The Evolving Knowledge Management Adult Learner

Abstract

This longitudinal study examines the perceptions, attitudes, and preferences of the adult learners in higher education institutions in the United States. A qualitative design was utilized, engaging respondents from six geographic regions in the United States. This three-year, longitudinal research results were compared and contrasted with the eight principles of the Council for Adult and Experiential Learning, and best practices for meeting the educational and professional needs of the adult learner were proposed (Brookfield, 1986). Since Knowles (1998) published his seminal work on adult learners and their unique characteristics, there have emerged a growing number of studies categorizing these students. Also known as *nontraditional students,* these individuals have been identified as sharing distinctive commonalities, such as: (1) full time employment with part-time enrollment, (2) dependent support (whether married or single parent status), (3) flexibility in academic and professional advisement, (4) acknowledgement of work- and life-experiences, and (5) are constrained by time limitations (Ritt, 2008; National Center for Education Statistics, 2002; Tell, 2000).

Introduction

The past economic downturn forced many adults to re-evaluate their job security, professional competency, and competitiveness with other co-workers. As a result, many workers are looking to higher education to bolster their skill set, marketability, and income opportunities (Ritt, 2008). With this emerging trend, higher education will continue to be impacted as never before to meet the needs and desires of this non-traditional student population. The National Center for Education Statistics (NCES) estimates that over 60 percent of students in U.S. higher education can be characterized as non-traditional (2002). The NCES found that 50% of all graduate students were 30 years of age and older in 2007, and over 80% of graduate students were 25 years and up (Hussar & Bailey, 2009). These graduation rates underscore the need for higher educational institutions to reach out, engage, and serve this older population of student. Universities that are able to address the needs of the adult learner will be positioned to effectively educate this contingent. Simply attracting and engaging this population does not go far enough in truly developing the adult learner. This population brings forth a unique set of needs and desires. The percentages of students with some nontraditional characteristics have changed in recent years (Ritt, 2008; Tell, 2000). To this point, because developmental needs, issues, and stressors for adults differ considerably from those faced by younger, "traditional-age" students, all aspects of the college environment must be reconsidered (and often reconfigured) to respond to this growing student population (Graham & Donaldson, 1999; Benshoff, 1991).

It appears that institutions of higher education are not adequately addressing the needs of these nontraditional students. Although college recruiters assured prospective students that they were sensitive to the unique challenges of the nontraditional students, more than 75% of the adult learners surveyed for this paper felt that systems were not in place to address the unique needs of the adult learner population. Without devising needs and systems specifically focused on the adult learner, universities will not be successful in engaging, recruiting or retaining the adult learner population successfully over the long term.

Adult Learner Characteristics

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 (Cross, 1980). Along with the developmental level needs, this study will show that adult learners also want to have instructional strategies tailored to their level of workplace experiences. One of the leading proponents of effective adult learning practices is the Council for Adult and Experiential Learning (CAEL). Through their research, CAEL has established eight "best practice" tenets for effecting serving the adult learner population, which are known collectively as the Adult Learning Focused Institution (ALFI) principles. These eight principles are summarized in Table 1, below (Tell, 2000, p. 5).

Table 1

Eight Adult Learning Focused Institution (ALFI) Principles

Principle	Definition
Outreach	The institution conducts its outreach to adult learners by overcoming barriers of time, place,

	and tradition in order to create lifelong access to educational opportunities.
Life and Career Planning	The institution addresses adult learners' life and career goals before or at the onset of enrollment in order to access 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 financial 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 uses 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.

These ALFI principles provide the foundation for effectively serving the nontraditional adult learners, while addressing the obstacles and challenges that face workforce collegiate. Table 1 indicates that experiential and problem-solving learning is highly effective with this group of nontraditional students, technology is both a learning and communication modality, and support systems are essential for the success of these students. All eight principles will be evaluated in this paper.

What Adult Learners Need from Universities to Succeed

As mentioned earlier in this review of the literature, many institutions of higher education have fallen short in addressing these emerging needs and wants. It appears that adult learners are unwilling and/or unable to follow the mapping sequence of traditional-aged students either inside or outside the classroom (National Center for Education Statistics, 2002). Adult learners typically desire active, participatory approaches to learning and value opportunities to integrate academic learning with their life and work experiences (Benshoff, 1991). Adult learners are critically concerned about the outcomes or deliverables of their degree program, and are concerned with the practical application of knowledge to their workplace. Table 2 identifies the key outcomes that the working adult expects.

