one of the most significant tools for instruction—the textbook. Marino (1997) found that while textbooks often use language sensitive to race, class,

and gender, they fail to take into account age related differences. Many assignments based upon selected textbooks are geared for the traditional students and do not take into account the developmental stage of the nontraditional student. An example of this may be a freshmen composition class in which the writing assignments are geared for eighteen-year-old students and their stage of development. Some faculty members do create their own teaching materials or adapt traditional assignments for nontraditional students thereby showing a sensitivity to the age diversity of the students (Marino, 1997). Marino (1997) believes that this is now changing and that we are seeing recognition of the nontraditional student in the instructional materials used in the classroom.

While the textbook may be an important tool for instruction and should recognize the differences between nontraditional and traditional students, the faculty makes an even larger impact on the educational process. The typical faculty member has little or no knowledge of andragogy or the particular needs of the nontraditional student. They have most often been educated via a traditional system and have had the majority of their teaching experience in the traditional classroom. Given that the nontraditional student brings a different set of needs to the classroom situation and desires a different type of instructional method, logic then follows that the faculty who teach nontraditional students must learn about nontraditional students, their needs, and their preferences that impact the learning process. Nontraditional students tend to be highly motivated and perceive learning as, “synthesizing classroom activities with real life situations,” (Shankar (1990) in Shankar, 1994). They like to plan their own learning activities, use practical ideas, and combine the theoretical with the real life application (Shankar, 1994). Shankar (1994) found that many nontraditional students find that it is difficult to interact with

professors who have preconceived notions about educational philosophy and believe in a structured curriculum designed only for traditional students.

As has been previously stated, to be effective in a nontraditional classroom, faculty must be trained. It is the responsibility of the administration to make certain that nontraditional students receive proper instruction. Therefore, faculty-training programs should be designed to assist the faculty in understanding nontraditional students and in learning how to interact effectively in the classroom. Shankar (1994) suggests that a faculty member familiar with the principles of andragogy be appointed to assist other faculty in understanding the differences between instructing traditional students and nontraditional students.

Some institutions do provide assistance to their faculty members by creating training materials on teaching adult students. For, examples, the Florida State Department of Education (1998) created a workbook entitled, *“The Philosophy of Teaching Adult Students. Quality Professional Development Project. Professional Development Manual II.”* California State University’s Institute for Teaching and Learning created a publication entitled, *“Helping Adults Learn Facilitator’s Guide”* in 1989 as a guide to assist higher education faculty and staff in promoting greater access and success for adult learners in higher education. The CSU Institute created four modules believed to be areas in which faculty needed to have more knowledge. These modules included information on: the characteristics of the adult learner, facilitating adult learning success and designing programs, designing instruction, and needed resources.

By taking the concept of andragogy and the characteristics of the adult learner, the classroom may be set up to provide adult learners with a rich educational experience. By training faculty members to deliver their content as suited to the learner, the experiences for both faculty members and students will be highly rewarding. The common theme in the classroom

delivery and content design needs to be that adults desire to be active participants in their learning process. They want to use the experiences they have to anchor the new concept being taught. Furthermore, they need to understand how to apply the new concept into their real world situations. And, finally, they wish to engage with their faculty members in a relationship of mutual respect. Some might believe that teaching the adult learners requires too much preparation and provides too much threat to the faculty member's ego. However, most faculty members who have taught adult learners will be quick to state that they receive huge satisfaction from teaching them. While faculty members who teach traditional aged students may wait for years to learn if what they taught was ever used successfully, the adult learners will often take what was learned in class and apply it at work the next day and then report back on the differences made by that application in the next class. There is little else that can provide any more satisfaction to a faculty member.

Administrators must support faculty members' engagement in learning about andragogy and adult learners through a number of initiatives, including: providing multiple opportunities for faculty members to acquire this knowledge, allowing for release time or stipends to encourage participation, providing opportunities for immediate application, and by showing that the remaining parts of the institution respect and support adult learners.

2.5 CURRICULUM FOR ADULT LEARNERS

In addition to the roles of the learner and the faculty, programs designed for the adult learner should have particular characteristics that will enhance the learning experience of the adult learner. A program designed for the adult learner should assist them to do the following:

- 1) decontextualize,
- 2) become more aware of the history, context (norms, codes, reaction patterns, perceptual filters) and consequences of their beliefs,
- 3) become more reflective and critical in their assessment of both the content and the process of problem solving and of their own ways of participating in this process,
- 4) “bracket” preconceived ideas and openly examine evidence and assess arguments,
- 5) make better inferences, more appropriate generalizations, and more logically coherent arguments,
- 6) be more open to the perspectives of others,
- 7) rely less on psychological defense mechanisms and be more willing to accept the authority of provisional consensual validation of expressed ideas (Mezirow, 1991).

According to Zemke and Zemke (1995) the curriculum designed for the adult learner should:

- 1) be problem centered. Adults are less interested in survey courses and prefer single-concept courses that focus on applying concepts to relevant problems,
- 2) include a preprogram assessment. The program design must take into account the knowledge and understanding of the participants,
- 3) promote informational integration. To remember and use new information, adults need to be able to integrate it with what they already know and information that conflicts with what they already hold to be true is integrated more slowly. Adults also want a structure to help them keep track of details and facts in relation to one another, ideas should be presented one at a

time, summarized frequently to assist in retention and recall, and make sure that the learners can master one element before moving on to the next,

4) use exercises and cases with fidelity. Adults prefer activities that are realistic and involving, that stimulate thinking, and that have some challenge to them. While adults prefer an active learning experience, they also need time to reflect if learning is to occur,

5) plan for feedback and recognition. Learners need to know what they are trying to accomplish and how they are doing. Time should be given to exploring goals and expectations, to acknowledge those that may not be met, and to discuss both participants' and trainers' responsibilities during class. Also, adults take errors personally and affect their self-esteem which leads to them taking fewer risks and sticking to what they know to be a correct solution,

6) have curriculum that, whenever possible, takes into account the differences in learning styles. Most adults prefer straightforward how-to content,

7) have a design that accommodates adults' continued growth and changing values. Adults' needs, interests, and values change over time. Changing people's long-held values takes time and careful intervention. New and radically different ideas must be explained repeatedly and in different ways before they are understood and accepted,

8) utilize transfer strategies. Adults must have a chance to practice the newly learned concepts in order for learning to become part of the learner.

Zemke and Zemke (1984) also state that adults prefer self-directed and self-designed learning projects over group-learning experiences and that they desire to control pace. Finally, even for the self-directed learner, lectures and short seminars can get positive ratings, especially

if these involve providing the learner with one-to-one access to an expert (Zemke and Zemke, 1984).

Kolb (2005) states that the enhancement of experiential learning can be achieved through the creation of learning spaces that promote growth producing experiences for learners. A number of educational principles flow from this, including:

- 1) respect for learners and their experience,
- 2) begin with the learner’s experience of the subject matter,
- 3) creating and holding a hospitable space for learning where differences are faced and, in fact, embraced,
- 4) making space for conversational learning that allows for reflective learning,
- 5) making space for development of expertise allowing for application,
- 6) making space for acting and reflecting,
- 7) making space for feeling and thinking,
- 8) making space for inside-out learning by linking educational experiences to the learner’s interests, and,
- 9) making space for learners to take charge of their own learning by constructing their own knowledge and not just passively receiving information.

As presented in the previous sections, adult learners have characteristics that should impact the design of the curriculum and the manner in which faculty members create and present information in the learning environment. These are summarized in the following chart.

Table 2. Curricula and Learner Features of Andragogy by Theorist

	Knowles	Bash	Merriam	Mezirow	Zemke	Kolb	Green	Connor	Miller	Siebert

Learner is self-directed/independent	X	X	X	X	X	X	X	X	X	X
Learner's experience must be recognized	X	X	X	X	X	X	X	X	X	X
Curricula should be problem centered	X			X	X		X		X	X
Learner is active in the learning process	X		X	X	X	X			X	X
Learning needs to be immediately applicable to real life	X	X	X	X	X	X	X		X	X
Learner must be treated with mutual respect		X		X	X	X			X	X
Learner needs to be told why they should learn something	X							X		
Learner is motivated more by intrinsic factors	X				X					
Learners learn from each other			X	X					X	
Learning produces transformation in the learner				X						
Learning requires critical self-reflection				X		X				
Learners need to be more aware, more open to the perspectives of others			X	X						
Educator serves as role model				X						
Curricula should include a pre-assessment component					X					
Learner feedback must be utilized					X	X			X	X
Different learning styles must be					X					X

accommodated										
Set an open classroom environment	X				X				X	X
Use a variety of formats to deliver information—discussions, Q & A, multimedia	X				X					
Educator should have a flexible plan for the course	X									

2.6 SUPPORT SERVICES REQUIREMENTS OF THE ADULT LEARNER

According to a survey conducted by the College Board of more than 4,000 nontraditional students, factors most important to their education are: convenient class times, quality instruction, valuable course content in major courses, and a sense that their tuition is a worthwhile investment (Kattner, 2001). The respondents indicated that they were most satisfied with: safe and secure classrooms, faculty knowledgeable in their fields, an atmosphere welcoming to nontraditional students, and a one-stop enrollment process (Kattner, 2001). The largest performance gaps were: the convenience of the bookstore hours, timely response to complaints, the “run around” when seeking information, advisors to help students apply studies to career goals, and options within a field of study (Kattner, 2001).

Institutions need to consider the perhaps special needs of the nontraditional students if they are to assist them in completing their intended course of study. A study conducted by Shankar (1994) interviewed nontraditional students on their thoughts regarding attending

college. The findings showed that nontraditional students believe the following: curriculum is designed with the traditional student in mind, course assignments are not designed with consideration to their needs, they often feel socially isolated, the classroom equipment and technology sometimes present problems, nontraditional students prefer having more control in the direction of their education, and, finally, that faculty are difficult to interact with because of their preconceived ideas surrounding education (Shankar, 1994). Institutions need to redesign many of their systems, taking into account the needs and desires of the nontraditional students.

While nontraditional students may take longer to complete their studies, they also tend to have better grades than younger students (Ely, 1997). However, the nontraditional student may also need: to improve basic academic skills, information about job opportunities, decision-making and stress management skills, and, assistance in the identification of individual strengths and abilities (Ely, 1997). Nontraditional students also need help in building their self-confidence as students and in acquiring or refreshing study skills (Benshoff and Lewis, 1992).

Ely (1997) found that the key to the persistence of nontraditional students is social integration, particularly helpful when fostered by the faculty. Additional assistance is provided through improved registration, parking, financial aid, and better accessibility and information services (Ely, 1997). Edwards and Person (1997) stated that most colleges and universities fail to recognize what is needed to support and retain adult learners. They suggest that the role of the admissions counselor, by acting as a teacher, researcher, student advocate, evaluator, and consultant is crucial to assisting the adult learner in getting through the educational process. Byrd (1990) also suggested that institutions provide credit for students' past experiences, provide information on sources of financial aid, establish more liberal admissions requirements, provide

quality low-cost day care services, and schedule courses to meet the needs of students who are employed on a full-time basis.

Hogges (1979) found that the leadership of college administrators is necessary to provide nontraditional students with what they need to be successful and what is needed may differ among students. Some students need greater scheduling flexibility, counseling, and financial assistance while other students benefit the most by policies that grant credit for life experience (Hogges, 1979). Roundtree-Wyly and Lambert (1988) found that institutions are on a continuum in meeting the needs of adult students, ranging from those that simply ignore these students, through those that provide flexible scheduling, to those that create special programs for nontraditional students. Roundtree-Wyly and Lambert (1988) agree that creating institutional commitment to meet the needs of nontraditional students requires a huge effort by faculty, staff, and administration.

Nordstrom (1989) wrote that older students differ in significant ways, including: their stage in development, their value systems, outside responsibilities, and learning characteristics. Nordstrom (1989) further stated that since nontraditional or adult learners often return to school when they have experienced a recent life transition or crisis, faculty, staff, and administrators should re-evaluate how they relate to these students. Nordstrom (1989) found that nontraditional students are often sacrificing more than younger students to attend college and are highly motivated but they lack confidence. In 1979, Massey found that institutions were not initiating the necessary changes but that they were simply reacting to the arrival of larger numbers of nontraditional students. Massey's (1979) study focused on the University of Maryland University College and on their creation of a student services unit that was geared specifically to nontraditional students. These services included: convenient and accessible admissions services,

registration, advisement, library, articulation, recruitment, financial aid, and veterans' services (Massey, 1979). Greenland (1988) conducted a similar study by looking at the responsiveness of the University of Massachusetts at Amherst to nontraditional students. Greenland's (1988) study suggested that an office that could serve as a clearinghouse for information on all available options for nontraditional students should be beneficial to both students and institutions.

Nontraditional students also are demanding consumers of higher education—they expect faculty to teach material that can be applied immediately to their workplace, they expect the classrooms to be comfortable and have a conducive atmosphere, they expect the staff to answer their questions promptly and accurately, they expect the learning experience to enrich their lives, and they expect to be treated like adults (Institute for Professional Development, 1994). The Institute for Professional Development (1994) created a list of elements that they view as critical to high quality nontraditional education programs, including:

- 1) mission fit,
- 2) appropriate staffing and services,
- 3) faculty involvement, training, and qualifications,
- 4) accreditation,
- 5) curriculum that is cutting edge for the discipline, takes into account the prior experience of the nontraditional student, and uses student and faculty feedback for continuous improvement,
- 6) learning outcomes that are clearly articulated,
- 7) library and learning resources that support nontraditional learning,
- 8) student services that meet the nontraditional student's needs and are readily accessible, and,

9) a committed and competent leadership.

The research indicates that nontraditional students have different needs than those of traditional students. With the increasing numbers of nontraditional students desiring to matriculate, institutions must address the needs of nontraditional students and assist them in overcoming the barriers to accessing education and attaining their educational goal. If institutions chose not to address these areas, they will not be successful in recruiting or retaining the fastest growing segment of potential students.

2.7 ADULT LEARNER BARRIERS

In a study conducted by Byrd (1990) in which she examined barriers to education with 119 nontraditional students, she found that the six most frequently reported barriers were: not enough time, amount of time to complete the educational program, costs, home responsibilities, not enough energy or stamina, and job responsibilities. Benshoff and Lewis (1992) further state that, in addition to multiple non-school-related commitments and responsibilities, nontraditional students also experience a lack of an age cohort and have limited social acceptability and support for their student status since this is operating outside of traditional adult roles. Additional barriers may include: anxiety or ambivalence about returning to school, time limits for completing course requirements, and campus rules and regulations designed for traditional age students (Kerka, 1992). It has also been found that many nontraditional students actually return to college when their lives are in a transition and they have just gone through a crisis such as divorce, unemployment, or geographic relocation (Nordstrom, 1989). These students must balance a variety of responsibilities in their lives: work, family, and financial commitments, all

of which place them in a higher “at-risk” category and leaving them with no free time (Ely, 1997). The life roles of spouse, parent, employee, and child create their own set of demands and pull the nontraditional student from devoting time to educational pursuits (Mabry and Hardin, 1992). Nontraditional students, by their lack of academic experience, do not have the network that often is in place for traditional students (Mabry and Hardin, 1992). The results are: they fail to speak up in the classroom or seek help from the faculty outside of the classroom, they leave the campus after classes and have no network of classmates to ask for assistance, and finally, the whole environment of the academic environment is new and unknown to them (Mabry and Hardin, 1992). Females appear to suffer most from a lack of confidence in the ability to be successful in college and to successfully compete against younger students and report that they were concerned about the difficulty of the work, the competition from younger students, the amount of time they have been away from school, and their ability to meet the challenge of college (Zamanou, 1993). They expressed that lower costs, convenient locations, and an ability to incorporate school into a regular routine minimizes the burden of being a student again (Zamanou, 1993).

Mabry and Hardin (1992) categorized the barriers experienced by nontraditional students into the following: institutional which include admissions, scheduling, registration, and faculty; situational barriers which are life circumstances unique to each student such as financial needs and lack of family support; and psychological barriers such as low self-esteem and identity crises. Nel (1990) researched the institutional responsiveness at the University of Wyoming in the 1890’s and while some surprise was indicated that policies specific to the nontraditional learner existed over 100 years ago, the more interesting question is why has more progress not been made?

2.8 INSTITUTIONAL BARRIERS AND SUPPORT

Benshoff and Lewis (1992) state that nontraditional students present some major challenges for institutions of higher learning whose programs and services have been geared to the traditional-age student population and identified a number of additional services to better meet their needs: separate registration, advising, and orientation; greater availability of and access to parking; more evening and weekend course offerings; special assistance with financial aid and housing; and better preparation of faculty and staff to meet the needs of adult students. The student services most often implemented for adults are counseling and career related and while they are important, adults list a variety of other services important but least often available to them: health services, publications for adults, a qualified staff trained to work with nontraditional students, and innovative and creative approaches to effectively communicate information about academic and student services programs (Benshoff and Lewis, 1992). The planning of course offerings often appears to have little flexibility and there seems to be little systematic examination of scheduling with regards to the needs of nontraditional students (Zamanou, 1993). The time limits placed on course or degree requirements as well as the locations of the courses also may be a hindrance to nontraditional students (Zamanou, 1993). Furthermore, student services offices such as counseling, career planning and placement, advisement, financial aid, bookstores, and even libraries are more often than not scheduled for traditional students or the convenience of the staff (Zamanou, 1993).

Kerka (1989) suggests that since there is little that institutions can do to change students' characteristics or their circumstances with reference to persistence rates, efforts must be placed on the educational environment. Creating a commitment on the part of the universities to meet the needs of adult students is an ongoing task that requires effort by faculty, staff, and

administration (Rountree-Wyly and Lambert, 1988). In 1991, Solomon, stated that while colleges and universities recruit older students, they are not responsive to them or their needs. Webb (1993) found that the differences in needs between traditional and nontraditional students are so great that there is concern that institutions and staff can handle these needs simultaneously and suggests that there is a need to create student support centers to handle these populations. Solomon (1991) further stated that adult students should find caring, committed staff to help them through admissions, help them remain committed to their education, and help them find what they want after they graduate. Solomon (1991) reports that while fifty-nine percent of institutions have a student services office or center available to nontraditional students, that the most important factor is that the staff within these centers or offices are not designated or trained to work specifically with these nontraditional students. Uncapher (1983) found that advisors should be selected on the basis of knowledge about, sensitivity to, and interest in, the returning adult student. Thiel (1984) suggests that in addition to providing increased and flexible support services, adjusting class schedules and locations, and providing creative options for financial aid, that in-service programs for faculty and administrators should be established to better serve the nontraditional student. Schlossberg (in Solomon 1991) identifies three phases in the nontraditional student's educational process: moving in, moving through, and moving on. Moving in is what is done prior to entering the institution and ends with the completion of an application; institutions should have an entry education center designed to assist in: the admissions procedures, orientation, financial aid planning and counseling, academic advising, developmental assistance, the assessment of prior learning, and registration (Schlossberg in Solomon 1991). Moving through refers to the progression of the student through the course of study; this would be handled by an adult learner support center which would provide mentors

trained to work with nontraditional students who would assist in academic advising and provide assistance and encouragement during the degree process (Schlossberg in Solomon 1991). The moving on portion could be served by a transition group that can bridge the gap between the institution and the outside world and could help the student to explore what they can expect upon graduation (Schlossberg in Solomon 1991).