Table 2

College-Level Outcomes and Their Respective Domains

Domains	Outcomes	References
Communication	Reading, writing, speaking, listening	Bhattacharyya, Patil, & Sargunan, 2010; Jiang, 2007; Tell, 2000
Computation	Quantitative skills	Smith & Smith, 2010; Rowe & Wehrmeyer, 2010; Fletcher, 2007; Tell, 2000
Critical Thinking	Higher order thinking skills, independent judgment, values comparisons	Rowe & Wehrmeyer, 2010; Wilde, 2010; Fletcher, 2007; Tell, 2000; Lundquist, 1999
Ethical Awareness	Applying moral judgment	O'Higgins & Kelleher, 2005; Vitell, Paolillo, & Thomas, 2003; Tell, 2000
Lifelong Learning	Continuous learning	Wilde, 2010; Ma, 2009; Tell, 2000; Fischer, 2000
Problem Solving	The ability to analyze and apply appropriate thinking patterns to an issue to determine the best solution	Rowe & Wehrmeyer, 2010; Wilde, 2010; Tell, 2000
Emotional Intelligence	Inter- and intrapersonal competencies (includes self-awareness, social awareness, self-	Colefax, Rivera, & Perez, 2010; Cherniss & Goleman, 2001; Tell, 2000

	management, and relationship management)	
Teamwork	Working productively with others to attain a specified goal	Edwards, 2010; Woppman, 2010; Sheng, Tien, & Chen, 2010; Tell, 2000
Planning	Taking responsibility for their vocation and educational ambitions	Tell, 2000; Naretto, 1995; Ashar & Skenes, 1993

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71   Table 2 does not represent an exhaustive list of domains and outcomes, but highlights some of the critical
72   competencies that have been identified in the literature recently. One important observation from this table is that
73   the nontraditional student is concerned with learning outcomes; that is, they demand that they receive an adequate
74   *return on investment,* commensurate with their financial and academic commitment (Tell, 2000; Terrell, 1990; Thor,
75   1984). Curriculum design plays a crucial role in generating adequate learning outcomes. Basham, Meyer, and Perry
76   (2010) found that by utilizing a *backwards design* methodology (where the designer identifies the measurable
77   outcomes and clarifies the assessment procedure), the program learning objectives (PLOs) can be properly
78   identified. Once these overarching PLOs are specified, all course learning objectives (CLOs) can articulate to the
79   PLOs. In this way the CLOs can be directly attributed to the PLOs. Every course outcome can then be "mapped" (or
80   compared with) the domains listed in Table 2. Any CLO that does not directly link to a PLO will be modified or
81   discarded.
82   Adult learners are concerned that their andragogical (adult-centered) instruction is applicable to their
83   relevant work and life experiences (Muench, 1987). They want to know that the material they learn in class is
84   something they can incorporate the next day at work.   Whether the topic surrounds critical thinking, ethical
85   awareness, or problem solving, the adult learner wants practical skills combined with theoretical concepts. As noted
86   in Table 1, andragogical instruction is not the only concern of the returning nontraditional student. These full time
87   employed students have unique needs that separate them from their traditional (17-24 year old) counterparts. These
88   concerns include:
89   • A breadth of information about their educational options
90   • Flexible financial arrangements
91   • Institutional flexibility in curricular and support services
92   • Academic and motivational advising supportive of their life and career goals
93   • Recognition of experience and work-based learning already obtained (Ashar & Skenes, 1993; Naretto,
94   1995; Flint, 1999)
95   These and other concerns depicted in Tables 1 and 2 are the focus of the *Adult Learner Assessment*
96   *Trending* assessment, which will be utilized for this study.
97   **Methodology**
98   The *Adult Learner Assessment Trending* (ALAT) assessment deployed a quantitative methodology,
99   including a qualitative feedback component for each section. For this study a questionnaire was created and sent to
100   six regions in the United States. The questionnaire had six sections along with a brief demographic section that
101   directly linked to the needs of the ALAT study. The first sections addressed data related to timing of college,
102   finances and course workload. The second section was comprised of time parameters and challenges facing the
103   adult learner. Section three dealt with more specifics of adult learner financing of their college studies. Section four
104   focused on the factors of motivation related to why the adult learner went back to college. The fifth section explored
105   the educational enhancement factors through the view of the adult learner study participants. The last section
106   focused on the life-education experiences.
107   This sectional breakout allowed the researchers to better pinpoint the effects of major objectives within this
108   study. The questionnaire was sent to 480 adult learners throughout the United States. The population sample was
109   based on a stratified random selection process in which the questionnaires were sent to 6 geographical regions in the
110   United States. The regions were as follows:
111   • Northeast - 60
112   • Southeast - 60
113   • North Central - 60
114   • South Central - 60
115   • Southwest - 60
116   • Northwest - 60
117   Of the 480 questionnaires that were distributed throughout the six regions, 173 were returned for a return
118   ratio of 36%. This ratio was remarkable given that the typical return ratio in national surveys of this size have a

119   return ratio of less than 15% Beatty, P. & Hermann, D. (2002). The standard deviation (SD) for return ratio's by the
120   six regions was within a 3% SD, which was also well within acceptable deviation level. The qualitative aspect of
121   the ALAT survey allowed voluntary feedback and input with regard to any aspect of the survey. By and large, there
122   was very little qualitative feedback from those who responded to the survey. To this end, there will be little
123   discussion on the qualitative aspect of this study with the majority of the discussion within this study focusing on the
124   quantitative aspect of this study. The second component of this longitudinal study was based on follow-up
125   telephone interviews. These were deployed on a volunteer basis. Participation was established when the adult
126   learner submitted their surveys. Respondent permission was granted through an email invitation, which was sent to
127   them asking if they were interested in participating in a telephonic interview.
128   **Sample Selection**. The study focused on adult learners aged 30 years and older. It also selected for those
129   individuals that have been away from college for at least six years. These parameters were established to truly
130   identify and choose the adult learners, as opposed to individuals who may have left college and subsequently
131   returned while still in their 20's or those who have never left college (such as doctoral students).
132   **Study Results**
133   The study results will be illustrated by section utilizing a trend analysis method.   The initial trend the
134   ALAT study focused on was related the narrative analysis aspect. Specifically the sequential aspects of the data
135   gleaned from the phone interviews were assessed. A story related to how the student either returned to higher
136   education or began their education at a later stage than the traditional age students. Further, the ALAT follow up
137   interview discovered that some elements or views were evaluated differently from others with regard to the student
138   phone responses. For example, many of the students felt very strongly when asked about proprietary schools v.
139   online programs offered at schools from traditional systems. Yet did not evaluate access to educational platforms as
140   dramatically as they felt any platform accessed by them would be similar to others offered at different schools. A
141   second narrative approach to the trend analysis aspect related to how the student past experiences with their work,
142   more than schooled shaped their perceptions of their present need to pursue a degree, college systems as well as
143   their perception related to future career and/or education opportunities.
144   Patterns, related to their responses were also trended and are discussed more thoroughly in subsequent sections. The
145   overall theme related to the trend analysis put forth a number of surprising, or at the very least, an evolution of the
146   adult learner. Yet another them that merged from the trend analysis was that the adult learner has become a savvy
147   consumer of educational services. The contextual analysis, which really created the capstone aspect of this study, so
148   to speak, focused on the overall inventory of adult learners across the country. Specifically, this study took one of
149   the most in-depth views into the motivations, desires and requirements of the adult learner, which, in turn, created
150   the context for this study. This method was selected so as to allow the reader valuable insight into the survey
151   instrument responses without getting the reader bogged down in the minutia of each response. The numeric
152   methodology utilized to assess the trending of the responses was a straight percentile based on the average of
153   responses.
154   **Section One: Demographic Results.** Study participants responded to a number of demographic questions
155   which identified the type of person that had either entered college or returned to college within the context of this
156   study. Further, this section also trended out the study participant's time away from high school as well as time away
157   from initial entrance into college. The average age of the student respondents was 40 ,with the mode being 38. The
158   youngest person who responded to the survey was 30 years of age, with the oldest being 65 years of age. The
159   breakdown of males (46) to females (49) respondents was nearly identical. Five percent of those who responded to
160   this survey chose not to indicate their sex. The time period that most of the student respondents were away from
161   college ranged from 11-20 years, which was consistent with the mean and the mode of Table 3. Further, the average
162   age of those who entered college, left and then returned to college also fell within the time range of 11-20 years.
163   This figure was in accordance with age mean and mode for the study. The most surprising percentage in this section
164   was that 15% of the student respondents had never attended college, especially the age mean being 40 and mode
165   being 38. This numeric range may be an area to further study with regard to understanding why they never attended
166   school and what they are looking for in a college.
167
168   **Table 3**
169   *Age ranges of student respondents*

Mean age of student respondents	40
Mode age of student respondents	38
Percentage of student respondents within the age range 30-39	66

Percentage of student respondents within the age range 40-49	22
Percentage of student respondents within the age range 50-59	6
Percentage of student respondents age 60 and older	6

The results contained in Table 3 supported the literature review that adult learners tend to be in their thirties when they engage the college process. The majority ranged from age 30 to 39 years of age. The fascinating aspect of Table 3 was that 12% of the respondents where 50 years of age or older. This percentage indicates that there may be challenges for the 50 and older contingent, such as comfort with computer technology, contemporary theories, and the need for social (rather than virtual) interaction. This might be an area for further research.

Table 4
Length of time away from high school and/or college

Percentage of student respondents who have been away from high school for 6-10 years	20
Percentage of student respondents who have been away from high school for 11-20 years	48
Percentage of student respondents who have been away from high school for more than 20 years	32
Percentage of student respondents who have been away from college for 6-10 years	22
Percentage of student respondents who have been away from college for 11-20 years	44
Percentage of student respondents who have been away from college for more than 20 years	19
Percentage of student respondents who have never attended college until now	15

Table 4 provides demographic data which focus on the time period from high school graduation and college enrollment, and the number of years that a respondent may have started college and then returned to this area of study as there is little or no research data focused on the adult learners time away from high school prior to returning to school. The researchers were not surprised that 68% of adult learners have been away from school for less than 20 years. This time to return to school coincides with the adult learners' career opportunity pathway. The research data shows that the majority of adult learners attend school to enhance their career opportunities and earning potential (Tell, 2000). Further, respondents within this study view their life experiences as a strong attribute that has relevance to their degree program.