Mabry and Hardin (1992) identified four major barriers for nontraditional students; these are informational, procedural, situational, and psychological. Informational barriers are created by the inability of institutions to make it easier for potential students to acquire the needed information and may be corrected by doing the following: sending information out to the entire community surrounding the campus, providing information at community sites such as malls and shopping centers, and holding informational sessions in the evenings during which nontraditional students can receive all of the information they need regarding the institution and education (Mabry and Hardin, 1992). Breaking down the information barrier must continue once the student attends the institution. The institution should hold special orientations for nontraditional students where a variety of topics pertaining to the institution and the pursuit of education are covered specifically for nontraditional students (Mabry and Hardin, 1992). Academic advisement is crucial to the nontraditional student, as they must learn what courses they should take and understand what courses they are not ready to pursue so that they may reach their goals (Mabry and Hardin, 1992). Nontraditional students also benefit by information on studying, time management, stress reduction, financial aid, career exploration, and mental health services (Mabry and Hardin, 1992). An effective way of disseminating information to nontraditional students is to provide a directory of resources that lists organizations on campus and off as well as information on services (Mabry and Hardin, 1992). The second barrier, identified by Mabry

and Hardin (1992) is the procedural barrier which are barriers created by the institutional structure. Institutions are often designed around the needs of traditional students, which is often not the most effective system for nontraditional students (Mabry and Hardin, 1992). An example of this is the admissions procedures used by the institution. For nontraditional students, main concerns include: transfer credit evaluation, course scheduling, credit by examination, life experience credit, and alternatives to earning credit (Mabry and Hardin, 1992). One of the areas that cause the most problems for nontraditional students is the scheduling of classes since most institutions design a course schedule to fit the traditional students (Mabry and Hardin, 1992). When class schedules do not accommodate the needs of the nontraditional students, the institution, perhaps without even knowing it, communicates to the nontraditional students that they are not important to the institution and are not wanted; the institutions in this circumstance do not realize that the class schedule is an effective marketing tool (Mabry and Hardin, 1992). Long registration lines or forms that request a parent's signature communicate to the nontraditional student that the institution is not designed for them (Mabry and Hardin, 1992). Faculty also may create barriers for nontraditional students; often they call on the nontraditional student in the classroom to provide an "older" viewpoint; faculty should learn about adult development, learning systems, and an environment conducive to nontraditional student learning (Mabry and Hardin, 1992). The third barrier identified by Mabry and Hardin (1992) is the situational barriers due to life circumstances. The institution cannot easily address these barriers, such as financial needs, housing, and the lack of family support but awareness on the part of the institution is beneficial (Mabry and Hardin, 1992). Institutions may decide to provide day care services and information on off or on campus housing (Mabry and Hardin, 1992). Since financial aid packages and offices are also designed to assist the traditional student, attention

should be paid to providing a staff member who can serve the needs of the nontraditional students and be available when the students are able to meet or speak with them (Mabry and Hardin, 1992). To address the issue of family support, the institution may be wise to bring the entire family into the process through orientation sessions and social activities; this may assist in enlisting family support (Mabry and Hardin, 1992). The fourth barrier for nontraditional students is a psychological one (Mabry and Hardin, 1992). These barriers can be many but include: low self-esteem, identity crisis, or isolation (Mabry and Hardin, 1992). Institutions can also assist with these barriers by helping the students to achieve some success early in the academic experience, receiving fast feedback on assignments so they know they are doing the right thing, or providing some group support (Mabry and Hardin, 1992).

2.9 SUPPORT SERVICES AND DELIVERY FORMATS FOR ADULT LEARNERS

Noel-Levitz, Inc. offers a number of survey instruments that provide institutions with information and surveys that institutions can administer to their own student population. In 2007, Noel-Levitz released, “The 2007 National Adult Student Priorities Report,” for which they compiled data from over 72,000 students from more than 203 institutions. The 2007 report found that the top nine enrollment factors for undergraduate adult students were, in descending order: academic reputation, availability of evening/weekend courses, future employment opportunities, campus location, financial aid/scholarships, cost, personalized attention prior to enrollment, recommendations from family/friends/employer, and the size of the institution. Kelson and Lesick (2005) stated that the competition for adult learners these days is fierce from other traditional brick and mortar schools as well as distance learning providers, corporate

colleges, proprietary institutions, and even noncredit training. Bash (2005) goes further to state that if an institution cannot or will not provide an adult learner with a product that he or she values and in a manner that is acceptable, that student will quickly take his/her business elsewhere. There is a growing consumer nature of the 21st century adult learner. Kelson and Lesick (2005) makes the following suggestions for an adult learner program to succeed: 1) convenience, convenience, convenience. This includes not only location but that courses should be offered in times and formats that fit adults' busy schedules, including: accelerated (less than the usual 15 week semester), evenings, weekends, and online. Furthermore, all services, including admissions, academic and financial aid advising, registration and bookstore should be available in one location and at times convenient to adults. The application and registration process should be simple, efficient, and timely with the ability to perform these processes online. Lastly, parking should be plentiful, close to the classrooms, safe, and free of charge, 2) career-oriented academic programs should be offered. The five fields most popular with degree-seeking adult learners are business, education, health, engineering, and computer science and all of these are career connected. Many employers still want their employees to have a degree that is job related, particularly if they are paying for all or part of the tuition costs; 3) opportunities for nontraditional acquisition of credits. Adult learners appreciate the opportunity to demonstrate the knowledge gained from their prior learning experiences and to receive college credits for what they have learned as this validates the importance of the life experiences that they have attained outside of the college classroom; and, 4) flexible transfer policy. The institution will need to have transfer policies that are user-friendly without sacrificing academic integrity. Kelson and Lesick (2005) goes on to further state that there is already so much competition for an adult learner's time from career and family that the institution must be able to demonstrate

that it will enable the learner to achieve his or her goals without totally disrupting the remainder of their lives.

The Lumina Foundation (n.d) conducted a review of literature in an article entitled, *”What We Know about Access, Persistence, and Success for Adult Learners in Postsecondary Education: A Review of Contemporary Literature.”* They found the following regarding institutions and their ability to influence adult learners’ access to postsecondary education:

- 1) institutions with online courses and resources expand accessibility to adult learners,
- 2) institutions need to reevaluate their academic and student affairs programs,
- 3) convenient locations close to their homes provides greater access,
- 4) collaborating with employers portrays the value of higher education to both the learner and the employer,
- 5) institutions that offer alternative pedagogical instruction may attract adult learners,
- 6) the institution should provide positive interactions between students and administrators, academic and financial-aid advisors, and instructors,
- 7) institutions need to better market the programs they offer for adults,
- 8) institutions should offer multiple and flexible class schedules,
- 9) the presence of adult learners is transforming academia shown through the growing numbers of for-profits and corporate universities,
- 10) social change has instigated greater access to higher education for a diverse population of adult learners, and;
- 11) some sources suggest that institutions treat adult learners as invisible with inflexibility to transfer credits, class scheduling, and/or payment options.

The Lumina Foundation study also provides information on how institutions can help the adult learner to persist. Many of these are similar to those listed in the access section but they are worthy to be repeated as necessary. These are:

1) If institutions want to improve persistence, they should offer multiple learning options, such as: off-campus learning centers, distance learning, online materials, and flexible course times in the evening and on the weekend,

2) academic advisors, counselors, and support services must all be effective for adult learners (time available and appropriately trained personnel),

3) institutions should use alternative pedagogical methods for adult learners,

4) academic aid to under-prepared learners should be offered,

5) learning communities should be established,

6) financial aid acquisition impacts persistence,

7) institution's acceptance of transfer credits influences persistence, and,

8) institution-wide reform may be a necessary step to increase persistence among adult learners.

According to Willits (2002), there are several important services an institution can offer its adult learners, including flexible scheduling such as evening and weekend courses, multiple term entry points, and various delivery formats such as online and blended in addition to on ground classroom. These offerings provide options that assist the student in completing their education.

Byrd (1990) identified the top barriers that she found in her research as well as provided recommendations to assist the nontraditional student in overcoming these barriers. The barriers and possible solutions are:

1) not enough time and the amount of time to complete a program; accept credit for previous work experience and combine their work and classroom experience for credit application,

2) cost barriers; financial aid counseling specific to nontraditional students, discounted tuition, and the offering of interest-free payment plans,

3) institutional barriers; more liberal admissions requirements, more realistic programs and policies for nontraditional students, streamlined procedures for admissions, amending of attendance policies, flexible class scheduling,

4) child responsibility barriers; low cost daycare provided by the institution,

5) employment barriers; extended counseling and advising office hours, convenient locations,

6) racial barriers; identification of “at-risk” students with counseling available by staff trained to assist nontraditional students.

To assist adult learners in either reviewing or acquiring the skills necessary to be successful in higher education, Mabry and Hardin (1992) suggest that institutions provide these students with both remedial and developmental programs.

Nel’s (1990) research on the University of Wyoming in the 1800’s indicated there was institutional support and a commitment to nontraditional students that were illustrated in policies regarding life experience, distance education courses which were at that time correspondence courses and off campus sites. Nel (1990) concluded her research by stating that few people realize the degree of institutional responsiveness that existed 100 years ago in Wyoming. This is particularly interesting since many institutions today are not nearly as responsive to nontraditional students as the University of Wyoming was 100 years ago.

Most importantly, institutions need to learn about their students via surveys and focus groups and not assume that they know what options are most appealing to their population of students (Willits, 2002). A survey of an institution's students will indicate what is most important to that student body as no one set of support services is right for all campuses. Willits (2002) also wrote that it is not just support programs that help students but that institutions also need to employ a professional services staff with strong motivational and advising skills. Advisors need to understand both adult learning theory and development theory as well as know how to use different approaches for different groups (Willits, 2002). Willits provided a list of services that administrators responsible for the support and success of adult learners should consider, including: offering nontraditional scholarships, flexible program and course scheduling options, child care options, comprehensive orientation programs, freshmen support programs, academic help, convenient and efficient student services, prior learning assessment, flexible tuition payment plans, workshops on time management skills, dealing with stress, career changes, strong communication systems, peer mentoring, student study groups, adult organizations, and housing opportunities. Obviously, as stated before, each institution will need to decide which of these they can offer and find out from their students which ones are the most important to offer.

As cited throughout the literature discussed, services that are streamlined such as one-stop student services centers where students are able to have the majority of their needs taken care of are very beneficial as are services that are provided online. Equally important are the staff members who are employed in the student services offices. These staff members need to be trained in working with the adult learner and need to understand the importance of a one stop solution to avoid the student getting the dreaded "runaround." It is well known within the adult

educator circle that while the academic reputation of the institution is important to the adult learner, even more important to them is the convenience of getting that reputable education.

Multiple delivery formats are also extremely important. Adult students want options and the more options an institution can provide to them, the happier they are with enrolling in courses. It is no longer enough to simply offer accelerated formats or weekend classes, evening classes, hybrid courses, and fully online courses. For an institution to remain competitive, it must offer multiple options to its adult learners so that they can select the format that fits the best with their family and employment situation. It is understandable that one institution may not be able to provide all options for all programs. However, to be competitive, it must offer as many as feasibly possible or the adult learners will select another institution. Sinclair Community College in Ohio is a prime example of an institution that provides maximum opportunity for its adult learners (Willits, 2002). All courses have a master syllabus so the content remains the same whether a course is offered weekdays, evenings, online, on CD-ROM, or on the weekend (Willits, 2002). Therefore, if students are having scheduling issues, they are allowed to change options without any problems; this provides a solution for almost every scheduling problem (Willits, 2002).

Some institutions have taken steps to provide more in-depth assistance to nontraditional students. For example, East Tennessee State University created a Center for Adult Programs and Services. An overview of this Center, provided by Turnbull (1989) describes this collaborative effort of the Divisions of Academic Affairs and Student Affairs. The Center offers programs and services including: community outreach, admissions, academic advisement, registration services, adult orientation and peer support programs, information and personalized referral, faculty and staff development programs, and an array of student assistance services for adult

learners. Turnbull (1989) states that over 1,000 student visits to the Center are recorded each week and that primarily student workers under the direction of the professional staff provide the support services. This suggests, Turnbull (1989) that improvements in support services may be achieved by reorganizing services currently available and requires only modest additions in services and funding.

Institutions that initiate and support adult programs often create administrative arrangements which impact roles, rules, requirements, and assumptions (Project Transition, 1979). There are at least three areas in which integration is important: matching the nontraditional program to the institution's mission, balancing integration and autonomy in administrative arrangements by allowing separation to ensure good services to nontraditional students but also allowing interaction and collaboration with other offices within the institution, and creating a workable financial structure that does not drain institutional resources (Project Transition, 1979). Nontraditional programs also require a curriculum and program designed specifically for nontraditional students and staff members who understand nontraditional students and their needs and barriers (Project Transition, 1979). Hall (in Roundtree-Wyly and Lambert, 1988) developed a list of services that are effective in assisting nontraditional students:

General

1. Develop a nontraditional handbook that includes student service hours and contact information
2. Publish a nontraditional newsletter
3. Encourage the student newspaper to include stories related to nontraditional students

Extended Hours

1. Have extended hours for the administrative offices, learning resources, counseling center, faculty, and staff on weekends and during the evenings

2. If the budget limits extended hours, open the offices later one or two days per week and some weekends.

Child Care

1. Assess the need for child care services on or near the campus

2. Evaluate child care facilities for availability to older students

3. Offer baby sitting services at a small fee

4. Provide services in the evenings and on the weekends

Commuter Service

1. Evaluate the transportation needs of nontraditional students

2. If possible, make special arrangements for nontraditional students to use transportation services

3. Publicize the availability of commuter services

4. Minimize on-campus transportation problems by clustering classrooms, offices, and other facilities

5. Advise students on parking lots near the campus

Housing

1. Examine existing housing policies to make certain they are available to nontraditional students

2. Provide short term housing for nontraditional students who travel long distances

3. Develop plans for emergency overnight housing

4. Reserve space for weekend college students

Food Service

1. Extend the hours of cafeteria service
2. Locate vending machines near classrooms used by evening and weekend students

Health Care Services

1. Evaluate health insurance policies and health care services to see if nontraditional students are eligible
2. Offer medical insurance to nontraditional students
3. Devise a health insurance plan that provides coverage to part-time students
4. Ensure that health care policies do not discriminate on age
5. Offer weekend and evening medical services
6. Have flexible scheduling for medical services

Student Services

1. Develop a system to inform prospective employers of the benefits of hiring nontraditional learners
2. Provide employers with information pertaining to age and sex discrimination
3. Encourage student government and other groups to hold meetings on the weekends or in the evenings
4. Create a nontraditional student group

Services such as those listed above can assist nontraditional students in believing that they are, indeed, a part of the institution.

Kerka (1989) suggests that institutions should adapt to nontraditional students by implementing programs and instructional strategies that enhance retention. Kerka (1989) lists these as follows:

1. Offering high quality instruction that addresses both instructional and student objectives
2. Training faculty in working with adult learners
3. Involving nontraditional students in program governance
4. Implementing a computerized progress tracking system
5. Offering courses at expanded times and days
6. Expanding locations for program offerings
7. Offering program continuity
8. Accepting credit for prior learning
9. Offering high quality and accessible student services with extended hours
10. Using admissions policies that have been adapted for nontraditional students
11. Offering no hassle registration and scheduling
12. Having career planning and placement geared for nontraditional students
13. Establishing rituals and symbols that form a sense of connectedness among nontraditional students, faculty, and staff

2.10 CREDIT FOR PRIOR LEARNING

Another important service previously discussed that encourages adult learners to enroll and help them to persist is the awarding of credit for previous learning and life experience known as prior learning assessment (PLA). The Council for Adult and Experiential Learning (CAEL) defines PLA as any knowledge-building or skills attainment that occurs prior to enrollment or outside of enrollment at a post-secondary institution, assessed for the purpose of awarding college credit

(Zucker, Johnson and Flint, 1999). According to Whitaker (1989), there are five academic standards that are directly relevant to the assessment process itself: credit should be awarded only for learning and not for experience, college credit should be awarded only for college-level learning, credit should be awarded for learning that is balanced between theory and application, the determination of credit awards must be done by appropriate subject matter and academic experts, and credit should be appropriate to the academic context in which it is accepted. Whitaker (1989) further states that there are five other standards related to the administrative context in which the assessment and the award of credit occur: credit awards and their transcripts should be monitored to avoid giving credit twice for the same learning, policies and procedures for assessment should be fully disclosed and available, fees should be based on services performed and not determined by the amount of credit awarded, all personnel involved in the assessment of learning should receive adequate training, and assessment programs should be regularly monitored, reviewed, evaluated, and revised as needed. CAEL categorizes prior learning assessment into four types: standardized exams, challenge exams, guidelines for assessment, and individual assessment referred to as portfolio assessment. While methods may vary from institution to institutions, the four most common assessment methods are: 1) Advanced Standing and Advanced Placement, 2) College Level Examination Program (CLEP), 3) Portfolio Review, and, 4) American Council of Education Guidelines for Corporate/Certificate Training.