Section Two: Time Commitment Issues and Obstacles. This section focused on time challenges that face the adult learner. Specifically, this section illustrated aspects related to study, work time (if applicable), family, and whether there is adequate time to fully engage the college education system.

Table 5
Employer Support for the Adult Learners' Academic Advancement

Topical Questions	% Strongly Agree	% Agree	% Disagree	% Strongly Disagree
Amount of hours spent at work is 40 or more hours per week	63	18	12	7
School work interferes with my work schedule	71	16	4	9
My employer supports my effort to advance my academic career	83	4	5	8
I have enough time to study adequately	0	3	37	60
School work interferes with family activities	82	6	11	1
I feel that I have time to fully engage my academic journey	0	12	62	26

The results in Table 5 illustrated that adult learners, for the most part, are employed in a full time capacity (87% *strongly agree* or *agree* that school interferes with work). Further, the data illustrates that the employer is generally supportive of the adult learners' effort to acquire a college degree (87% *strongly agree* or *agree* that their employer is supportive of their educational advancement opportunities). However, work and family activities are major obstacles in academic pursuits.

Table 6
Full Time and Part Time Course Loads for the Adult Learner

Average number of hours spent studying per week	20
Average number of semester hours taken per term	6

5

Percentage of students attending school fulltime	83
Percentage of students attending school part time	17

203

204   Table 6 noted the percentage of students that attended full time or part time. Nationally, 83% of
205 respondents attended school at a full time capacity. The average number of hours taken by the adult learner was six
206 credits hours in accelerated terms. These students appeared to complete their degree in the most expeditious manner
207 possible. Students also indicated that they spent an average of 20 hours studying per week. This infers that
208 nontraditional students apportioned a significant amount of time in academic engagement. These adult learners
209 wanted to accelerate their learning, but also wanted to invest in a quality education.
210   **Section Three: Financial Costs.** How do nontraditional students compare with tradition students in their
211 dependence on financial assistance with their education? Table 7 addresses cost factors such the acquisition of
212 loans, grants, out-of-pocket costs, etc.

213

214 **Table 7**
215 *Tuition Costs for the Adult Learner*

Percentage of students who receive some form of tuition assistance	63
Percentage of students using cost as the primary factor in attending a school	11
Percentage of students receiving school grants	23
Percentage of students who have student loans	29
Average out of pocket cost per term	$500+

216

217   Table 7 assesses the financial factors facing the adult learners in this study. The nontraditional students
218 surveyed received some form of tuition assistance (63%), as compared with 67% of traditional students that received
219 financial aid (National Center for Education Statistics, 2009). It appears that the adult learners are more reliant on
220 federal grants, loans, and other nonfederal assistance than their traditional counterparts. Further, the data in Table 7
221 illustrates that only 11% of adult learners choose their university on the basis of financial cost primarily. Further
222 research explicating the selection factors in choosing an institution (brand name reputation, educational delivery
223 methodology, faculty experience, student support services, etc.) would be warranted.
224   **Section Four: Factors Influencing College Enrollment.** There are various factors that distinguish
225 attendance and excellence in traditional and nontraditional students. Life experiences are not paramount for
226 traditional students, since they have not acquired the lifetime of skills that their older counterparts have. Table 8 not
227 only identifies the key indicators for adult learner enrollment (i.e. career advancement, promotional opportunity, and
228 employability), but also recognizes factors that may initially deter a student from matriculating into a program (fear
229 of fitting in, dismissal of life experiences, or age deterrents).

230

231 **Table 8**
232 *Factors That Influence Whether an Adult Learner Will Attend and Excel in a University Setting*

Topical Questions	% Strongly Agree	% Agree	% Disagree	% Strongly Disagree
Life experiences as a motivation for school	68	17	10	5
Career advancement, promotion and employability for school	71	22	3	4
Past experience allowing the student to be a self-directed learner	84	8	3	5
Fear of not fitting in within the traditional school environment	23	28	36	13
Age as a deterrent to attend college	11	9	58	22
Life experiences as a tool for classmates to learn from	73	11	9	7

233

234   The data in Table 8 illustrated that the adult learner does not feel that age should be a deterrent to attending
235 school (80% either disagreed or strongly disagreed). Furthermore, the adult learners felt that their life experiences
236 were assets that they could bring to the classroom as learning tools to be shared with fellow students (84% agreed or
237 strongly agreed). Past experience allowed nontraditional students to be self-directed in their learning environment
238 (92% agreed or strongly agreed), and 85% stated that life experiences motivated them to enroll in school (agreed or
239 strongly agreed). These findings seem to infer that adult learners understand what is required of them to achieve,
240 and these workplace skills (e.g., goal attainment, following protocols and procedures) can be transferable

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241 competencies for the classroom. The import of integrating life experiences with course curricula appears vital to the
242 success of a nontraditional degree program, and should be a directive for future andragogical research.
243   **Factors Centering on Technology, Family, and Workplace Application.** There was concern that adult
244 learners might not feel comfortable in a fully online or blended setting (where there is face-to-face and online
245 instruction). Familial issues were investigated, such as primacy of four-year college experience, college aspirations
246 for their children, etc. Finally, practical application to the job environment was addressed.
247
248 **Table 9**
249 *Factors Regarding Technology, Family Aspirations, and Educational Applicability to the Workplace*

Percentage of students who view technology as a deterrent to attend school	27
Percentage of students who feel their life experiences better prepared them for college	87
Percentage of students of are the first in their family to attend college	91
Percentage of students who feel their children will attend college	93
Percentage of students who feel their course work can immediately utilized in their current job	68
Percentage of students who view college as an extension of their current job	83

250
251   Table 9 revealed that only 27% of the respondents viewed technology as a deterrent to their educational
252 pursuits. The reason for this hesitation was not specified (whether unsure of computer competency, preferred "live"
253 classroom interaction, or other issues). However, technology was no deterrent to nearly 3 out of 4 adult learners,
254 which may be a result of their use of technology in the workplace.   Regarding family attendance in college, the vast
255 majority of respondents to this survey stated that they were the first person in their family to achieve a college
256 degree (91%) and they anticipated that their children would attend college at some future date (93%). The data
257 shows that the majority of adult learners have immediately applied what they learned in school to their current job
258 (68%) as well as viewed school as an extension of their work (83%).
259   **Section Five: Educational Enhancement Factors.** These *enhancement factors* are often critical,
260 intangible requirements that adult learners need for academic success. Use of study groups, school/work/study
261 balance and other group project requirements were explored (see Table 10).
262
263 **Table 10**
264 *Educational Enhancement Factors of Nontraditional Students*

Topical Questions	% Strongly Agree	% Agree	% Disagree	% Strongly Disagree
Ability to manage the study-school-work triad	67	21	4	9
Willingness to sacrifice other aspect of life for studies	71	13	8	8
Students who benefit from study groups	84	11	2	3
Students who benefit from mandated group projects	9	14	33	44
Students who have a support group in place to aid them with school	85	11	2	2
Online courses are convenient and impactful	67	22	5	6

265
266   Table 10 dealt with issues related to time scheduling, student groups and the adult learner's willingness to
267 engage specific aspects of college systems. The data showed that adult learners were very comfortable with
268 managing work-school-studying balance (88% either agreed or strongly agreed) as well as their prioritization of time
269 and energy for academic achievement (84% agreed or strongly agreed). With regard to group processes, the adult
270 learners took two different paths. When it came to forming study groups on a voluntary basis, 95% of the adult
271 learners surveyed agreed or strongly agreed that study groups were helpful in their academic success. Similarly,
272 96% (agreed or strongly agreed) that a voluntary student support group was helpful for general success in school.
273   However, these same students appeared to be very much opposed to mandatory group projects (77%
274 disagreed or strongly disagreed with the statement that mandatory group projects were helpful).   This information
275 may impact curriculum design for adult students. The data also demonstrated that online courses were viewed as
276 very favorable, with 89% of respondents either agreeing or strongly agreeing with that statement.   Overall,
277 nontraditional students indicated that they were cognizant of the demands of higher education, and were willing to
278 take responsibility for their academic success.

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279   *Section Five: Educational Selection and Retention Criteria.* In this section, students were asked to
280   examine the salient criteria for selection of their school of choice, whether they were happy with their choice, and
281   their preferences overall in their educational experience.   Study habits and budgeting approaches were also
282   examined.
283
284   **Table 11**
285   *Adult Learner Preferences in College Selection and Retention*

Percentage identifying the reputation of school as the primary factor in attending a school	77
Percentage of students who prefer attending for profit schools	8
Percentage of students who prefer attending nonprofit schools that are not considered part of a university system	13
Percentage of students who prefer attending nonprofit schools that are part of a traditional university system	84
Percentage of students who wish they were attending another school	71
Percentage of students who study just enough to pass their coursework	47
Percentage of students who create a personal budget to manage school costs	38