Advanced Standing and Advanced Placement is normally awarded to students who are able to challenge a course offered at the institution. The advanced standing exam is often the final examination (or another suitable examination selected by the academic department) from the particular course for which the student wants to obtain credit. The institution sets the

required score needed in order to earn credit but the score most likely coincides with the “C” grade equivalency (Tannehill, Solomon, and Yeager, 2008). An example where a student might select this option is: the student has worked in an accounting department for a number of years but never obtained an undergraduate degree. He or she decides to complete a bachelor’s degree and one of the required courses is introduction to accounting. The content of this course covers accounting methods the student performs on a daily basis. So, instead of taking the course for which the student already has the content knowledge, the student would be permitted to challenge the course by passing the final examination in the course. If the student fails the examination, he/she would then be required to enroll in the course to earn the credit. Fees for this type of PLA are usually nominal, ranging from as low as \$30 per examination to a one-credit equivalency fee (Tannehill et al, 2008). The advanced placement credit is by courses offered through high school that are considered advanced beyond those normally considered honors level for high school students. Upon successful completion of the course and standardized examination, the students are awarded high school credit but college level credit as well (Tannehill et al, 2008).

College Level Examination Program (CLEP) is a type of standardized exam that assesses previous learning. CLEP examinations consist of both general subject as well as subject specific exams. The general subject examination is equivalent to knowledge obtained in the first two years of college while the subject examinations assess knowledge of a specific subject for a wide variety of undergraduate courses. Over 2900 institutions in the United States grant credit for CLEP examinations, requiring a minimum level of proficiency to receive credit. The American Council on Education (ACE) recommends granting credit for scores of 50 or higher (Tannehill et al, 2008).

Portfolio review, according to CAEL, is utilized by 46% of public and 56% of private institutions to grant credit. Portfolio development is both a means of evaluating learning and a means to assess prior, often experiential learning. A portfolio review process as a means to assess prior learning involves inviting the learner to become reflective and critical about his or her own previous learning experiences and to document skills and knowledge learned as part of work experience (Tannehill et al, 2008). The construction of a portfolio requires that a student go through four separate but related steps: 1) identifying the learning, 2) expressing the learning in terms of college level curriculum and competencies, 3) relating it to overall educational and career objectives, and 4) compiling the evidence and demonstrating the competence (Tannehill et al, 2008). Some institutions offer portfolio development workshops while others provide guidelines for self-instruction but all portfolios must be structured in a way that students distinguish between learning and experience, articulate their knowledge and its utilization, and establish the connection between theory and practice (Tannehill et al, 2008).

Michelson and Mandell (2004) identified six major approaches to portfolio development:

- 1) an academic orientation which focuses on improving and defining the adult learners academically transferable skills such as reasoning and logic in writing and to help them identify skills they already possess,
- 2) the meaning of education which utilizes a historical and sociological framework of formal education to invite learners to reflect on their own experiences in education,
- 3) personal exploration which addresses the learner's reason for coming back to formal education and is used to invite self-reflection and learning,
- 4) learning from the outsider within which asks the learner to reflect on challenges in their own life in reference to society at large,

5) the world of work and careers which relates the learner's practical and academic meaning to the portfolio exercise and asks them to gain new insights to the context of their workplace, and,

6) dimensions of expertise which requires the learner to consider what they know, what others know, and what colleges and universities assume they should know.

The portfolio process provides the adult learner with the recognition that they have already acquired knowledge through their life and work experiences (a key concept of Knowles' concept of andragogy). It asks the learner to provide evidence of relevant work and descriptive materials that explains to the reviewer what knowledge was acquired and how it was acquired. The portfolio review process is, perhaps, the most difficult one to implement and administer. It is not as simple as passing an examination and requires a large amount of work on the part of the learner as well as the assessor. CAEL suggests that portfolio evaluators go through a formal training program to understand the ways in which portfolios can be constructed and assessed.

The final PLA method that will be discussed is the American Council on Education (ACE) Guidelines for Corporate/Certificate Training. ACE assists both students and institutions by providing guidelines for awarding college level credit for formal educational programs and courses offered by organizations for employees, members, or customers. Credit is applied in a number of ways: to the major to replace a required course, applied as a general elective, or applied to waive a prerequisite. ACE states that the most important basis for making credit recommendations is learning outcomes but also states that other factors must be considered, including: the content and rigor of each course at the postsecondary level, the course must have a prescribed program of instruction, instructors should be selected based on their qualifications,

and, there must be appropriate procedures for evaluation. In order for ACE to evaluate the courses offered through an organization, the following information must be submitted: a detailed course syllabus, all instructional materials, the suggested qualifications of the participants, the qualifications and resume of the instructors, evaluative methods, and the duration of the course. A panel of three subject matter experts from educational institutions, profession and educational associations, and accrediting agencies reviews these submissions.

The literature suggests that if institutions are to offer adult learners the best opportunities at enrolling and persisting, they will include granting credits for prior learning assessments. However, each institution must decide on the limit of credits they will accept for PLA. Most institutions have a maximum of transfer credits they accept for courses completed at previous institutions and may have a final 30 credit residency requirement at their institution for undergraduate credits. However, what part of the remaining approximately 90 semester credits of the undergraduate degree may be transferred from another school or awarded via PLA must be determined. Some institutions place a maximum transfer of credits at 69 and include transfer as well as PLA in that number. Others accept up to 69 credits of transfer work from other schools and still allow PLA credits beyond the 69. Obviously, the more flexible the policy is, the more students will benefit. However, this must be balanced with a number of factors, including the tuition revenue lost from the awarding of PLA. This must be balanced with the number of students gained by having such a policy in place.

It is not surprising that the more convenient services and course offerings are the more attractive and beneficial they become to the adult learner. While institutional reputation is important to adult learners, even more important is the convenience factor as they have too much to juggle with their family and work situations and many choices to select when it comes to

institutions and programs. If institutions want to attract the adult learners, they will provide good customer service by highly trained staff members and provide a streamlined method for the adult to earn their degree in the least painful and shortest way possible, all the while maintaining academic integrity. Research on adult learners provides information on the services that are most important to this population. These researchers and the discovered services are compiled in the following.

Table 3. Student Service Features of Andragogy by Theorist

	Nel	Kattner	Byrd	Hogges	Massey	Greenland	Benshoff/Lewis	Zamanou	Mabry/Hardin	Kelson/Lesnick	Willefs	Hall	Kerka	Octernaud	Acknell	Ely
Convenient Class Times		X	X	X			X	X	X	X	X		X		X	
One Stop Enrollment Process		X	X		X					X						
Convenient Bookstore		X								X						
Timely response to complaints		X				X										
Knowledgeable advisors		X	X	X	X		X		X		X			X		
Help with basic academic skills			X						X		X					X
Career services			X						X		X		X			X
Study skills refresher			X								X					X
Social integration/ Student groups												X	X			X
Ease of registration					X		X		X	X			X			X
Convenient parking							X			X						X
Financial			X	X	X		X		X	X	X					X

Aid/Scholarship for Nontraditional Students																	
Better accessibility									X								X
Information services/one stop office					X	X		X	X		X						X
Prior learning credit	X		X	X				X	X			X					
Day care services			X								X	X					
Convenient Library access					X												
Articulations/ Transfer credit					X			X	X							X	
Veterans' Services					X												
Comfortable Classrooms						X											
Convenient Locations	X							X		X		X	X				
Lower Costs			X					X									
Health Services							X		X			X					
Offices open at hours nontraditional students can access			X					X			X	X	X	X	X		
Housing									X		X	X					
Convenient delivery formats										X	X						
Food service												X					

2.11 INSTITUTIONAL PRACTICES AND BEST PRACTICES

Octernaud (1990) conducted a study that analyzed the characteristics of both nontraditional and traditional students with respect to successful recruitment and retention activities. Octernaud's

(1990) findings lead to the following recommendations: (1) there should be in-service training on the characteristics, motivations, learning styles, and the needs of nontraditional students; (2) marketing strategies geared toward adult learners should be developed; (3) the offering of services during evening and weekend hours assists in the removal of barriers; and (4) recruitment and retention efforts should be periodically evaluated to find both the strengths and the weaknesses of these activities.

While many institutions interested in enrolling nontraditional students make multiple accommodations or enhancements to programs and services, there are fewer institutions that are created specifically for nontraditional students. An example of such an institution is Empire State College, a part of the State University of New York system, created in 1971. Empire State College has academic programs that offer individualized degree programs responding to the student's goals and needs, accepts the assessment of prior learning for academic credit, and uses a learning contract to organize the degree program for content, evaluation, length of contract, and credit to be awarded upon completion (American Association of State College and Universities/ERIC Model Programs Inventory Project, 1989). Empire State's mission is to provide alternatives for diverse persons or groups and does not have a primary location or campus; instead, it maintains a variety of centers and units in numerous locations that bring advisement, instruction, and evaluation as close to the student as possible (American Association of State Colleges and Universities/ERIC Model Programs Inventory Project, 1989).

Zamanou (1993) states that according to Astone and Nunez-Wormack, institutions seem to fall into one of three stages of development with relation to nontraditional programs. The three stages are: (1) *laissez-faire* which is characterized by: the removal of barriers on adults such as age requirements and parental consent forms and allows the nontraditional student access

to whatever they can find within the traditional system as there are no special services, recruitment, or programs for nontraditional students; (2) separatist in which special programs are created for adults, usually in separate locations from the traditional student body with different and limited student support services, taught primarily by part-time faculty, with little opportunity to enroll in day classes, having different degree program requirements, and where the primary administrators have a lower status and are granted limited or no access to the university policy making process; and (3) equity where there is active recruitment of adult learners, there are delivery systems that are appropriate for adult learning, there is a fully integrated curriculum, a prior learning assessment policy, administrative services available by phone, mail, evenings and weekends, academic advising at convenient hours, the senior policy makers are aware of the nontraditional students, the primary administrators for nontraditional students are fully empowered, and administrative policies and practices are proactive rather than reactive when dealing with adult students, their needs and problems (Zamanou, 1993). There are ten processes in the development of an equity institution:

- 1) the institutional mission statement expresses a commitment to nontraditional students,
- 2) senior administrators clearly, frequently, and consistently articulate the institution's commitment to nontraditional students,
- 3) long range planning addresses the needs of nontraditional students,
- 4) senior administration develops a policy which emphasizes the acceptance of the nontraditional students as part of the academy and not just as a market to be used to support traditional students and programs,
- 5) admissions, transfer, and academic programs are supportive of nontraditional students,

- 6) courses must be scheduled for nontraditional students but without compromising quality or credibility,
- 7) bureaucratic procedures must be streamlined and seek equity in the application of rules to all students,
- 8) offices and functions pertinent to nontraditional students must be made available at times convenient to and accessible by nontraditional students,
- 9) all departments and practices must address nontraditional student needs as well as traditional needs, and,
- 10) student services must have particular processes and positions having specific responsibility and authority for nontraditional students (Acknell in the California State University's (CSU) Helping Adults Learn. Facilitator's Guide, 1989).

According to Apps (in Roundtree-Wyly and Lambert, 1988), institutions and their support of nontraditional students can be placed into five categories: 1) the institution acts as if all students are traditional and makes no allowances for those who are not; 2) they recruit nontraditional students and recognize their existence but make no changes in current programs for fear of lower quality; 3) continues traditional programs but makes modifications in scheduling by offering weekend and evening classes with facilities and services offered at nontraditional times; 4) is the same as the third group but also offers degree programs with nontraditional schedules and formats; and, 5) actually develops degree programs for nontraditional students only. Apps (in Roundtree-Wyly and Lambert, 1988) thinks of these groupings as stages of progression for institutions in their commitment to and planning for nontraditional programs with action replacing reaction at group three. Institutions must have a

comprehensive and institutional wide plan, one that involves faculty, administrators, staff and students, to serve both the students they now have and those they could have, and not continue doing what they did to serve the students they once had (Zamanou, 1993). The Education Improvement Program of the Southern Association of Colleges and Schools in 1979 discussed three main areas of concern for institutions interested in enrolling the nontraditional student. The three areas are: 1) philosophical, the goals of the institution must be compatible with the goals of nontraditional students; educational institutions cannot be all things to all constituents and enrolling nontraditional students without supporting their needs is, at the least, suspect, and at the most, unethical; 2) academic, traditional students are more willing to accept a deferred gratification system and to put up with more red tape than are nontraditional students who will openly rebel against poor media usage, inappropriate testing and grading procedures, and poor teaching, and 3) staffing concerns, the entire personnel of the institution must be more sensitive and responsive to the student and recognize that the student is the primary reason for the institution's existence (Education Improvement Program, 1979).

According to Bash (2003), the growth of adult learners, adult programs, and institutions enrolling adult learners has created a situation in which the offering of services and programs to attract and keep adult learners must be balanced with what is considered good practice for adult learners. The American Council on Education (ACE), in partnership with the Adult Higher Education Alliance, published *Principles of Good Practice for Alternative and External Degree Programs for Adults* in 1990. These include the following:

1. Mission Statement: The program has a mission statement that reflects an educational philosophy, goals, purposes, and general intent and clearly complements the institutional mission.

2. Personnel: Faculty and Academic Professionals: Faculty and academic professionals working in alternative and external degree programs share a commitment to serve adult learners and have the attitudes, knowledge, and skills required to reach, advise, counsel, and assist such students.

3. Learning Outcomes: Clearly articulated programmatic learning outcomes frame the comprehensive curriculum as well as specific learning experiences; in developing these outcomes, the program incorporates general student goals.

4. Learning Experiences: The program is designed to provide diverse learning experiences that respond to the characteristics and contexts of adult learners while meeting established academic standards.

5. Assessment of Student Learning: The assessment of a student's learning is used to determine the achievement of comprehensive and specific learning outcomes.

6. Student Services: The policies, procedures, and practices of the program take into account the conditions and circumstances of adult learners and promote the success of those students.

7. Program Administration: The administrative structures and the human, fiscal, and learning resources are sufficient, appropriate, and stable for accomplishing the program mission.

8. Program Evaluation: Evaluation of the program involves faculty, academic professionals, administrators, and students on a continuing, systematic basis to assure quality and standards, and to stimulate program improvement.

The Council for Adult and Experiential Learning (CAEL) partnered with the American Productivity and Quality Center (APQC) conducted a benchmarking study of six highly adult learning focused colleges and universities. This was the first step toward identifying and

disseminating new models of how higher education institutions can provide the best possible educational experience for adult students. The overarching theme of the key findings was, “*The Adult Learning Focused Institution of Higher Education has a culture in which adult-centered learning, sensitivity to learners’ needs, flexibility, and communication drive institutional practice.*” According to Flint and Associates (1999), there is a fundamental mindset that every employee should interact with adult learners on their level, practice active listening, and interpret and translate what is heard into a response that address the learners’ needs. Flexibility and the expectation of change as well as high levels of communication are top priorities for these institutions.

The benchmarking study identified eleven findings that marked the adult-centered institution. These will be described briefly and some examples from the six institutions identified as having best practices will be provided.

1. Institutions have clearly articulated missions that permeate the institution and inspire and direct practice: Faculty, students, administrators, staff, curriculum development, instructional practice, support services, policies and procedures, and organizational structure have a high level of attention devoted to adult learners.

- a. Marylhurst University’s mission statement is, “*Marylhurst is a private institution of higher learning open to men and women of any race or religion. It is dedicated to making innovative post-secondary education accessible to self-directed adults of any age.*” The mission helps to keep the entire institution focused on being responsive to the changing needs of adult learners and it forces the institution to constantly assess its performance.

2. Institutional decision-making is a shared responsibility that uses collaborative processes inclusive of faculty, staff, and students to create rapid, flexible responses to student and community needs: Decision making is decentralized and widely shared among faculty, adult learners, staff, and community organizations and individuals.

a. DePaul University encourages its adult learners to participate in decisions that pertain to planning, implementing, and evaluating student learning. Its faculty members play an active role in administration and decision making and work in tandem with the dean of the School for New Learning on programs and policies. In addition, alumni involvement as well as community involvement has become a priority.

3. The institution uses an inclusive, non-competitive admissions process designed to determine the best educational match for the adult learner:

a. Marylhurst accepts applications throughout the year and each application is considered on an individual basis. They also have a program which allows prospective students to sit in on four or five classes and to talk to faculty and other learners about their experiences and the programs.

4. The institution engages adult learners in an on-going dialogue designed to assist learners to make informed educational planning decisions: The key is self-assessment which encourages the learner to assume an active role in their own educational planning.

a. Sinclair Community College requires all students to participate in an entry-level assessment and placement process. They also offer PLA credit and skill building courses on study skills, vocabulary, and science preparation as well as free tutoring.

5. Faculty members are not just dispensers of knowledge but function as managers and facilitators of the learning process: Faculty are not limited to the classroom but are involved in administrative duties, advising, and teaching.

a. Empire State College faculty members function as mentors who are involved in guiding individualized study via learning contracts. Faculty and students work together to design individual programs and learning contracts as well as assignments.

6. The teaching-learning process involves adult learners in collaborative learning experiences typically centered around their lives and work: There is an emphasis on experiential learning and the integration of theory and application.

a. Marylhurst University requires all students to complete an academic portfolio which is used to demonstrate learning outcomes. Their classes are also designed to accommodate various learning styles.

7. Curriculum and instructional delivery are designed to help adult learners meet their learning goals: This may include informal and formal assessment procedures, identification and evaluation of prior learning, development of individualized learning plans, and options for the curriculum to be adapted for students. Instruction is delivered via multiple formats—any time, any place, any way, and anywhere.

a. Empire State does not have a predesigned curriculum but has ten areas of study. Within each area, the student formulates a concentration to study completed through a learning contract. Students may enroll in independent studies; enroll in formal courses at other institutions; study through field experiences; study in groups; or study online.

8. Student services are easily accessible and convenient through a variety of access points: Services are provided through a variety of access points-in person, telephone, web sites, print, and email.

- a. Athabasca University believes that the students should not need to know the institution's organization chart to find answers to questions. They have a centralized Information Center Helpdesk that provides one stop service seven days per week for 12-18 hours per day.

9. Part-time and adjunct faculty members are valued for their connections to workplaces and communities, and for providing an accessible and flexible curriculum: They provide connections to the work place and community and provide students with the opportunity to study with practitioners in their fields.

- a. College of New Rochelle relies upon part-time faculty to teach the majority of its adult learners and to assist with independent projects and supervision of internships.

10. Information technology is focused on enriching one-to-one communication and providing flexible and timely education and administrative services that meet the needs of adult learners: The institution sees technology as another venue for enriching the dialogue between the learner and faculty and administration.

- a. Marylhurst purchases technology based upon two criteria—that the technology must support the needs of the learners and it must be sustainable.

11. The institution makes continuous and deliberate efforts to simultaneously ensure the affordability, accessibility, and quality of education degrees and programs: The institution

partners with businesses and organizations to provide customized, work or career related education for adult learners. It also encourages them to utilize employer paid tuition benefits.