286
287   The data contained within Table 11 illustrated many of the preferences of the adult learner in matters of
288   attraction and retention of this population.   Seventy seven percent (77%) of respondents stated that they attended
289   their school because of the reputation of that institution. This may have a correlation with the findings that 92% of
290   nontraditional students preferred nonprofit universities over for profit or proprietary schools. This study did not
291   examine that specific reasons for this reticence in choosing for profit universities, but this question might be worthy
292   of future research. One interesting finding was that the vast majority of adult learners preferred to attend schools
293   from traditional university schools, particularly schools that were a member of a distributed university system
294   (84%). These results can be contrasted with 13% of respondents that selected a standalone nonprofit institution that
295   was not a member of a university system. It is unclear as to why 71% of the students surveyed wished that they were
296   attending a different university than the one they were enrolled in. Were these nonprofit or for profit students?
297   Were these disgruntled students part of a distributed system? These and other questions would need to be clarified
298   in future research.
299   Another significant point identified in Table 11 was related to a rather large percentage of adult learners
300   (47%) that essentially study enough to pass the course. Here again, the reasons that students studied just enough to
301   pass the course was not explicated. For example, was the reason that the adult learner did not excel due to poor
302   instruction, lack of time, lack of discipline, conflicts between work load and school load, or some other criteria?
303   Further research could examine this question. Finally, Table 11 notes that 38% of nontraditional students created a
304   budget to manage school costs. It is unclear as to whether this percentage of students were better equipped to meet
305   their obligations to pay back their student loans than the remaining 62% of nontraditional students, or whether this
306   merely indicates that others had the financial support of their company for tuition, textbook, and other school related
307   expenses. Also, repayment of federal and state student loans would be of interest to the lending institutions, so
308   future research (including whether adult learners are more capable of loan repayment than their traditional
309   counterparts) might produce interesting data.
310   **Section Six: Motivation for Pursuing a Degree.** What motivates the average adult learner to complete
311   his or her degree later in life? Is the primary driver career advancement, self-satisfaction, being an example to one's
312   family, or degree completion? Table 12 addresses these aspirational items.
313
314   **Table 12**
315   *Motivation Factors for Pursuing a Degree*

Topical Questions	% Strongly Agree	% Agree	% Disagree	% Strongly Disagree
Increased earning potential	71	12	7	10
Self satisfaction	68	14	12	6
Example for children	80	11	4	5
Degree completion	71	22	4	3
Values the rigors of education over a diploma	83	4	2	11
Utilizes school learning resources	11	4	44	41

Application of degree program to current job	78	8	3	11
Use of course work to satisfy continuing education units	3	2	34	61

316

317   The data contained in Table 12 focused on factors that motivate adult learners to engage the college
318 challenge, despite competing forces in their lives. There is a significant data that alludes to the premise that adult
319 learners are mainly motivated by increased earning potential (Aslanian, 1996; Winefield, 1993; Bauer & Mott,
320 1990). While this factor rated very high in this survey (83% responded in the *Agreed* to *Strongly Agreed*
321 categories), one surprising outcome was the fact that the lifelong learner was more motivated by setting an example
322 for their children than for increased earning potential (91% agreed or strongly agreed). This could be attributed to
323 the fact that the vast majority of adult learners will be the first in their family to earn a college degree (refer back to
324 Table 9). It was also clear that these lifelong learners were not only motivated by extrinsic incentives (such as with
325 pay raises or job security), but they were driven by intrinsic incentives as well. Table 12 demonstrated that 82%
326 (either agreed or strongly agreed) of respondents were pursuing their degree for the self-satisfaction of
327 accomplishing this feat, while 93% (agreed or strongly agreed) of those surveyed were determined to complete their
328 degree. Eighty-Seven percent (agreed or strongly agreed) of respondents valued the rigors of educational pursuits in
329 general, while 86% (agreed or strongly agreed) found that they could apply their degree program to their current job.
330 These results seem to indicate that the adult learner tended to be self-driven as they engaged the college challenge.

331   Another observation from Table 12 was the fact the adult learner did not embrace school learning resources
332 available. This may be due to the fact that they are very independent in their problem solving skills, or that they
333 might utilize informal study guides such as ad hoc study teams, conferences with the faculty, or other non-
334 institutional approaches. However, it is yet another opportunity for colleges to make advances within the adult
335 learner population. Clearly, 85% either disagreeing or strongly disagreeing with the statement that they utilized
336 school learning resources identifies a disconnection with the resources provided. The lifelong learner may have
337 been unaware that such assistance existed, the resources may have been inadequate, or these adults are too
338 independent to ask for help. Future research could examine this phenomenon.

339   One final observation was that few adult learners (5% agreed or strongly agreed) that they attended college
340 for the purpose of pursuing continuing education units (CEUs). There may be at least two reasons why adult
341 learners do not utilize colleges for the pursuit of CEUs. First, there are several organization offering and heavily
342 advertising CEUs to the adult learner. To this point, this industry is takes in more than 50 million dollars a year
343 (Basham, Meyer, and Perry, 2010). The second reason may signify that most adult learners view colleges as a
344 degree process only.

345 **Key Findings**

346   **Demographic data.** Many of ALAT survey findings were consistent with the Adult Learning Focused
347 Institution (ALFI) principles established by the Council for Adult and Experiential Learning (CAEL). For example,
348 88% of students surveyed in the ALAT instrument were found to be between the ages of 30 and 49 years of age. It
349 was also found that 80% of lifelong learners were away from high school 11 or more years before returning to
350 school, and 63% of returning students were away from college for at least 11 years.

351   **Work-Life-Study Balance.** The respondents indicated (81% agreed or strongly agreed) that they spent at
352 least 40 hours at work, had supportive employers for educational advancement (87% agreed or strongly agreed), yet
353 were challenged because of conflicts of time with work (87% agreed or strongly agreed) and family activities (88%
354 agreed or strongly agreed). Ninety Seven percent (97%) disagreed or strongly disagreed with the statement that "I
355 have enough time to study effectively." These nontraditional students were highly motivated, being willing to
356 sacrifice other activities for their studies (84% agreed or strongly agreed).

357   The average adult learner attended school fulltime (83%), took six semester credits per term, and dedicated
358 an average of 20 hours of study per week to educational pursuits. And 91% of those surveys indicated that one
359 motivator for pursuing a college degree is to be an example for their children. Overall, the demographics in this
360 study are consistent with those found by the National Center for Education Statistics (NCES). The NCES (Tell,
361 2000, p. 3) found the following about adult students:

362

363 **Table 13**
364 *Comparison of Adult Learner Characteristics Between NCES and ALAT Findings*

Characteristic	NCES Findings	ALAT Findings
Delayed enrollment into postsecondary education	Yes	Yes

Attend part time	Yes	No (if 6 semesters/term is considered fulltime)
Are financially independent of parents	Yes	Yes
Work fulltime while enrolled	Yes	Yes
Have dependents other than a spouse	Yes	Yes (inference made regarding being one's children eventually attending college)
Are a single parent	Yes	Unknown (Not asked)
Lack a standard high school diploma	Yes	Unknown (Not asked)

Financial matters. Sixty-three percent of ALAT respondents received some form of tuition assistance, 23% received school grants, and 29% were given student loans. The ALFI principles agreed with the ALAT findings that "nearly half of all undergraduates, and most graduate/first professional students, are self supporting (adult) students" (Tell, 2000, p. 8). The ALFI exemplary practice recommendations are useful for universities in serving lifelong learners:

- Informs adult learners about convenient payment options available to them
- Assists adult learners with deferred payment plan options when tuition reimbursement programs do not make funds available until course completion
- Assesses charges to learners incrementally during the course of a program and establishes equitable refund policies
- Helps learners develop strategies for locating external funding to assist with education costs
- Makes financial aid and scholarships available to [full and] part-time students

The researchers inserted the "full and" designation in the last recommendation since the overwhelming number of students found in the ALAT study were full time students. The next section will discuss the types of educational environments that adult learners desire.

School Preferences. Reputation was a primary factor in selecting a school, according to 77% of respondents in the ALAT survey. In addition, 92% of adult learners preferred attending nonprofit schools, as compared with 8% of nontraditional students who desired for profit institutions. Furthermore, 84% stated that they would rather be enrolled in a nonprofit institution that was part of a distributed system, rather than a standalone campus. Only 13% of those surveyed preferred a nonprofit school that was not affiliated with a distributed system.

The ALFI principles do not directly deal with the issue of for profit vis-à-vis nonprofit institutions. The strong preference for nonprofits in the ALAT survey was unexpected, and worthy of further review. The causal factors that contribute to the stigmatization of for profits would be an area worthy of future research.

Adult Learners' Motivation. The ALAT survey found that nontraditional students enroll in universities for a variety of different reasons. As one would expect, 83% of respondents denoted that increased earning potential was key in pursuing college, 82% matriculated for the self-satisfaction of increasing their educational acumen, and 93% desired to finish their degree that was interrupted due to life's impediments. One interesting finding was that 91% registered for college as an example for their children. This motivation would be particularly meaningful, presumably, for those who would be the first to graduate with a college degree in their family.

It was evident, from the results, that receiving a degree was not the only end product that these lifelong learners desired. They wanted a rigorous education that was valuable (87% agreed or strongly agreed), applicable to their job (86% agreed or strongly agreed), and classrooms where their life experiences were appreciated (84% agreed or strongly agreed). Interestingly, 85% of those surveyed did not avail themselves of school learning resources, nor did they utilize university course work for continuing education requirements (95%). These nontraditional students were very focused and specific regarding their learning outcomes. As pointed out earlier, learning outcomes (such as critical thinking, communication, problem-solving skills, and computational competencies, among others) were non-negotiables. The ALFI principles concur with these findings, affirming that learning outcomes must be firmly established in curriculum design, community/stakeholder input, assessment implementation, continuous improvement, and prior learning assessments to maximize the higher education experience for the lifelong learner (Tell, 2000).