- a. Marylhurst's philosophy is how they can keep tuition low and not how they can get money out of the programs.

This benchmarking study led CAEL to create the principles of effective practice that have been further tested within focus groups of adult learners, educators, employers, union representatives, policy makers, and other interested in adult learning. These Principles of Effectiveness for Serving Adult Learners describe processes and approaches to be adopted by colleges seeking to improve access by and quality for students. They are not meant to prescribe policies and practices but are meant to serve as a framework for assessing institutional commitment to and capacity for meeting the needs of adults, and to form what CAEL calls the Adult Learning Focused Institution (ALFI).

The following section will briefly explain each of the eight principles designated by CAEL and will provide best practices or examples of evidence that may demonstrate that principle in action:

- 1) Outreach: The institution conducts its outreach to adult learners by overcoming barriers of time, place, and tradition to create lifelong access to education opportunities
 - a. Work-place based recruiting and student support activities
 - b. Weekend institutes
 - c. Off-campus instructional sites
 - d. Multiple instructional deliveries

2) Life and Career Planning: The institution addresses the adult learners' life and career goals before or at the onset of enrollment in order to assess and align its capacities to help learners reach their goals

- a. Course offerings in career development for adult learners
- b. Customized orientation sessions for adult learners
- c. Portfolio development course for credit
- d. Re-entry advising on issues such as time management and multiple life roles

3) Financing: The institution promotes choice using an array of payment options for adult learners in order to expand equity and flexibility

- a. Deferred payments for those who obtain tuition reimbursement
- b. Discounted tuition for multiple enrollments in a family
- c. Discounted tuition for companies
- d. Institutional funded scholarships for part time students

4) Assessment of Learning Outcomes: The institution defines and assesses the knowledge, skills and competencies acquired by adult learners both from the curriculum and from life/work experience in order to assign credit and confer degrees with rigor

- a. Encourages adult learners to take an active role in the assessment process
- b. Designs education experiences using learning outcomes
- c. Advocates for adult learners to receive credit for prior learning

5) Teaching-Learning Process: The institution's faculty use multiple methods of instruction (including experiential and problem based methods) for adult learners in order to connect curricular concepts to useful knowledge and skills

- a. Employs a teaching-learning process that includes a high degree of interaction among learners and between learners and faculty
 - b. Considers adult learners to be co-creators of knowledge
 - c. Offers multiple methods of instructional delivery
 - d. Encourages faculty to build upon the knowledge and life-situations of the adult learners
- 6) Student Support Systems: The institution assists adult learners using comprehensive academic and student support systems in order to enhance students' capacities to become self-directed, lifelong learners
- a. Devises flexible time frames for enrollment, registration and programs
 - b. Helps adults to become college-ready through academic support systems
 - c. Provides or supports professional development activities related to adult learning theory and application for faculty and staff
- 7) Technology: The institution uses information technology to provide relevant and timely information and to enhance the learning experience
- a. Uses technology to build and reinforce a sense of community among adult learners
 - b. Provides sufficient support for faculty and staff to develop skills in the use of technology that will facilitate online learning and electronically delivered student services
- 8) Strategic Partnerships: The institution engages in strategic relationships, partnerships, and collaborations with employers and other organizations in order to develop and improve educational opportunities for adult learners

- a. Recruits learners through businesses, unions, and community based organizations
- b. Promotes the use of prior learning assessment to employers and community organizations
- c. Collaborates with stakeholders to help establish learning goals that fulfill skill needs and lead to career opportunities
- d. Encourages employers to make a variety of company resources available to employees for education related activities

CAEL used these eight principles to design a process through which an institution can determine the level of adult student focus. For each of the eight principles, a list of performance indicators is provided. A group of institutional representatives from across the institution are to answer whether each performance indicator is in place, is not in place, or is being developed. The institution is also advised to conduct a survey designed by Noel-Levitz that assesses what is important to adult students at that institution and what the performance gaps are for each item. The combination of the self-assessment and the survey provides the institution with a rich set of data to make corrections as needed and as possible. The institution may then apply to CAEL to become recognized as an Adult Learning Focused Institution (ALFI). For adult educators, gaining the ALFI designation is similar to receiving an accreditation from the National Council for Accreditation of Teacher Education (NCATE) or the Association to Advance Collegiate Schools of Business (AACSB). Institutions that place a significant importance on the education of adult learners would learn a vast amount of knowledge about what they should do for their existing students as well as what should be in place for additional recruitment.

2.12 SUMMARY

The nontraditional student is often the most ignored student on our campuses (Mabry and Hardin, 1992). Malcolm Knowles (in Mabry and Hardin, 1992) once stated that, “it is perhaps a sad commentary that, of all our social institutions, colleges and universities have been among the slowest to respond to adult learners.” A gap exists between the needs of the nontraditional student and the ability of institutions to provide for them (Thiel, 1984). An institution with long range planning and thinking will continue to address the needs of their traditional students but also understand the need to create programs and services that assist their nontraditional students with overcoming the barriers that often prevent a successful result with respect to education. Thiel (1984) states that institutions must provide: increased and flexible support services, in-services for faculty and administrators, adjustment of class schedules and locations, and creative options for financial aid and childcare. It is indeed, unfortunate that many institutions are enrolling nontraditional students because their traditional student population is declining and do little to provide a support environment to these students. Kasworm, Sandmann, & Sissell, 2000, believe that higher education is entering a period of time that demands a reconsideration of the way it has positioned nontraditional learners. They state:

“This reconsideration and repositioning, however must consist of more than the uncritical, knee-jerk responses to the marketplace of higher learning that have taken place in the past, and that have simply lead institutions to view adults as “cash cows” who fill classroom seats. This market mentality, while resulting in some changes in service delivery, accommodation of prior learning, and access, focused primarily on individual colleges and universities and the experiences of the adults affiliated with them, and therefore, did little to fundamentally change the policies, structures, focus, and epistemological norms that shape the very foundations of higher education as a societal institution....Such leadership must take place within

our own institutions, but also within our states, regions, and nations”
(Kasworm et al, 2000).

The best way that institutions can help adults is to make their lives as students as hassle-free as possible; what they want and need are logistical ease and administrative efficiency (Aslanian, 2001). Arthur Levine, president of Teachers College at Columbia University said,

“The relationship these students want with their college is like the one they already have with their banks, supermarkets, and the other organizations they patronize. They want education to be nearby and to operate during convenient hours-preferably around the clock. They want easy, accessible parking, short lines, and polite and efficient personnel and services....All they want of higher education is simple procedures, good service, quality courses, and low costs-with course quality ranked as the highest priority....They are bringing to higher education exactly the same consumer expectations they have for every other commercial enterprise with which they deal” (in Aslanian, 2001).

The attention to older students comes at a time when many states are grappling with an aging population and a shifting economy in which an increasing number of jobs require college degrees (Sander, 2008). In February 2008, Kentucky educators and state officials met to kick off the Kentucky Adult Learners Initiative which is the beginning of a multi-year effort that will focus on financial aid, professional development for faculty members who teach adults, and student support services, among other areas. The immediate goal is to bring back to higher education those 11,000 adults who completed 90 or more credit hours but never completed their degrees (Sander, 2008). These educators view the adult learners as the population for which they see increasing opportunities for growth. Kentucky is not an unusual state. The country as a whole is aging and both the existing and potential student populations at institutions of higher education are increasing rapidly. The impact is great. Institutions can attract this pool of students by providing appropriate instruction, a variety of delivery formats, faculty trained to instruct the adult learner, and the academic and support systems they need to persist. The institutions that offer these will likely succeed in attracting the adult learners and increase their

student body. It requires a different way of educating students and a different way of conducting business. However, the opportunities and the rewards are huge. The review of literature indicates that nontraditional students have definitive needs. At the same time, they also have unique barriers, both personal and institutional, that may easily prevent them from attaining their goals. It is the responsibility of adult educators and their institutions to provide the opportunities and the support mechanisms essential to the success of the adult learner.

3.0 RESEARCH METHODOLOGY

3.1 RESEARCH QUESTIONS

This study investigates the following research questions derived from the review of literature on adult learners and the theory of andragogy:

1. Do institutions utilize the principles of andragogy to educate its adult learners?
2. Do institutions provide specialized support for the adult learners, specifically:
 - d. services,
 - e. program delivery options, and,
 - f. the awarding of credit for prior learning through College Level Examination Program (CLEP), advanced standing, advanced placement, transfer of credits, portfolio review, and the American Council of Education (ACE) Guidelines for Corporate Training?
3. Do institutions apply best practices, as defined by andragogy, for adult learners?
4. What are the most common principles and services, as defined by andragogy, utilized by institutions as categorized by the Carnegie classification?

3.2 RESEARCH METHODOLOGY

The research for this study was conducted through the use of a survey. It involved the collection of data from administrators who have the primary administrative responsibility for the education and retention of nontraditional students pursuing an undergraduate degree. The 2008-2009 membership directory of the University Continuing Education Association (UCEA) was used for contact purposes. The UCEA is a professional organization for administrators and institutions involved in the education of non-traditional students.

3.3 RESEARCH POPULATION

The population for this study was administrators at 358 member institutions of the UCEA located in the United States who have been identified as having primary administrative responsibility for the education and servicing of adult learners. Each administrator was emailed the survey to the email address provided in the UCEA membership directory.

3.4 INSTRUMENTATION

A survey was used to determine whether or not the principles of andragogy are used when educating nontraditional students, what services are provided to assist nontraditional students, what best practices the institution has implemented, and the identification of the most common principles and services utilized by institutions as categorized by the Carnegie Classification. The

survey was designed based upon the review of literature. It was estimated that the survey could be completed in approximately 15-20 minutes. The following table shows the relationship between the research questions and the survey questions.

Table 4. Survey Questions and Corresponding Research Questions

Research Question	Survey Item
Do institutions utilize the principles of andragogy to educate its adult learners?	13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 24
Do institutions provide specialized support for the adult learners, specifically: <ul style="list-style-type: none"> a. services, b. program delivery options, and, c. the awarding of credit for prior learning through College Level Examination Program (CLEP), advanced standing, advanced placement, transfer of credits, portfolio review, and the American Council of Education (ACE) Guidelines for Corporate Training? 	25, 26, 27, 28
Do institutions apply best practices, as defined by andragogy, for adult learners?	29, 30, 31
What are the most common principles and services, as defined by andragogy, utilized by institutions as categorized by the Carnegie classification?	1, 22, 24, 25, 28, 29, 31, 32, 33, 34
Demographic Information	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

3.5 PILOT TEST

A pilot test was conducted with five administrators who have similar responsibilities as those administrators in the survey population. This allowed for feedback on readability, ease of response, survey completion time, survey content, and any problems that appeared to exist within the survey instrument. Based upon the feedback a final instrument was developed and distributed.

3.6 DATA COLLECTION

Each survey was coded only for identification purposes to permit adequate follow up. All participants were assured that all information will be held in the strictest confidence and that the information disclosed in the survey responses will not be reported by institution nor any respondent personally identified within the research writing.

Upon the approval of the Institutional Research Board, each survey was emailed to the 358 participants. A one-week waiting period then occurred. After one week, all non-respondents were sent another email with a second copy of the survey requesting a response. There were still non-respondents after the second series. At that point, a third email with an attached survey was sent and 278 phone calls requesting a response were made one time to each non-respondent. The phone number utilized was the business number provided in the UCEA membership directory. If the non-respondent was not reached personally, a voice message requesting participation was left. Survey responses could be returned by email, fax, or mail.

A total of 85 completed surveys, a completed survey response rate of 24 percent, were received. Another fifteen individuals were no longer members of UCEA due to retirement, resignation, or job elimination. An additional twenty-six members refused to participate for a variety of reasons ranging from simple refusal to the lack of data collection capabilities or subject knowledge.

3.7 DATA ANALYSIS

An analysis was conducted of the survey responses. A frequency distribution was conducted on each survey item with the results compiled and reported by item and institutional type. This allowed for the identification of any principles of andragogy, services and support provided to nontraditional students, the best practices currently utilized, and the identification of the most utilized principles and services by institutions as classified by the Carnegie Classification. The findings are described in the following section and the complete survey results may be found in the appendices.

3.8 SUMMARY

This research focused on nontraditional students in undergraduate degree programs. The survey population was the primary administrators responsible for educating nontraditional students at 358 institutions that belong to the University Continuing Education Association. The instrument used was a survey designed from the review of literature that assessed the strategies used and the

effectiveness of these strategies as they pertain to the educational and institutional support for nontraditional students, and the use of best practices. A pilot test ascertained the appropriateness of the instrument. The primary administrators who were provosts, deans, executive directors or other similar titles received the instrument through email with the opportunity to respond through email. The results are compiled and reported to answer each of the research questions.

4.0 FINDINGS

4.1 INTRODUCTION

A survey was administered to 358 members of the University Continuing Education Association (UCEA). Eight-five completed surveys were returned and were analyzed to answer the five research questions proposed in this study. Each survey question was associated to one or more of the four research questions with a final category detailing the demographic information from the survey responses. If any category does not total 100% it is due to the respondent not answering that particular question. The following are the results of the survey responses.

4.2 DEMOGRAPHIC INFORMATION

Information on the demographics of the institution and students was gathered. This information was found in survey questions 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12. Survey question 1 was, “What Carnegie classification best describes your institution?” Respondents at associate’s institutions constituted 1% of the survey population, baccalaureate 11%, master’s colleges and universities 44%, doctoral granting universities 42%, special focus institutions 2%, and no tribal colleges were in the survey response pool.

Survey question two asked if the institution was considered to be a not for profit or for profit. Ninety-eight percent were not for profit and 2% were for profit.

Survey question three was, “How does your institution define nontraditional students?” The following are those results.

Table 5. Definition of Nontraditional Students

How does your institution define nontraditional students?	Percentage of respondents who selected this criterion
Age	49%
Do not use a descriptor to define nontraditional students	29%
Other	16%
Work experience	15%
By program enrollment only	11%
Financial independence	11%
Years out of high school	9%
Being a parent	5%
Marital status	5%

If age was used as a defining factor, the most commonly used age was 25 though one institution uses 18 or above. If years out of high school was used as a defining factor, the most commonly used number of years was 5.

Survey question four asked about the gender of the institution’s nontraditional students. The majority of the students mainly female was selected 68% of the time, equally male and female 16%, mainly male 5%, and don’t know was selected 11% of the time.

Survey question five was, “What is the most common age range of your nontraditional students?” The age range of 31-40 was selected 71% of the time, ages 22-30 16%, ages 41-50 6% , over age 50 was not selected by any respondents, and don’t know was selected by 15% of the respondents.

Survey question six asked about the average household income of the nontraditional students. The results are in the table below.

Table 6. Household Income of Nontraditional Students

What is the average household income of your nontraditional students?	Percentage of respondents selecting this criterion
Don't know	69%
\$40,000-\$59,999	15%
\$20,000-\$39,999	8%
\$60,000-\$79,999	6%
\$80,000-\$99,999	1%
Less than \$20,000	0%
Over \$100,000	0%

The most common selection was that they did not know with the second most commonly selected range \$40,000 to \$59,999 at 15%.

Question seven asked about the predominant race of the nontraditional students and is reported in the following table

Table 7. Predominant Race of Nontraditional Students

What is the predominant race of your nontraditional students?	Percentage of respondents selecting this criterion.
White	84%
Don't know	14%
African American	4%
Asian-Pacific Islander	0%
Hispanic	0%
Native American	0%

White was overwhelmingly selected as the predominant race of their nontraditional students (84%). Don't know was the second most common selection at 14%.

Questions eight and nine requested that they provide the total number of undergraduate students at the institution and then the total number of nontraditional undergraduate students at the institution. Sixty-eight of the respondents provided an answer to

this question. Provided in the table below are the frequencies of the percentages of nontraditional students out of the total study body at the institution.

Table 8. Percentage of Nontraditional Students at the Institutions

Range	Number of Institutions
Less than 10%	20
10% to 19%	17
20% to 29%	6
30% to 39%	9
40% to 49%	2
50% to 59%	1
60% to 69%	4
70% to 79%	2
80% to 89%	1
90% to 100%	6

Fifty-one percent of the respondents work at institutions at which less than 30% of the students are considered nontraditional.

Survey question ten asked what degree the majority of their institution's nontraditional students were seeking. Eight-two percent of students were seeking baccalaureate degrees while eight percent were seeking associates degrees. The remaining 10% of the respondents did not answer this question.

Survey question eleven asked if the number of nontraditional, undergraduate students at the institution was increasing. Sixty percent responded yes.

Survey question twelve was to be answered only if the institution was seeing an increase in the numbers of nontraditional students. This question asked to what they attributed the increase. The responses to this question were as follows:

- 1) online learning
- 2) new programs
- 3) marketing

- 4) economic downturn, higher unemployment
- 5) increased enrollments at the community colleges
- 6) increased convenience
- 7) growing awareness of the need for a degree
- 8) more aggressive recruitment
- 9) changing demographics
- 10) relationship with military
- 11) improved student services
- 12) second career opportunities
- 13) creation of a division specifically focused on recruiting and retaining nontraditional students
- 14) flexible transfer policy
- 15) working with workforce training, unions, Chambers of Commerce

Finally, survey question 35 asked the respondents if they would like a copy of the results of this study. Seventy of the eight-five respondents or 82% indicated they are interested in receiving a copy of the results.

4.3 RESEARCH QUESTION I

Research question I was, “Do institutions utilize the principles of andragogy to educate its adult learners?” Survey questions 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, and 24 provided the

information for this question. The results for questions 13-20 and 23 are shown in the table below:

Table 9. Utilization of the Principles of Andragogy to Educate Adult Learners

Survey Question	Percentage Who Responded, “Yes.”
Do you offer programs specifically to nontraditional students?	73%
Do you have a school or department dedicated to nontraditional students?	71%
Do you offer courses designed specifically for nontraditional learners?	66%
Is the nontraditional student mentioned in the school or department mission statement?	61%
Do you believe the faculty members who teach your nontraditional students are knowledgeable regarding the principles of andragogy (adult learning theory/concepts)?	59%
Does your institution have an institutional mission to educate nontraditional students?	58%
Does your institution believe that nontraditional students should be treated differently than traditional students?	53%
Do you provide training on the principles of andragogy (adult learning) to your faculty members who teach nontraditional students?	44%
Is the nontraditional student mentioned in the institutional mission statement?	29%

Seventy-three percent of the respondents indicated that their institutions offer programs for nontraditional students, 71% have a department dedicated to nontraditional students, and 66% offer courses designed specifically for nontraditional learners. The lowest percentages were for providing training on the principles of andragogy (adult learning) to the faculty members who teach nontraditional students (44%) and whether or not the nontraditional student is mentioned in the institutional mission statement (29%).

If the institution had a department or division dedicated to the adult learner, the respondent was asked to provide the name of that department. The most common terms associated with these department or division names were continuing (24), professional (13), education (11), and adult (7) with the most common pairings “professional studies” or “continuing education.”

Forty-four percent of the institutions do provide training to their faculty on the principles of andragogy (Survey Question 20); the following table shows the delivery method for the training (Survey question 21).

Table 10. Delivery Methods for Training Faculty on Andragogy

How do you offer training in andragogy to your faculty members?	Percentage of respondents responding, Yes.”
Online	25%
Classroom seminars	24%
Other	15%
Conferences	12%

Online training and classroom seminars are about equal at 25% and 24% respectively. The category of other included: faculty meetings, workshops, books, newsletters, individual consultation, faculty handbook, faculty orientation, and mentoring.

The survey also asked which principles of andragogy their faculty members who taught nontraditional students followed (Survey question 22). These responses are reported in the following table:

Table 11. Principles of Andragogy Used by Faculty Members Teaching Nontraditional Students

Which principles of andragogy does your faculty for nontraditional learners utilize?	Percentage of respondents who selected the response
Faculty use a variety of instructional methods to deliver information	76%
Learner is active in the learning process	73%
Learner is treated with mutual respect	71%
Classroom environment is designed for	58%

interactivity	
Learner is self-directed and independent	45%
Learners are told why they need to learn something	42%
Faculty member is a role model	40%
Faculty members use flexible course plans	39%
Faculty members are willing to relinquish control of the classroom/content	34%
Other	8%

A variety of instructional methods was the highest at 76% closely followed by the learner being active in the learning process at 73% and mutual respect for the learner at 71%. The three lowest with the exception of “other” were the faculty being a role model at 40%, the use of flexible course plans at 39%, and the faculty members being willing to relinquish control of the classroom and/or content at 34%. The category “other” included: the use of outcomes assessment, faculty is a facilitator, faculty members use real world experiences, do not have faculty dedicated to teaching nontraditional students, different learning styles are not recognized, and none of the above.

The final survey question (24) related to the first research question was regarding the curriculum for nontraditional students. The results for this question are in the table below.

Table 12. Curriculum Considerations for Nontraditional Students

Which of the following suggested by the principles of andragogy does your curriculum follow?	Percentage of respondents who selected the category.
Curriculum allows learners to do self-reflection	56%
Curriculum uses a variety of instructional methods to deliver information	56%
Learner’s experience is recognized	54%
Curriculum is immediately applicable to real life	53%
Curriculum is designed to have learners learn from each other	49%
Curriculum is designed to make the learner more open to others’ perspectives	46%

Curriculum accommodates different learning styles of the learners	41%
Curriculum encourages feedback from learners	41%
Learning is designed to be transformational	40%
Curriculum is problem centered	34%
Curriculum utilizes a pre-assessment component	21%
Other	6%

The highest percentages were the curriculum allows for self-reflection (56%), a variety of instructional methods are used to deliver information (56%), and the recognition of the learner’s experience (54%). The lowest scores were for learning designed to be transformational (40%), the curriculum is problem centered (34%), and the use of a pre-assessment component (21%). Responses for other included: additional selection of course work, courses reflect a range of features, approaches, and methodologies, offering courses at good times, community placements, follow principles of quality matters, and best practices in distance education pedagogy.

4.4 RESEARCH QUESTION II

Research question two was, “Do institutions provide specialized support for the adult learners, specifically: a) services, b) program delivery options, and c) the awarding of credit for prior learning through the College Level Examination Program (CLEP), advanced standing, advanced placement, transfer of credits, portfolio review, and the American Council of Education (ACE) Guidelines for Corporate Training?” The survey questions answering research question II were 25, 26, 27, and 28.

The first survey question (25) related to institutional support was, “Which of the following services do you offer to nontraditional students?” The responses are presented in the following table:

Table 13. Specialized Services Offered to Nontraditional Students

Which of the following services do you offer to nontraditional students?	Percentage of survey responses indicating this was provided
Classes at convenient times—for examples: evening, weekend	87%
Transfer credit acceptance	86%
Easy access to registering for courses	82%
Convenient access to library materials	81%
Timely response to complaints	81%
Multiple delivery formats—online, blended, and accelerated	80%
Advisors trained specifically to work with nontraditional students	78%
Articulations with other schools	76%
Convenient bookstore access	71%
One stop enrollment process designed for nontraditional students	71%
Veterans’ services	68%
Convenient locations	58%
Financial aid counseling specifically for nontraditional students	58%
One stop student services/information center	56%
Convenient parking	53%
Flexible tuition payment plans	52%
Prior learning credits	51%
Help with basic academic skills	49%
Scholarships for nontraditional students	48%
Offices open for nontraditional student access hours	47%
Food service	41%
Health Services	40%
Lower cost tuition than for traditional students	38%
Comfortable classrooms designed for nontraditional students	36%
Career services specifically designed for nontraditional students	34%
Study skills refresher opportunities	34%
Social groups for nontraditional students	20%
Housing	14%

Child care services	12%
Other	5%

The three most offered services were classes offered at convenient times (87%), transfer credit acceptance (86%), and easy access to registering for courses (82%).

The three least offered services were social groups for nontraditional students (20%), housing (14%), and child care services (12%). Other included the following: dean's office opened for students one afternoon a week, advisement by national experts, online programs, and a campus identification card.

The survey question (26) results regarding the staff that works with adults showed that 74% of the staff who works with nontraditional students are trained in the needs of adult learners. When asked how these staff members are trained to work with adult students (survey question 27), 53% indicated attending conferences on nontraditional students, 31% indicated the training was done online, 21% deliver classroom seminars, and 32% indicated other which included: on the job training, staff meetings, workshops, and in-service trainings.

The final survey question (28) for this research question referred to offering prior learning credits and the results are in the table below.

Table 14. Prior Learn Credit Acceptance

Which of the following do you offer to students to gain prior learning credits?	Percentage of respondents who indicated they accept this category
Transfer credits	89%
CLEP	73%
Advanced Placement	48%
ACE Guidelines	47%
Portfolio Review	38%
Advanced Standing	25%
Do not accept prior learning credits	7%

The most commonly accepted prior learning credits are transfer credits. The most common limit of credit acceptance was 90. College Level Examination Program (CLEP) credits were accepted at a percentage of 73%. The least accepted were advanced standing credits at 25%. Still, 7% of those surveyed accepted no prior learning credits.

4.5 RESEARCH QUESTION III

The third research question was, “Do institutions apply best practices, as defined by andragogy, for adult learners?” The survey questions related to this research question were 29, 30, and 31. The responses to the first survey question (29), “Which of the following do you believe describes your institution with respect to the education of nontraditional students,” are listed in the following table.

Table 15. Institutional Best Practices for Nontraditional Learners

Which of the following do you believe describes your institution with respect to the education of nontraditional students?	Percentage who selected this response.
Faculty and academic professionals working in alternative and external degree programs share a commitment to serve adult learners and have attitudes, knowledge, and skills required to reach, advise, counsel, and assist such students.	66%
Evaluation of the program involves faculty, academic professionals, administrators, and students on a continuing, systematic basis to assure quality and standards, and to stimulate program improvement.	62%
The program is designed to provide diverse learning experiences that respond to characteristics and contexts of adult learners while meeting established academic standards.	61%
The program has a mission statement that reflects an educational philosophy, goals,	61%

purposes, and general intent and clearly complements the institutional mission.	
The policies, procedures, and practices of the program take into account the conditions and circumstances of adult learners and promote the success of those students.	60%
The assessment of a student’s learning is used to determine the achievement of comprehensive and specific learning outcomes.	53%
The administrative structures and the human, fiscal, and learning resources are sufficient, appropriate, and stable for accomplishing the program mission.	52%
Clearly articulated programmatic learning outcomes frame the comprehensive curriculum as well as specific learning experiences; in developing these outcomes, the program incorporates general student goals.	48%

These categories represent the American Council on Education’s (ACE) Principles of Good Practice for Alternative and External Degree Programs for Adults. The responses go from a high of 66% for faculty and academic professionals working in alternative and external degree programs share a commitment to serve adult learners and have attitudes, knowledge, and skills required to reach, advise, counsel, and assist such students to a low of 48% for clearly articulated programmatic learning outcomes frame the comprehensive curriculum as well as specific learning experiences; in developing these outcomes, the program incorporates general student goals.

Survey question 30 asked, “Are you familiar with the Council for Adult and Experiential Learning (CAEL) Adult Learning Focused Institution (ALFI) designation?” Sixty-seven of the respondents indicated that they were familiar with this designation.

Survey question 31 referred to the AFLI designation which assesses the institutional commitment to and the capacity for meeting the needs of nontraditional students.

The following table shows the responses.

Table 16. Institutional Commitment by ALFI Categories

Which of the following do you believe describes your institution?	Percentage of respondents who selected this response.
Technology: The institution uses information technology to provide relevant and timely information and to enhance the learning experience.	85%
Outreach: The institution conducts its outreach to adult learners by overcoming barriers of time, place, and tradition to create lifelong access to education opportunities.	80%
Teaching-Learning Process: The institution's faculty use multiple methods of instruction (including experiential and problem based methods) for adult learners in order to connect curricular concepts to useful knowledge and skills.	72%
Strategic Partnerships: The institution engages in strategic relationships, partnerships, and collaborations with employers and other organizations in order to develop and improve educational opportunities for adult learners.	67%
Student Support Systems: The institution assists adult learners using comprehensive academic and student support systems in order to enhance students' capacities to become self-directed, lifelong learners.	59%
Financing: The institution promotes choice using an array of payment options for adult learners in order to expand equity and flexibility.	53%
Assessment of Learning Outcomes: The institution defines and assesses the knowledge, skills, and competencies acquired by adult learners both from the curriculum and from life/work experiences in order to assign credit and confer degrees with rigor.	48%
Life and Career Planning: The institution addresses the adult learners' life and career	32%

goals before or at the onset of enrollment in order to assess and align its capacities to help learners reach their goals.	
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The area with the highest scores was technology (85%). The lowest score was life and career planning (32%).

4.6 RESEARCH QUESTION IV

The fourth research question asked, “What are the most common principles and services, as defined by andragogy, utilized by institutions as categorized by the Carnegie classification?” This question was answered by the survey questions 1, 22, 24, 25, 28, 29, 31, 32, 33, and 34.

Survey question one was, “What Carnegie classification best describes your institution?” Respondents at associate’s institutions constituted 1% of the survey population, baccalaureate 11%, master’s colleges and universities 44%, doctoral granting universities 42%, special focus institutions 2%, and no tribal colleges were in the survey response pool.

The results for question 22, “Which principles of andragogy does your faculty for nontraditional learners utilize?” are in the following table and summarized by the Carnegie Classification. Please note that since there was a response from only one associate’s college, two responses from special focus institutions, and no responses from tribal colleges, the comparison in this table and subsequent tables in this section are for baccalaureate, master’s, and doctoral institutions.

Table 17. Faculty Utilization of Andragogy Comparison by Carnegie Classification

Criteria	Total Responses	Baccalaureate Colleges	Master’s Colleges and Universities	Doctoral-granting Universities
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Faculty use a variety of instructional methods to deliver information	77%	89%	73%	78%
Learner is active in the learning process	73%	100%	62%	78%
Learner is treated with mutual respect	71%	100%	62%	72%
Classroom environment is designed for interactivity	59%	78%	49%	64%
Learner is self directed and independent	46%	33%	43%	53%
Learners are told why they need to learn something	43%	56%	27%	56%
Faculty member is a role model	40%	22%	35%	50%
Faculty members use flexible course plans	40%	33%	41%	42%
Faculty members are willing to relinquish control of the classroom/content	35%	33%	30%	42%

The highest overall score was for the faculty use of a variety of instructional methods to deliver information while the lowest for faculty members are willing to relinquish control of the classroom and/or content.

The comparisons for survey question 24, “Which of the following suggested by the principles of andragogy does your curriculum follow?” are summarized in the table below.

Table 18. Curriculum and Andragogy by Carnegie Classification

Criteria	Total	Baccalaureate	Master’s	Doctoral-
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	Responses	Colleges	Colleges and Universities	granting Universities
Curriculum allows learners to do self-reflection	57%	89%	49%	58%
Curriculum uses a variety of instructional methods to deliver information	57%	67%	51%	61%
Learner's experience is recognized	55%	78%	49%	56%
Curriculum is immediately applicable to life	54%	67%	49%	56%
Curriculum encourages feedback from learners	51%	67%	46%	53%
Curriculum is designed to have learners learn from each other	50%	67%	43%	53%
Curriculum is designed to make the learner more open to others' perspectives	46%	86%	35%	53%
Curriculum accommodates different learning styles of the learners	41%	56%	35%	44%
Learning is designed to be transformation	40%	56%	32%	44%
Curriculum is problem centered	34%	22%	30%	42%
Curriculum utilizes a pre-assessment component	22%	11%	27%	19%

The highest overall scores were for the curriculum allows learners to do self-reflection (57%) and the curriculum uses a variety of instructional methods to deliver information (57%). The lowest was for the curriculum utilizes a pre-assessment component (22%).

Survey question 25, “Which of the following services do you offer to nontraditional students” was also compared across the three institutional types and is summarized in the following table.

Table 19. Comparison of Services Offered to Nontraditional Students by Carnegie Classification

Criteria	Total Responses	Baccalaureate Colleges	Master’s Colleges and Universities	Doctoral-granting Universities
Classes at convenient times—for examples: evening, weekend	88%	100%	89%	83%
Transfer credit acceptance	85%	100%	89%	78%
Easy access to registering for courses	84%	100%	84%	81%
Convenient access to library materials	82%	100%	84%	75%
Timely response to complaints	82%	89%	81%	81%
Multiple delivery formats—online, blended, and accelerated	79%	100%	73%	81%
Advisors trained specifically to work with nontraditional students	78%	78%	84%	72%
Articulations with other schools	77%	89%	81%	69%
One stop enrollment process designed for nontraditional students	73%	78%	73%	72%
Convenient bookstore access	70%	100%	84%	72%
Veterans’ services	70%	67%	70%	69%
Convenient locations	59%	67%	70%	69%
Financial aid counseling specifically for nontraditional students	57%	67%	57%	56%
One stop student services/information center	57%	67%	57%	56%
Convenient parking	52%	78%	43%	56%
Flexible tuition payment plans	52%	78%	57%	42%
Prior learning credits	50%	89%	51%	39%

Help with basic academic skills	49%	78%	46%	44%
Scholarships for nontraditional students	49%	67%	46%	47%
Offices open for nontraditional student access hours	48%	67%	49%	42%
Food service	40%	67%	35%	39%
Health services	40%	44%	41%	39%
Lower cost tuition than for traditional students	39%	44%	35%	42%
Comfortable classrooms designed for nontraditional students	38%	67%	35%	33%
Career services specifically designed for nontraditional students	35%	44%	22%	47%
Study skills refresher opportunities	34%	44%	41%	25%
Social groups for nontraditional students	21%	22%	27%	14%
Housing	13%	22%	11%	14%
Child care services	12%	11%	11%	14%

The highest overall score (88%) and the highest in all Carnegie classifications was offering of classes at convenient times—for examples: evening, weekend. The lowest overall score and the lowest in all Carnegie classification was the providing of child care services (12%).

Survey question 28 was, “Which of the following do you offer to students to gain prior learning credits?” The summary by institutional classification is below.

Table 20. Prior Learning Credit Acceptance by Carnegie Classification

Criteria	Total Responses	Baccalaureate Colleges	Master’s Colleges and Universities	Doctoral-granting Universities
Transfer credits	89%	100%	92%	83%
CLEP	72%	100%	76%	61%
Advanced Placement	49%	44%	46%	53%
ACE Guidelines	46%	78%	54%	31%
Portfolio Review	38%	67%	41%	28%
Advanced	26%	22%	27%	25%

Standing				
Do not accept credits	7%	0%	11%	6%

The most common form of prior learning credit acceptance was transfer credits (89%) which was not only the overall highest but was the highest in all Carnegie classifications. The lowest overall method of accepting prior learning credits was advanced standing (26%) which was also the lowest across all classification.

Survey question 29 was, “Which of the following do you believe describes your institution with respect to the education of nontraditional students?” The following is the summary of that question across the three institutional types.

Table 21. Institutional Best Practices Comparison by Carnegie Classification

Criteria	Total Responses	Baccalaureate Colleges	Master’s Colleges/ Universities	Doctoral-granting Universities
Faculty and academic professionals working in alternative and external degree programs share a commitment to serve adult learners and have attitudes, knowledge, and skills required to reach, advise, counsel, and assist such students.	67%	78%	68%	64%
Evaluation of the program involves faculty, academic professionals, administrators, and students on a continuing, systematic basis to assure quality and standards, and to stimulate program improvement.	63%	78%	54%	69%
The program is designed to provide diverse learning experiences that respond to characteristics and contexts of adult learners while meeting established academic standards.	62%	67%	54%	69%
The program has a mission	62%	67%	57%	67%

statement that reflects an educational philosophy, goals, purposes, and general intent and clearly complements the institutional mission.				
The policies, procedures, and practices of the program take into account the conditions and circumstances of adult learners and promote the success of those students.	61%	56%	59%	64%
The administrative structures and the human, fiscal, and learning resources are sufficient, appropriate, and stable for accomplishing the program mission	54%	56%	51%	56%
The assessment of a student's learning is used to determine the achievement of comprehensive and specific learning outcomes.	52%	56%	49%	56%
Clearly articulated programmatic learning outcomes frame the comprehensive curriculum as well as specific learning experiences; in developing these outcomes, the program incorporates general student goals.	50%	33%	46%	58%

Faculty and academic professionals working in alternative and external degree programs share a commitment to serve adult learners and have attitudes, knowledge, and skills required to reach, advise, counsel, and assist such students was the highest overall score (67%) while clearly articulated programmatic learning outcomes frame the comprehensive curriculum as well as specific learning experiences; in developing these outcomes, the program incorporates general student goals was not only the overall lowest score (50%) but the lowest score for all Carnegie classifications.

Survey question 31 was, “Which of the following do you believe describes your institution? The results by institutional classification are in the following table.

Table 22. Institutional Commitment by ALFI Category Compared by Carnegie Classification

Criteria	Total Responses	Baccalaureate Colleges	Master’s Colleges and Universities	Doctoral-granting Universities
Technology: The institution uses information technology to provide relevant and timely information and to enhance the learning experience.	84%	100%	81%	83%
Outreach: The institution conducts its outreach to adult learners by overcoming barriers of time, place, and tradition to create lifelong access to education opportunities.	80%	78%	81%	81%
Teaching-Learning Process: The institution’s faculty use multiple methods of instruction (including experiential and problem based methods) for adult learners in order to connect curricular concepts to useful knowledge and skills.	73%	78%	76%	69%
Strategic Partnerships: The institution engages in strategic relationships, partnerships, and collaborations with employers and other organizations in order to develop and improve educational	67%	67%	65%	69%

opportunities for adult learners.				
Student Support Systems: The institution assists adult learners using comprehensive academic and student support systems in order to enhance students' capacities to become self-directed, lifelong learners	61%	89%	57%	58%
Financing: The institution promotes choice using an array of payment options for adult learners in order to expand equity and flexibility.	54%	89%	57%	42%
Assessment of Learning Outcomes: The institution defines and assesses the knowledge, skills, and competencies acquired by adult learners both from the curriculum and from life/work experiences in order to assign credit and confer degrees with rigor.	49%	56%	49%	47%
Life and Career Planning: The institution addresses the adult learners' life and career goals before or at the onset of enrollment in order to assess and align its capacities to help learners reach their goals.	33%	56%	32%	28%

The ALFI category regarding technology, the institution uses information technology to provide relevant and timely information and to enhance the learning experience was the highest overall category (84%) and the highest for all of the Carnegie classifications. Life and Career Planning: The institution addresses the adult learners' life and career goals before or at the onset of enrollment in order to assess and align its capacities to help learners reach their goals was the lowest overall score (33%) and the lowest for all Carnegie classifications.

The survey question 32 asked the respondents to identify their most exemplary activities according to the principles of andragogy. Seventy-eight percent of survey respondents provided an answer to this question. Survey question 33 asked the respondents to identify areas that could improve, again based upon the principles of andragogy. Seventy-two percent of the respondents provided an answer to this question. Survey question 34 asked the respondents if they believed their institution is committed to the principles of andragogy in meeting the needs of nontraditional students, and why or why not? Eight-nine percent of survey respondents answered this question. The profile of institutions by Carnegie classifications for these questions will be discussed in the following chapter. The responses for these questions may be found in the appendices section.

5.0 CONCLUSIONS AND IMPLICATIONS

5.1 CONCLUSIONS

5.1.1 Demographic Conclusions

This research project led to a number of interesting findings. The most significant are identified in this section.

The demographic information identified who the nontraditional students were and who they were not at the institutions that were surveyed. There was no main descriptor used to define these students as less than half of the institutions (49%) used age as a descriptor and the second highest response (29%) was that no descriptor was used at all. When age was used as a description, the most common age used was 25 years of age.

The students at these institutions are female (68%), ages 31-40 (71%), and predominantly white (84%). While 69% of the respondents did not know the average household income of their students, 15% did select \$40,000-59,999 as the most common range.

The enrollments of nontraditional students are increasing at 60% of these intuitions due to online learning, new programs, better marketing, and the current economic situation.

5.1.2 Research Question I Conclusions

The top three categories for institutions and their faculty utilizing the principles of andragogy to educate its adult learners were: 1) 73% offer programs specifically to nontraditional students, 2) 71% have a school or department dedicated to them, and 3) 66% offer courses designed for the adult learners. The lowest three categories were: 1) 53% said their institutions believe that nontraditional students should be treated differently than traditional students, 2) 44% provide their faculty members with training on andragogy, and 3) 29% of institutions mention the nontraditional student in their mission statements. Of the 44% who provide training in andragogy to their faculty, 25% offer it online and 24% in the classroom.

Institutions may have a mission to educate nontraditional students and even have a dedicated department for them but this is not often reflected in the mission statements of the institutions (29%) or of the dedicated department (61%). Faculty members who teach nontraditional learners are not regularly trained in andragogy (44%).

Faculty members do utilize the principles of andragogy to educate nontraditional learners but they are not used in totality, only in parts. The highest categories pertaining to the faculty utilization of andragogy were: 1) they use a variety of instructional methods (76%), 2) the learner is active in the learning process (73%), and there is a mutual respect of the learner (71%). However, the lowest categories were: 1) the faculty member is a role model (40%), 2) flexible course plans are used (39%), and the faculty members are willing to relinquish control of the classroom and/or content (34%).

The curriculum is not consistently designed for nontraditional students based upon the principles of andragogy. The top curriculum categories were: 1) learners can do self-reflection (56%), 2) a variety of instructional methods are used to deliver information (56%), and, 3) the

learner's experience is recognized. The lowest categories were: 1) learning is designed to be transformational (40%), 2) curriculum is problem-centered (34%), and 3) a pre-assessment component is used (21%). The opportunity for transformational and problem-centered learning is a key part of the principles of andragogy but is not frequently utilized in the nontraditional classroom at the institutions participating in this survey.

5.1.3 Research Question II Conclusions

The specialized support these institutions offer to adult learners, including services, program delivery options, and the awarding of credit for prior learning have as the top three responses: 1) classes are offered at convenient times (87%), 2) transfer credits are accepted (85%), and, 3) there is easy access to registering for courses (82%). The lowest three were: 1) there are social groups for nontraditional students (20%), housing for nontraditional students (14%), and child care services are provided (12%).

It was found that 74% of the staff that works with adult learners are trained with the training done most often via conference attendance (53%). The most common method for prior learning credit acceptance is transfer credit acceptance at 89 % while the lowest is 25% for the acceptance of advanced standing. Only 38% utilize the portfolio review process to award credit. This is a key method to the recognition of life experience, an important component to andragogy and the application of its principles. Seven percent indicated that no method of prior learning credit is accepted. The two most common reasons provided for the lack of a prior learning credit process were the lack of personnel and financial resources and the inability of the faculty members to support this process as a legitimate method for earning credit.

The results showed that while classes are offered at convenient times at a high rate (84%), access to services is low (47%). While students are able to attend their courses with a variety of options, the support services that they need are not available when they need them (47%). For example, one respondent indicated that one activity of which they were most proud was that the dean's office was open on Thursday afternoons for the students to have access to the dean. Thursday afternoon would not be an optimal time for students to meet with the dean. A much more exemplary activity would be for the dean to be accessible in the evenings or weekends and perhaps via a distance method. That would be a convenient service to nontraditional students, not an office open at a time when the students are most likely to be working.

This student population has often been out of school for an extended period of time and sometimes did not have success in their previous college experience. Therefore it would be beneficial to this population to have academic skills or basic study skills refresher courses. Yet, these were offered 49% and 34% of the time respectively. Furthermore, in a time of economic difficulty, these students could likely be looking for a new position or career. However, only 34% of the responding institutions offer career services designed for nontraditional students.

5.1.4 Research Question III Conclusions

Institutional best practices were surveyed by asking the respondents to indicate which American Council of Education (ACE) Principles of Good Practices for Adult Learners and which Council for Adult and Experiential Learning (CAEL) Adult Learning Focus Institutions (ALFI) Principles their institutions followed. The two highest ACE Principles were that faculty and academic professionals are committed to serve adult learners (66%) and the evaluation of the

program involved faculty, staff, and students (62%). The two lowest ACE Principles were the existence of clearly articulated programmatic learning outcomes that frame the curriculum (48%) and that administrative structures, staffing, and fiscal resources are sufficient, appropriate, and stable for accomplishing the program mission (52%).

The two ALFI Principles that were followed at the highest rate were technology and the use of information technology to provide relevant and timely information to enhance the learning experience were utilized (85%) and outreach which is that the barriers of time, place, and tradition are overcome (80%). The two ALFI Principles utilized least often were the assessment of learning outcomes (48%) and life and career planning (32%).

The low averages for the ACE assessment (53%) and the ACE learning outcomes (48%) coincide with the low score on the ALFI assessment category (48%). And, the low ALFI category average for life and career planning (32%) was supported by the low average found in the student services listing question for the offering of career services to nontraditional students (34%). The high averages for the ACE technology principles (85%), outreach (80%), and the teaching-learning process (72%) are supported by the high averages for multiple course delivery (80%) in the student services question and the multiple methods of instruction (76%) on the faculty use of the principles of andragogy.

5.1.5 Research Question IV Conclusions

Baccalaureate, masters, and doctoral Carnegie classifications were then compared on multiple measures. When comparing the principles of andragogy utilized by faculty, baccalaureate colleges were higher than the average of the three classifications in five of nine categories while

the masters institutions were only higher than the average in one of nine categories and doctoral granting institutions higher than the average in every category.

Regarding prior learning credit acceptance, transfer credits was the highest in all categories and advanced standing was the lowest. When comparing the principles of andragogy utilized within the curriculum the baccalaureate institutions were higher than the category average in nine of 11 categories, the masters institutions were higher in only one of the categories, and the doctoral granting institutions higher in ten of the 11 categories.

When comparing the services offered to nontraditional students, the baccalaureate institutions were equal to or higher than the category average in 27 out of 29 categories while master's institutions were higher in 17 of the categories, and doctoral granting institutions higher in only seven of the categories. Within the ACE Best Practices, the baccalaureate were higher than the average in six out of eight categories, the master's were higher than the average in one category, and the doctoral granting institutions higher than the average in seven of the eight categories. The results of the CAEL ALFO institutional commitment survey question were that the baccalaureate institutions were equal to or higher than the average in seven of the eight categories, the master's institutions equal to or higher than the category average in four of the eight categories, and the doctoral granting institutions higher in only two of the eight categories.

Doctoral granting institutions averaged higher in more categories than the others with respect to the utilization of andragogy by the faculty and the curriculum but lower with respect to services than either baccalaureate or master's institutions. However, if the categories of faculty, curriculum, services, and best practices are all compared, the baccalaureate institutions have the highest number of leading averages. Furthermore, more respondents from baccalaureate

institutions believe theirs are committed to meeting the needs of nontraditional students (66%) than the respondents from the master's (36%) or doctoral institutions (32%).

Seventy-eight percent of the respondents replied to the question regarding their most exemplary activity according to the principles of andragogy. Baccalaureate institutions identified advising and faculty most often as their most exemplary activity, master's institutions listed faculty, curriculum design, services, and advising, and doctoral institutions provided the teaching-learning process and programming as their most exemplary activities.

When asked for areas that could improve, 72% of the respondents replied to this question. The baccalaureate institutions listed support services and assessment, the master's institutions online courses, support services, faculty training, and flexible course delivery, and the doctoral institutions listed student services, curriculum options, and faculty training as areas that could improve for nontraditional students based on the principles of andragogy. For additional and detailed comments from the respondents regarding exemplary areas and those that need improvement, please refer to the appendices in the document.

Baccalaureate institutions appear to do the best job of servicing the nontraditional students according to the principles of andragogy and are most proud of their advising and faculty. Doctoral granting institutions appear to be most successful that the faculty and curriculum use the principles of andragogy to educate nontraditional learners and are most proud of their teaching-learning process and programming. The master's institutions do not lead in any of the surveyed categories but are most proud of their faculty, curriculum design, services, and advising those these categories are not well represented in the associated survey responses.

5.2 IMPLICATIONS

There are a number of implications to be gathered from this research. Overall, the baccalaureate institutions report utilizing the principles of andragogy at a higher percentage than the other institutions. This would indicate that nontraditional students would be more appropriately educated and supported at these institutions than the others. However, the response pool for this category was relatively small (9) and it would be interesting to complete additional research within this category to see if these higher reported percentages would continue. And, it is the doctoral granting institutions that utilize the principles of andragogy at a higher rate for both faculty and curriculum. Only master's institutions appear to offer little to the nontraditional student as they do not lead in faculty , curriculum, services, or best practices.

Also, it is generally believed that community colleges offer some of the best programs and services for nontraditional students. The response pool for community colleges was almost nonexistent for this study and could not be used for any comparison purpose. A future research project could focus on community colleges and their commitment to the principles of andragogy.

Additional research could be done with faculty members and students at the institutions surveyed for this project to see if their perceptions are similar to those of the administrators. For example, administrators indicated that faculty members do utilize the principles of andragogy to educate their nontraditional students but they offer training at a fairly low percentage (44%). It would be interesting to survey faculty members on their understanding and utilization of andragogy as well on how they acquired their knowledge on the topic. And, while administrators may believe that the faculty, curriculum, and services support their nontraditional students, it would be interesting to see if their students shared the same beliefs.

An institutional segment not well represented here is the for profit sector. Only two administrators responded from for profit institutions. A survey targeting just for profit institutions may produce entirely different results or it could produce the same results.

Furthermore, the respondents comprising this population were all members of the University Continuing Education Association, an association formed for nontraditional student program administrators. An interesting comparison could be to replicate this study with administrators of nontraditional programs who do not belong to an organization of nontraditional administrators to see if the results are the same or different.

The majority of institutions have many more staff members working in traditional student related functions than those who work with nontraditional. Staff members who work with traditional students and those who work with nontraditional students could all benefit by formal education on the topic of andragogy. College and university administrators should all be well educated on the theory of andragogy as well as its implications on faculty, curriculum, and student support services. Universities providing instruction to future higher education administrators should make a course or several courses on andragogy a part of their master's and doctoral curriculum. This is the fastest growing population of students enrolled in higher education. Unfortunately, most administrators know little about educating the nontraditional student which leads to a lack of institutional support for these students.

Sixty percent of the respondents indicated that their enrollment of nontraditional students is increasing and the survey respondents echoed this finding. If this survey were redone in a few years, perhaps the results would be different. As the population of nontraditional students continues to grow, perhaps the utilization of the principles of andragogy as evidenced through

the faculty, curriculum, and student services will also continue to grow. Or, the results could remain the same as schools continue to conduct business as usual.

The literature shows that the number of nontraditional students is going to continue to increase. However, the competition for these students is also going to continue to increase, both in the for profit world and in the not for profit arena.

Online and blended course delivery also continues to increase. The institutions who provide the best educational opportunities with the most superior support services will be the winners. Students have many choices and the attitudes that many institutions have regarding only providing convenient class times and delivery options without any other support services will need to change if they want to continue to recruit and retain nontraditional students. The institutions that provide the whole package to the nontraditional students will be the survivors. The remaining institutions who continue to focus on the traditional students may find themselves trying to figure out how to keep their doors open as the number of traditional students continues to decline.

APPENDIX A

THESE RESPONSES ARE LISTED BELO AND ARE PRESENTED BY CARNEGIE CLASSIFICATIONS

Table 23. Baccalaureate Colleges Most Exemplary Activities

advising and the faculty
admissions and student services personnel dedicated to the adult learner
encouragement of PLA as a persistence supporting tool, use of advisory committees to align curriculum to community needs, ongoing assessment using adult student feedback to improve campus operations, organizing course schedules to make best use of blended model, organize schedule to provide convenience and flexibility, provide convenient local campuses that are one-stop centers, building instructional models that capitalize on the learners' experience
degree completion program specifically for adult learners
the capstone (senior seminar) course is entitled Personal and Professional Development and requires an integrated professional portfolio and an applied research project. The portfolio includes educational experiences since high school completion (transcripts, military training, professional certificates, etc.), an autobiography, current resume and examples of written work. The Applied Research Project addresses a real and current problem within a work setting and includes problem-solving, academic inquiry methods, critical thinking, and oral and written communications. These students invest the learning gained from employment and from the collegiate setting to bring about positive change in their career setting
the use of a variety of learning methodologies
the term of andragogy is not defined as referred to in this study. Our curriculum focuses on experiential learning which is extremely effective and relevant for nontraditional students
educational format is designed for adults: support services are provided, instructors are skilled, assessment and feedback are provided
school dedicated to meeting the educational needs of adults

Table 24. Baccalaureate Colleges Areas That Could Improve

one stop shop that includes all services areas would be helpful--we manage through our own division resources to handle
still in the process of updating curriculum so that the CPS programs are truly differentiated from those offered on our traditional campus
we need to continue to improve our assessment mechanisms with each academic department
career related services from the onset of their degree program
programs tailored to evening and adult learners--in delivery and scheduling as well as course titles and content
academic support for the nontraditional student
more diagnostic assessments
campus culture is focused on traditional aged students

Table 25. Baccalaureate Colleges Institutional Commitment to Nontraditional Learners

very much so--founded as a college for the professions and specifically for working women, the changes throughout the last 40 years still maintain the mission and focus on adult learners
yes, the vision of our "new" president (he has been here 3 years) was to create a college within a college dedicated to the nontraditional learner. Our administrative side includes marketing, admission and student services staff (11 people) and a 2 person workforce development center. Our academic side includes a dean, associate dean, and two assistant deans (one for business programs and one for technology programs).
yes, it is rooted in our mission statement and our strategic plan
yes, especially in the design of programs to meet the needs of adult students
no, currently the vast majority of programming and resources are devoted to attracting and retaining traditional students to the institution. With the assumption that a great many adult learners are employed during the day, adults are not excluded from any bachelor's degree program but there are few departments that consistently offer evening classes at the junior/senior level.
no, the institution is primarily organized around the needs of the residential, traditionally aged students. That said, certain programs have an abundance of adult students and the faculty who are engaged in those programs are quite committed
committed to life-long learning and promotes it through a continuum and variety of programs and services. Our on-campus student population of nontraditional age students is not large enough to support unique program services. However, we do have a large population of off-campus students and their needs are met through dedicated program staff
faculty and staff are knowledgeable about working with adult students. My guess is that few are familiar with a set of defined principles
no--not on the radar screen. Assume that the free standing school will address those needs

Table 26. Master's Colleges and Universities Most Exemplary Activities

We have an intensive faculty training program, our centralized curriculum is designed to create the ideal learning environment for the student with full interaction required from faculty and students
our courses are hands-on, project-based and immediate relevance to their job or personal life
individualized attention, TLC, PLA, courses for adult learners, office hours and classes at appropriate times
the relevancy oriented courses that we offer our students
we provide opportunities to obtain credit for their past experiences, if they can equate them to college level learning. Additionally, we provide the option for students to develop an individually designed major that uses past experiences and courses, and allows them to develop a degree that fits their educational and career goals
our desire to make our courses available to students anywhere anytime. We teach courses in the evening, weekends, hybrids, online and independent study
student centered learning
multiple teaching modalities and activities in the typical adult classroom, faculty integration conferences focuses on the adult centered classroom
the role of the learner's experience, orientation to learning
our accelerated degree programs
curriculum design--the rest are threshold activities
development of online orientation
there is not a specific learning pattern our institution follows for adult learners --it's all tailored for traditional learners
recognition of prior learning, wherever and however learned
using information technology to provide relevant and timely information and to enhance the learning experience of nontraditional learners
highly interactive online courses and the students' constructivism. Extreme emphasis on practical and immediate application of theory. Richly responsive and readily available faculty members online
appropriateness of instructional strategies
student development of their own curriculum in our Liberal Studies program intentional problem base learning
I am most proud of our program that recognizes and assesses the previous life experience of the adult learners and based upon the portfolio students earn credits toward the completion of their degree program
distance student advising, assessment of prior learning portfolio course and program, agency sponsored learning and military sponsored credits
our Business Administration capstone course is designed to capitalize on the most prominent characteristics of our adult learners. Our Alpha Sigma Lambda chapter also provides opportunities for our adult students to work together to make a difference in their community through projects that complement and don't compete with their academic obligations

our student support services support the needs of nontraditional students by offering flexible hours and online access to some services
degree completion and online degree programs
college philosophy espouses student centered learning opportunities, including individualized study and degree planning, credit for prior learning, credit for college level learning gained outside the classroom, experiential learning
instruction, small class size, faculty as facilitators, accelerated formats with outcomes and goals clearly stated
the institution does not recognize the principles of andragogy
advising

Table 27. Master's Colleges and Universities Areas That Could Improve

I feel we are very strong in all areas
online or hybrid courses would benefit our students immensely
support services outside the unit's association with nontraditional adult learners
we utilize each of the six principles but unfortunately we need to TEACH these principles to our faculty. When I read the six principles, I do feel our faculty utilize them but they are not aware that they are using this adult theory
our courses could take on more of a problem oriented focus rather than content oriented
our institution does not focus on adult learners so I feel that our institution can improve in all areas focused on adult education. This is an opportunity in our community that I would like to focus on in the future
more scholarships for nontraditional students
some student service areas
could always improve
co-curricular activities
provide greater support for those needing remedial work/support
student funding services, credit for prior learning, better classroom furniture for facilitation and student interaction
course delivery that is not time or place dependent. Degree options that have greater flexibility for nontraditional students to get courses most pertinent to where they are in life and where they want to go
having more flexibility for timing of event in asynchronous courses. More resource to continually update online courses to reflect real world events
always taking into account the wide range of levels/types of previous experiences
reduced lecture--after a decade of working on this, it's still a problem for our professors
the training/orientation to faculty on andragogy; helping them take what I sense they already have a sense of to actively using the theories in their instruction

Table 28. Master's Colleges and Universities Institutional Commitment to Nontraditional Learners

we are very committed to the principles, they drive all of our course development and classroom guidelines
yes, the program consists entirely of adjunct faculty; working professionals in the respective disciplines teaching from everyday life experiences. The program's flexible course scheduling benefit the non-traditional student
within the unit's association with nontraditional adult learners
this is an area that we need to improve upon in the coming year. We need to teach the principles to our continuing education faculty
we are in the process of assessing this more full and will be completing the ALFI this semester. With a large number of adult students it is very important to us that we do a better job of meeting their needs. We are very committed to andragogy in our distance learning program but tend to be less committed in our traditional on campus offerings
directly no, indirectly yes
we are doing a lot of good things to help nontraditional students and have identified them in our university mission. We need to build more financial models to better serve the nontraditional part time students
no, my institution is so "traditional student" oriented that while it states that it wants to serve the nontraditional student, in fact what it does is it tries to adapt traditional methodologies for nontraditional students. We have not gotten to the point where the nontraditional student is seen in a separate light as a distinct class of student with distinct needs and distinct circumstances
yes, continuous improvement and evaluation
I believe our nearly four decades of service to adult students has allowed our institution to informally embrace solid principles of andragogy and we have a deep seeded commitment to continuous improvement. Having said that, we have not formally and concisely articulated our approach to education adult learners
yes, online courses are developed with the principles of andragogy in mind. Adjunct instructors all have extensive real-world experience to impart on their learners
this division but not the university as a whole
it is the heart of our mission
to a degree--there is a major focus on residential freshmen
yes
no, we are traditional student focused for the most part
it is the basis for this institution's creation
it is difficult to get our faculty and administration as a whole to embrace the nontraditional student and to think beyond the limits of the main campus. The President is supportive and sees nontraditional students as a primary growth factor for the institution. This will give us institutional support. We also see nontraditional students as a primary factor in the future economic growth of the state.
no, years ago, this campus made the decision that its primary focus would be traditional students, and on that basis, campus enrollments have increased from 7000 to almost 12000 students. Nontraditional students are handled in many of the same ways as traditional students

except for some of the limited, special services the Continuing Education department can provide. Our greatest achievement, aside from counseling services and program advisement is making classes more accessible to nontraditional students
not yet, because we have such a large population of traditional students, our focus tends to remain there; we are working toward more self-service tools and resources that benefit everyone, but particularly non-traditional students; however, we have some policy limitations that still restrict access or limit services
yes. Our fundamental theoretical base for online course development, design, review and delivery is founded in Malcolm Knowles principles of andragogy and subsequent theoretical findings and best practices with adults students
yes, the institution has made a commitment to the nontraditional student and provided a great deal of awareness and professional development for the faculty and staff
not especially, we have one college dedicated to adult learners but that college depends on the other colleges for the vast majority of our instruction
at this point, no. We are a large undergraduate institution and our primary efforts are to meet the 18000 traditionally aged undergrads that come to our campus. Having said that, our institution is moving rapidly to becoming an engaged institution and will adapt and embrace andragogy to meet our emerging goal to be an engaged institution
no, we have no services, programming or activities built around the adult learner
somewhat but mostly for on-campus younger nontraditional. Older online students are seen by many faculty as cash cows to be tolerated
yes, committed but not always prepared. Our faculty and administration value the diversity and unique strengths our adult learners bring to university life, but not all areas are consistent in accommodating their needs. Even though they have had a notable presence on campus for nearly 20 years, adult learners still occasionally get short shift with some services (food service, library hours, etc.)
not consciously. The institution was originally formed as a transfer college (upper division). So, it evolved as a college for returning adult students. Still, the administration all comes from traditional settings and are not very open to developing a program to support nontraditional students. Doesn't necessarily make sense.
no. It tends to focus on the majority of our students who remain traditional
college philosophy espouses student centered learning opportunities, including individualized study and degree planning, credit for prior learning, credit for college level learning gained outside the classroom, experiential learning
yes, within its available budget and institutional size
no
yes. The College is widely respected on campus and perceived as an integral part of the institution. Because of the strong faculty union, mostly full time faculty teach adult students and they enjoy teaching them

Table 29. Doctoral-granting Institutions Most Exemplary Activities

service learning and accelerated programs
teaching-learning process

life and career planning with counseling appointment and workshop offered to adults prior to becoming students
we do not believe in andragogy. Rather, we try to be learning centered.
online degree in partnership with an elearning partner, evening baccalaureate degrees, regional campus structure, online master's degree
non-credit programming including workforce education
online course development using Quality Matters
unknown
role of learner's experience. Our courses are highly dependent upon comparisons between theory and what occurs in the world of work. Much validity is placed on the experiences and counsel of students who have been engaged in real world activities for a significant amount of time. Because of the diversity of our students and because of the wide work-related experiences, the curriculum is aimed at seeing and understanding the curricula through a real world lens. Comparisons are made for the purpose of highlighting learners' impressions of both consistency and inconsistency with theory. Deep explorations of the dynamics of these relationships are highly encouraged
academic advising and student services in general are our strengths. We are good at developmental advising, recognizing the adult student wears multiple hats. For example, we understand they often are working and caring for children as well as aging parents.
online registration and academic support
none that I can think of
continuing education courses are sensitive to the needs of nontraditional students and designed as such
I am not familiar with these principles specifically
specific office dedicated to advising non matrices and adult learner inquirers
in recognition of the crucial role of academic quality to our mission and values, we affirm the Principles of Best Practice for Lifelong Learning and officially adopt these principles as fundamental to the work of our organization
academic advising, financial aid advising, and career counseling available
online learning--flexible design
all accelerated programs require cohort study teams whereby students learn from each other in a collaborative atmosphere, faculty and administrators embrace the principles of adult learning and teaching
use of technology to promote access to instruction and instructional support
classes held in late afternoon/evening. Working very closely with local government entities to meet local workforce needs. Our partnerships with regional companies needing additional educational opportunities.
we serve only part time, evening, or online students. We work hard to educate faculty for these media and for assessment of outcomes
aggressive counseling
our programs and faculty are great at respecting the experience that the students bring to the programs of study and make attempts to incorporate and help the students relate their experience

do not isolate this out
access to online programs and support services. Courses designed with focus on student involvement and interaction (with other students and with the instructor) and are based on student outcomes
online and classroom instruction is very sophisticated and engaging
we have a number of programs that offer opportunities for nontraditional students

Table 30. Doctoral-granting Institutions Areas That Could Improve

career services
student services, life and career planning
relevance of some curricula
curriculum and services designed for the evening, weekend, accelerated, or distance learner
teacher training, but not based on andragogy
all areas of instruction would benefit
more training for faculty offering online distance learning courses
better services like financial aid and advising for nontraditional students
probably the Role of the Learner's Self Concept. Please don't view this as the corollary to the learner's experience. My answer is based on our faculty's lack of knowledge and willingness to make our adult students truly responsible for their knowledge acquisition. Faculty are steeped in the traditional learner mindset where they must impart wisdom.. To lecture. To inform. So, even with a lens that compares theory to the real world, the final word comes down to the professor. It is a summary lecture versus a summary proposal.
we are not so good at training our faculty in the principles of how adults learn and how learners should be taught. There is a lot of inconsistency in this regard. Sometimes we talk about it and a little momentum builds but then other priorities get in the way. Also, we have been without an associate dean for two years and there is no one to take a leadership role in seeing ideas come to fruition.
non-academic support
not relevant to our current situation
the institution as a whole could better define nontraditional
we work more with employees as a number of nonmatrics approved to take courses is limited
we would like to offer a bachelor's degree completion program for nontrads. We are working on that.
enrollment management, student services
some University services are not available during evening hours
additional training/professional development to address issues relevant to the adult learner
simply offering more program availability in high need areas, as in teacher education and business. But, that clearly requires more resources.
student counseling, institutional approach to financial aid, career counseling, comprehensive, detailed vision for each student

very traditional institution. Almost all our undergrads are 18-22, live in dorms, and complete a classical traditional classroom-based education program. No extra efforts for nontraditional students are in evidence here.

Table 31. Doctoral-granting Institutional Commitment to Nontraditional Learners

yes. Worked with Dr. Knowles in planning and development.
not the university but our office
not fully. We are a traditional residential campus whose main focus is the traditional 18-22 year old
good teaching is valued, however, some faculty recognize the expertise of the students and use it to the class's advantage, others not so much
no. Great demand on limited resources by traditional undergraduate student body--largely full time, residential, whose needs surpass departmental ability to meet deman
no, because andragogy is a false set of values and distinctions.
this is not a familiar term in our institution. People would not know what the principles are--perhaps they would not see them as different from good pedagogy
we are committed to offering a quality online distance learning experience to meet the needs of adult students
not yet-in development as online degree completion programs come online
no. Commitment would mean hiring a largely new faculty. I'm runing this program for nontraditional students with a faculty who find it difficult to break the traditional student pedagogy and mindset.
no, I don't think the Center for Academic Excellence which supports all faculty at the institution would even know what the word andragogy means. The dominant culture is focused on traditional, full time day students.
yes, the university maintains an entire school focused on adults
no, our university is focused on research and graduate education
yes, certainly, but I think we aren't all clear on who we are talking about
we are an institution geared to traditionally aged UG population. CEO office works with some nontraditional students but many are matriculated and we do not work with them
we are committed to the principles of student engagement, active learning, problem centered instruction, assessment, accountability, retention, and student success.
yes, we have studied best practices and endeavor to implement them.
to the extent that our unit is recognized and supported, yes. However, the campus is a research I institution that has multiple constituents to serve.
yes, the Division of Continuing and Distance Education is build upon a strong tradition of extending extraordinary academic programs to working professionals in the region and beyond.
yes. Our Colleges of Business/Management and Education are build on the principles, are clearly articulated to the public, students, and the rest of the University, and have been instrumental in changing mind-sets of more traditional programs
it is an emerging issue. We have made some progress but have not formulated a coherent statement of principles

yes, the regional campus and distance education program is strong and has been for over a century. We have reached out to rural areas, primarily serving the adult learner population in that capacity.
frankly, no. We have a small over-loaded staff and are the only unit on campus providing part time study. There is no comprehensive, institutional approach to handling other than traditional students and no resources to do it at this time. We do the best we can with what we have and I believe that most students feel reasonably well-served.
no, for the above reasons. Simply put, we don't have to. We have a long waiting list of students trying to get into the traditional model. If these ever cease to serve our needs, we might expand our offerings, programs, and formats to better serve adult learners.
we continually work at it.
not familiar with them
we are committed! We were designed from the start to serve the needs of the nontraditional student population. It seems strange to us because non-traditional students are our mainstream and we sometimes forget that is not the case at all other institutions. Our guiding principles ask us to start with the question of how does this affect students whenever we are considering changes to programs, practices, or policies
we make no special effort to identify the principles of andragogy independently from other learning methodologies
we don't describe our distance students as nontraditional even though most meet common descriptions for that classification. Our online programs, targeted at working, place bound adults, are a key part of the institution's enrollment strategy and are a good match with our land grant mission. But, I can't say that the institution is committed to the principles of andragogy per se
this is not a word we use frequently but as a former professor of adult studies, I know the principles behind the word and we work hard in selecting and training adjunct faculty who are good at working with adults on campus and online
not really. We think we are a research based institution and the concentration is on graduate study, funded grants and research.

APPENDIX B

LETTER ACCOMPANYING SURVEY REQUESTS ONE AND TWO

Dear Colleague:

I am requesting that you complete the attached questionnaire and return it to me within one week (mm/dd/yyyy). The purpose of this research study is to identify what curriculum and student services are offered to nontraditional students at your institution based upon the principles of andragogy and some best practices models. This research is being completed for my dissertation as part of the requirements for a doctoral degree from the University of Pittsburgh's School of Education. I will be surveying all administrators who are identified through the member institutions of the University Continuing Education Association (UCEA). This survey should not take longer than 15-20 minutes of your time.

If you are willing to participate in this project, please complete the enclosed survey and return to me via email. The information for returning the survey is provided at the end of the questionnaire. There are no foreseeable risks associated with this project nor are there any direct benefits to you. Your responses will be kept in strictest confidence and no responses will be associated with either person or institution in the compilation of the research and reporting of the results. Your participation is voluntary and you may elect not to participate at any time. This

research study is being conducted by Darcy Tannehill, who may be reached at: dtannehill@thechicagoschool.edu. Thank you, in advance, for your cooperation.

Sincerely,

Darcy B. Tannehill

APPENDIX C

SCRIPT OF TELEPHONE MESSAGE

MM/DD/YYYY

The following message will be left with each non-respondent or on the voice mail of their business phone:

Hello_____, this is Darcy Tannehill. I am a doctoral student at the University of Pittsburgh and I need your assistance for my dissertation research on nontraditional students, andragogy, and related curricula and student services. I have sent you a few emails with a copy of my survey from my email address: dtannehill@thechicagoschool.edu and I am concerned that you may not have received them.

I recently sent you another email on February 11th with this survey and ask that you please complete it and email it to me by February 18th. The subject of the recent email is University of Pittsburgh Research Project. It will take you no more than 15-20 minutes to complete and I would be very appreciative of your participation.

If you have any questions, please feel free to phone me at: 724-693-2518. Thank you very much.

APPENDIX D

ANDRAGOGY AND ITS APPLICATION: AN INVESTIGATION OF POST- SECONDARY INSTITUTIONS SURVEY

This questionnaire is designed to explore the curricula and student services provided to **nontraditional students(adult learners)** by your institution and any best practices that might be in place. The questions have been derived from a review of literature on the principles of andragogy, a learner centered approach defined by Malcolm Knowles which states the following: adults need to know why they are to learn, adults are self-directed to learn, adults have a large quantity and quality of experience that can relate to learning, adults are life tasked and problem centered, and, while adults respond to external motivation the stronger motivators are intrinsic. (Note: all responses will be kept in strictest confidence and no responses will be associated with either person or institution).

Name: _____

Title: _____

Department Name: _____

Institution Name: _____

1. Which Carnegie classification best describes your institution?

- _____ Associate's Colleges
- _____ Baccalaureate Colleges
- _____ Master's Colleges and Universities
- _____ Doctoral-granting Universities
- _____ Special Focus Institutions
- _____ Tribal Colleges

2. Which best describes your institution?

not for profit
 for profit

3. How does your institution define nontraditional students? Please check all that apply.

age, what minimum age do you use _____?
 work experience
 years out of high school, what minimum years out do you use _____?
 financial independence
 marital status
 being a parent
 by program enrollment only
 other, _____
 we do not use a descriptor to define nontraditional students

4. Are the majority of your nontraditional students:

male
 female
 equally male and female
 don't know

5. What is the most common age range of your nontraditional students?

22-30
 31-40
 41-50
 over 50
 don't know

6. What is the average household income of your nontraditional students?

less than \$20,000
 \$20,000-\$39,999
 \$40,000-\$59,999
 \$60,000-\$79,999
 \$80,000-\$99,999
 over \$100,000
 don't know

7. What is the predominant race of your nontraditional students?

white
 African-American
 Hispanic
 Asian-Pacific Islander

_____Native American
_____don't know

8. What is the estimated total number of undergraduate students at your institutions?

9. What is the estimated number of nontraditional undergraduate students at your institution?

10. What degree are the majority of your nontraditional students seeking?

_____associate
_____baccalaureate

11. Is the number of nontraditional, undergraduate students at your institution increasing?

_____yes, please go to #12
_____no, please skip to #13

12. To what do you attribute the increase in your nontraditional, undergraduate student population?

13. Do you offer programs specifically to nontraditional students?

_____yes
_____no

14. Does your institution believe that nontraditional students should be treated differently than traditional students?

_____yes
_____no

15. Does your institution have an institutional mission to educate nontraditional students?

_____yes
_____no

16. Is the nontraditional student mentioned in the institutional mission statement?

_____yes
_____no

17. Do you have a school or department dedicated to nontraditional students?

_____yes, please provide the name of the school or department _____
_____no

18. Is the nontraditional student mentioned in the school or department mission statement?

_____yes
_____no

19. Do you believe the faculty members who teach your nontraditional students are knowledgeable regarding the principles of andragogy (adult learning theory/concepts)?

_____yes
_____no

20. Do you provide training on the principles of andragogy (adult learning) to your faculty members who teach nontraditional students?

_____yes, please go to #21
_____no, please skip to #22

21. How do you offer training in andragogy to your faculty members?

_____classroom seminars
_____online
_____conferences on nontraditional education
_____other, please describe _____

22. Which of the following does your faculty for nontraditional learners follow?

_____learner is self directed and independent
_____learner is active in the learning process
_____learner is treated with mutual respect
_____learners are told why they need to learn something
_____faculty member is a role model
_____classroom environment is designed for interactivity
_____faculty use a variety of instructional methods to deliver information

- faculty members are willing to relinquish control of the classroom/content
 - faculty members use flexible course plans
 - other, please describe: _____
-

23. Do you offer courses designed specifically for nontraditional learners?

- yes, please go to #24
- no, please skip to #25

24. Which of the following does your curriculum for nontraditional learners take into consideration?

- learner's experience is recognized
 - curriculum is problem centered
 - curriculum is immediately applicable to real life
 - curriculum is designed to have learners learn from each other
 - curriculum allows learners to do self-reflection
 - learning is designed to be transformational
 - curriculum is designed to make the learner more open to others' perspectives
 - curriculum utilizes a pre-assessment component
 - curriculum accommodates different learning styles of the learners
 - curriculum encourages feedback from learners
 - curriculum use a variety of instructional methods to deliver information
 - other, please describe: _____
-
-

25. Which of the following services do you offer to nontraditional students?

- classes at convenient times—for examples: evening, weekend
- one stop enrollment process designed for nontraditional students
- convenient bookstore access
- advisors trained specifically to work with nontraditional students
- timely response to complaints
- help with basic academic skills
- career services specifically designed for nontraditional students
- study skills refresher opportunities
- social groups for nontraditional students
- easy access to registering for courses
- convenient parking

- financial aid counseling specifically for nontraditional students
 - scholarships for nontraditional students
 - one stop student services/information center
 - prior learning credits
 - child care services
 - convenient access to library materials
 - transfer credit acceptance
 - articulations with other schools
 - veterans' services
 - convenient locations
 - comfortable classrooms designed for nontraditional students
 - lower cost tuition than for traditional students
 - flexible tuition payment plans
 - health services
 - offices open for nontraditional student access hours
 - housing
 - multiple delivery formats—online, blended, accelerated terms
 - food service
 - other, please describe: _____
-

26. Is the staff that works with nontraditional students trained in the needs of adult learners?

- yes, please go to #27
- no, please skip to #28

27. How are staff members trained to work with nontraditional students?

- classroom seminars
- online seminars
- conferences on nontraditional learners
- other, please describe _____

28. Which of the following do you offer to students to gain prior learning credits?

- transfer credits, if so how many do you accept? _____
 - CLEP
 - Advanced Standing
 - Advanced Placement
 - Portfolio Review
 - ACE (American Council of Education Guidelines for Corporate Training)
 - we do not accept prior learning credits. Please explain why you do not offer this service: _____
-

29. Which of the following do you believe describes your institution with respect to the education of nontraditional students?

_____The program has a mission statement that reflects an educational philosophy, goals, purposes, and general intent and clearly complements the institutional mission.

_____Faculty and academic professionals working in alternative and external degree programs share a commitment to serve adult learners and have the attitudes, knowledge, and skills required to reach, advise, counsel, and assist such students.

_____Clearly articulated programmatic learning outcomes frame the comprehensive curriculum as well as specific learning experiences; in developing these outcomes, the program incorporates general student goals.

_____The program is designed to provide diverse learning experiences that respond to the characteristics and contexts of adult learners while meeting established academic standards.

_____The assessment of a student's learning is used to determine the achievement of comprehensive and specific learning outcomes.

_____The policies, procedures, and practices of the program take into account the conditions and circumstances of adult learners and promote the success of those students.

_____The administrative structures and the human, fiscal, and learning resources are sufficient, appropriate, and stable for accomplishing the program mission.

_____Evaluation of the program involves faculty, academic professionals, administrators, and students on a continuing, systematic basis to assure quality and standards, and to stimulate program improvement.

30. Are you familiar with the Council for Adult and Experiential Learning (CAEL) Adult Learning Focused Institution (ALFI) designation?

_____yes

_____no

31. Which of the following do you believe describes your institution?

_____Outreach: The institution conducts its outreach to adult learners by overcoming barriers of time, place, and tradition to create lifelong access to education opportunities

_____Life and Career Planning: The institution addresses the adult learners' life and career goals before or at the onset of enrollment in order to assess and align its capacities to help learners reach their goals

_____Financing: The institution promotes choice using an array of payment options for adult learners in order to expand equity and flexibility

_____Assessment of Learning Outcomes: The institution defines and assesses the knowledge, skills and competencies acquired by adult learners both from the curriculum and from life/work experience in order to assign credit and confer degrees with rigor

_____Teaching-Learning Process: The institution's faculty use multiple methods of instruction (including experiential and problem based methods) for adult learners in order to connect curricular concepts to useful knowledge and skills

_____ Student Support Systems: The institution assists adult learners using comprehensive academic and student support systems in order to enhance students' capacities to become self-directed, lifelong learners

_____ Technology: The institution uses information technology to provide relevant and timely information and to enhance the learning experience

_____ Strategic Partnerships: The institution engages in strategic relationships, partnerships, and collaborations with employers and other organizations in order to develop and improve educational opportunities for adult learners

32. According to the principles of andragogy, what are your most exemplary activities?

33. Based upon the principles of andragogy, which areas could improve?

34. Do you believe your institution is committed to the principles of andragogy in meeting the needs of nontraditional students? Why or why not?

35. I would like a copy of the results of this study.

_____ yes

_____ no

Thank you so much for your willingness to participate in this study. Please return this survey via email to: dtannehill@thechicagoschool.edu. Please contact me with any questions.

Darcy Tannehill

REFERENCES

- American Association of State Colleges and Universities/ERIC Model Programs Inventory Project. (1989, March). *Individualized education at Empire State College*. Washington, D. C. (ERIC Document Reproduction Service No. ED 306 872)
- Aslanian, C. B. (2001). *Adult students today*. New York : The College Board.
- Bash, L. (2003). *Adult learners in the academy*. Bolton, Massachusetts: Anker Publishing Company, Inc.
- Bendixen-Noe, M. K. (1998). Nontraditional students in higher education: Meeting their needs as learners. *Mid-Western Educational Researcher*, 11(2), 27-31.
- Benshoff, J., & Lewis, H. A. (1992). *Nontraditional college students*. (Report No. RI88062011). Ann Arbor, MI : School of Education, University of Michigan . (ERIC Document Reproduction Service No. ED 347 483)
- Byrd, S. R. (1990, November). *Perceptions of barriers to undergraduate education by non-traditional students at selected non-public, liberal arts institutions in the mid-south*. Paper presented at the annual conference of the Mid-South Educational Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED 331 407)
- California State University (1989). *Helping adults learn. Facilitator's guide*. Academic Publications Program. Long Beach, CA: (ERIC Document Reproduction Service No. ED 348 909)
- California State University (1990). *Policies and practices to meet the needs of older, part-time students*. Chancellor's Office. Long Beach, CA: (Abstract from ERIC Document Reproduction Service No. ED 348 915)
- Centre for the Study of Higher Education Research. (1993). *Academic support for non-traditional students*. (No. 7). Parkville, Victoria, Australia: Webb, J.
- Clark, M.C. (1993). Transformational learning. In S. B. Merriam (Ed.), *An update on adult learning theory* (pp. 47-56). San Francisco: Jossey-Bass Publishers.
- Columbia University (n.d). Jack Mezirow. Retrieved March 30, 2008, from <http://www.columbia.edu/itc/tc/parker/adlearnville/transformativlearning/mezirow.htm>

- Connor, M.L. (1997). Andragogy and pedagogy. *Ageless Learner*. Retrieved September 3, 2007, from <http://www.agelesslearner.com/intros.andragogy.html>
- Education Improvement Program, Southern Association of Colleges and Schools. (1979, April). *The older students phenomenon: Planning ahead*. Atlanta, GA: (ERIC Document Reproduction Service No. ED 184 489)
- Edwards, R., & Person, D. (1997). Retaining the adult student: The role of the admission counselor. *Journal of College Admission*, 154, 18-21.
- Ely, E. E. (1997). *The non-traditional student*. (Abstract from: ERIC Document Reproduction Service No. ED 411 906)
- Flint, T.A. & Associates (1999). *Best practices in adult learning: A CAEL/APQC benchmarking study*. Chicago: CAEL.
- Flint, T.A., Zakos, P., & Frey, R. (2002). *Best practices in adult learning: A self-evaluation workbook for colleges and universities*. Dubuque, Iowa: Kendall/Hunt Publishing Company.
- Florida State Department of Education. (1998). *The philosophy of teaching adult students. Quality professional development project. Professional development manual II*. (Division of Workforce Development). Tallahassee, FLA. (Abstract from ERIC Document Reproduction Service No. ED 430 099)
- Green, J. (1998). Andragogy: Teaching adults. In B. Hoffman (Ed.), *Encyclopedia of Educational Technology*. Retrieved January 1, 2005, from <http://coe.sdsu.edu/eet/Articles/andragogy/start.htm>
- Greenland, A. E. (1988). *Responsiveness to adult undergraduates in a traditional land-grant university : an institution-wide self-assessment*. (Abstract from: ERIC Document Reproduction Service No. ED 302 105)
- Hogges, R. (1979). *The administrator and non-traditional educational delivery systems*. (Abstract from: ERIC Document Reproduction Service No. ED 174 158)
- Howell, C. L. (2001). *Facilitating responsibility for learning in adult community college students* (Report No. ED-99-CO-0010). Los Angeles, CA: University of California at Los Angeles. (ERIC Document Reproduction Service No. ED 451 841)
- Institute for Professional Development. (1994, January). *Building on a tradition of innovation: Ensuring quality in adult degree programs*. Phoenix, AZ. (ERIC Document Reproduction Service No. ED 382 769)
- Jackson, C. L. & DuVall, L. A. (1989). *Designing programs for adults—let's not overlook andragogy*. (Abstract from: ERIC Document Reproduction Service No. ED 311 217)

- Kasworm, C. E., Sandmann, L. R., & Sissel, P. A. (2000). Adult learners in higher education. In A. L. Wilson & E. R. Hayes (Eds.), *Handbook of Adult and Continuing Education* (pp. 449-463). San Francisco: Jossey-Bass.
- Kattner, T. (Eds.). (2001). *What's working in recruitment & retention*. Madison, WI: Magna Publications, Inc.
- Kelsen, I.H. & Lesick, L.T. (2005). Recruiting and admitting adult learners: They're not just older—they're different. In L. Bash (Ed.), *Best practices in adult learning* (pp. 49-64). Bolton, Massachusetts: Anker Publishing Company, Inc.
- Kerka, S. (1989). *Retaining adult students in higher education*. *ERIC Digest No. 88*. (Report No. RI-88062005). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 308 401)
- Kerka, S. (1992). *Part-time students in higher education. Trends and issues alerts*. (Report No. RI-88062005). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 342 931)
- Knowles, M. (1975). *Self-directed learning: A guide for learners and teachers*. Chicago: Follett Publishing Company.
- Knowles, M. (1990). *The adult learner: A neglected species* (4th ed.). Houston, TX: Gulf Publishing Company.
- Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy* (Rev. ed.). Chicago: Follett Publishing Company.
- Knowles, M. S. (1989). *The making of an adult educator: An autobiographical journey*. San Francisco: Jossey-Bass Inc., Publishers.
- Kolb, A. Y., & Kolb, D.A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning and Education*, 2(4), 193-212.
- Lumina Foundation. (n.d.). *What we know about access, persistence, and success for adult learners in postsecondary education: A review of contemporary literature*. Retrieved June 6, 2007, from http://www.luminafoundation.org/research/what_we_know/adult_learners/
- Mabry, C. H. & Hardin, C. J. (1992). *From recruitment to matriculation: Meeting the needs of adult students*. (ERIC Document Reproduction Service No. ED 349 931)
- Mandell, A. & Michelson, E. (1990). *Portfolio development and adult learning: An introduction*. San Francisco: Jossey-Bass.

- Marino, C. A. (1997, March). *The student returns: Challenges of the returning student*. Paper presented at the annual meeting of the Conference on College Composition and Communication, Phoenix, AZ. (ERIC Document Reproduction Service No. ED 409 567)
- Massey, T. B. (1979). *Internal organization to serve part-time student needs*. (Abstract from: ERIC Document Reproduction Service No. ED 190 025)
- Merriam, S. B. (Ed.) (1986). *Being responsive to adult learners*. Washington, D. C: Scott, Foresman and Company.
- Merriam, S.B. (1993). Adult learning: Where have we come from? Where are we headed? In S.B. Merriam (Ed.), *An update on adult learning theory* (pp. 5-14). San Francisco: Jossey-Bass Publishers.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco: Jossey-Bass Publishers.
- Mezirow, J. et al. (1990). *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning*. San Francisco: Jossey-Bass Inc., Publishers.
- Mezirow, J. et al. (2000). *Learning as transformation: Critical perspectives on a theory in progress*. San Francisco: Jossey-Bass.
- Miller, K.A. (1987, November). *Administrative roles in helping faculty adapt to adult learners*. Paper presented at the annual conference of the Speech Communication Association, Boston, MA.
- Nel, J. (1990, October). *University response to the educational needs of adults: Evidence from the past*. Paper presented at the annual meeting of the American Association for Adult and Continuing Education, Salt Lake City, UT. (ERIC Document Reproduction Service No. ED 325 717)
- Noel-Levitz (.n.d.). *National adult student priorities report*. Coralville, Iowa.
- Nordstrom, B. H. (1989). *Non-traditional students: Adults in transition*. (ERIC Document Reproduction Service No. ED 310 686)
- Octernaud, S. K. (1990). *The nontraditional students at Ferris State University: Implications for recruitment and retention*. (Major research project, Nova University, Fort Lauderdale, FLA). (ERIC Document Reproduction Service No. ED 348 907)
- Pratt, D.D. (1993). Andragogy after twenty-five years. In S. B. Merriam (Ed.), *An update on adult learning theory* (pp. 25-24). San Francisco: Jossey-Bass Publishers.

- Project Transition. (1979). Designing for development: Four programs for adult undergraduates. A working report of programs at: Clark University, Loretto Heights College, Mary Baldwin College, Vermont State Colleges. Denver, CO. (ERIC Document Reproduction Service No. ED 183 054)
- Roundtree-Wyly, J., & Lamber, J. (1988, November). *Model curriculum programs and services for adult learners.* Paper presented at the annual meeting of the American Association of Adult and Continuing Education, Tulsa, OK. (ERIC Document Reproduction Service No. ED 300 620)
- Sander, L. (2008, February 15). Colleges woo adults who have some credits but no degree. *The Chronicle of Higher Education*, A29.
- Shankar, A. D. (1994, November). *Interpreting the narratives of non-traditional students: An exploratory study.* Paper presented at the annual meeting of the Speech Communication Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED 380 827)
- Siebert, A. (2000). *The instructor's role in retaining adult learners and increasing their chances of success in college.* Paper presented at the national conference on the Adult Learner, Atlanta, GA. Retrieved January 4, 2005, from <http://www.adultstudent.com/eds/articles/teaching.html>
- Smith, M. K. (2002). Malcolm Knowles, informal adult education, self-direction and andragogy. *The Encyclopedia of Informal Education.* Retrieved January 4, 2005, from <http://www.infed.org/thinkers/et-knowl.htm>
- Solomon, K. S. (1991) . Impact of older students on higher education in the United States: 1945-1985. (ERIC Document Reproduction Service No . ED 331 446)
- Tannehill, D. B., Solomon, M. E., & Yeager, J. L. (2008). Adult learner's needs and institutional responses: A quality imperative for prior learning assessment. *PAACE Journal of Lifelong Learning*, 17, 63-73.
- Thiel, K. K. (1984). *The gap between needs and services for adult students in higher education.* (ERIC Document Reproduction Service No. ED 251 619)
- Towell, E. & Neeley, L. (1999, August). *Internet courses, mature learners: Two undervalued market segments.* Paper presented at the Americans Conference on Information Systems, Milwaukee, WI.
- Turnbull, S. K. (1989). *Services for adult & commuting students.* (Abstract from ERIC Document Reproduction Service No. ED 316 111)

- Tweedell, C. B. (2000, October). *A theory of adult learning and implications for practice*. Paper presented at the annual meeting of the Midwest Education Research Association, Chicago, IL.
- Uncapher, B. W. et al. (1983). *Meeting needs of adult university students: A model designed by adult students*. (Abstract from EDIC Document Reproduction Service No. ED 235 735)
- United States Department of Education, National Center for Education Statistics. (2002). *The condition of education 2002*. (NCES 2002-025). Washington, D.C: U. S. Government Printing Office.
- Whitaker, U. (1989). *Assessing learning standards, principles, and procedures*. Philadelphia: CAEL.
- Willits, P. (2002). *The complete guide to directing successful nontraditional student programs*. Horsham, PA: LRP Publications.
- Zamanou, S. (1993, November). *Differences do make a difference: Recruitment strategies for the non-traditional student*. Paper presented at the annual meeting of the Speech Communication Association, Miami, FLA. (ERIC Document Reproduction Service No. ED 367 034)
- Zemke, R. & Zemke, S. (1984). 30 Things we know for sure about adult learning. *Innovation Abstracts*, 6(8), Retrieved January 4, 2005, from <http://honolulu.hawaii.edu/intranet/committees/FacsDevCom/guidebk/teachtip/adults-3.htm>
- Zemke, R. & Zemke, S. (1995, June). Adult learning: What do we know for sure? *Training*, 31-39.
- Zucker, B.J., Johnson, C.C. & Flint, T.A. (1999). *Prior learning assessment*. Chicago: CAEL.