Associated with learning outcomes are the student support systems which help to facilitate success for a nontraditional student. Students that created their own study groups stated that they found them beneficial (95% agreed or strongly agreed), and 96% of respondents (agreed or strongly agreed) utilized a support group to assist

409   them with school.   In contrast, 77% disagreed or strongly disagreed that mandatory group projects were
410   advantageous. And 89% of these adult learners were in agreement (agreed or strongly agreed) that online courses
411   were convenient and impactful. The ALFI principles recognize that adult learners were more successful when
412   support systems were provided as part of their learning experience. The ALFI principles noted that when colleges
413   have large enrollments which cannot serve each student adequately, peer support and student cohort groups are an
414   alternative to institutional support (Tell, 2000). That's not to say that some students do not benefit from support
415   groups (4% do gain benefit from them), nor is it inferring that study groups are beneficial to others (5% find study
416   groups advantageous).   But unlike the ALFI principles, the ALAT study purports that informal, peer-initiated
417   cohorts or support groups are overwhelmingly favored over formalized mechanisms.
418   **Technology.**   One way to address issues of andragogy, student support, financial record keeping,
419   advisement, and work-life-study balance is through the incorporation and utilization of technology for the adult
420   learner. Only 1 in 4 students saw technology as a deterrent to attending school. Perhaps the use of technology at
421   work, or social networking communication has become more ubiquitous than once thought. Online courses are seen
422   very favorably (89% agreed or strongly agreed), and blended courses may be another option for the nontraditional
423   student. Asynchronous online or blended (on ground and online modalities combined) learning may be one of the
424   most effective ways to address the needs of the adult learner as they balance work-life-study demands (Robinson &
425   Hullinger, 2008).
426   **Conclusion**
427   The ALAT study examined many of the ALFI principles across six regions of the United States, and found
428   that there was tremendous concordance between these two documents. The needs of the American workforce are
429   changing rapidly, and higher education needs to position itself to serve this group of lifelong learners.   As
430   universities utilize the recommendations proffered by this study and by CAEL, the unique needs of the adult learner
431   will be addressed, resulting in a more educated and effective workforce in the United States and throughout the
432   globe.
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References

Ashar, H., & Skenes, R. (1993). Can Tinto's student departure model be applied to non-traditional students? *Adult Education Quarterly, 43*(2), 90 - 97.

Aslanian, C. (1996). Adult learning in America: Why and how adults go back to school. New York: The College Board.

Aslanian, C. B., & Brickell, H. M. (1980). Americans in transition: Life changes as reasons for adult learning. New York: College Entrance Examination Board.

Axelrod, M. & Cannell, C. F. (1959). A research note on an attempt to predict interviewer effectiveness. *Public Opinion Quarterly, 23*, 571–76.

Basham, J. D., Meyer, H., & Perry, E. (2010). The design and application of the digital backpack. *Journal of Research on Technology in Education*, *42*(4), 339-350.

Bay, L. (1999). Twists, turns, and returns: Returning adult students. *TETYC*, 305-312.

Bankier, M. D. (1986). Estimators based on several stratifi ed samples with applications to multiple frame surveys. *Journal of the American Statistical Association, 81*, 1074–1079.

Bean, J.P. & Metzner, B.S. (1985). A conceptual model of non-traditional undergraduate student attrition. *Review of Educational Research, 55*(4), 485 - 540.

Beatty, P. & Hermann, D. (2002). To answer or not to answer: decision processes related to survey item nonresponse. In R. M. Groves, D. A. Dillman, J. L. Eltinge, & R. J. A. Little (Eds.), *Survey Nonresponse* (pp. 71–85). New York: John Wiley & Sons, Inc.

Bauer, D., & Mott, D. (1990). Life themes and motivations of re-entry students. *Journal of Counseling and Development, 68,* 555-560.

Benshoff, J. M. (1991). Nontraditional college students: A developmental look at the needs of women and men returning to school. *Journal of Young Adulthood and Middle Age, 3,* 47-61.

Bhattacharyya, E., Patil, A., & Sargunan, R. A. (2010). Methodology in seeking stakeholder perceptions of effective technical oral presentations: an exploratory pilot study. *The Qualitative Report*, *15*(6), 1549-1569.

Brookfield, S. D. (1986). *Understanding and facilitating adult learning*. San Francisco: Jossey-Bass.

Brookfield, S. D. (1999). What is college really like for adult students? *About Campus, 3*(6), 10-15.

Cherniss, C., & Goleman, D. (Eds.). (2001). *The emotionally intelligent workplace.* San Francisco: Jossey-Bass.

Cleveland-Innes, M. (1994). Adult student drop-out at post-secondary institutions. *The Review of Higher Education, 17*(4), 423 - 445.

Colfax, R. S., Rivera, J. J., & Perez, K. T. (2010). Applying emotional intelligence (EQ-I) in the workplace: vital to global business success. *Journal of International Business Research, 9*(l), 89-99.

Cupp, L. (1991). Acquiring new perspectives: The impact of education on adult students in a traditional university. Paper presented at the *Annual Meeting of the American Association for Adult and Continuing Education*, Montreal, Quebec.

Edwards, A.-L. (2010). Applying learning organizations to the classroom. *Academy of Educational Leadership Journal*, *14*(4). 1-21.

Ely, E. E. (1997). The non-traditional student. Paper presented at the *American Association of Community Colleges Annual Conference*. Anaheim, CA, April 12 - 15.

Fletcher, G. H. (2007). An eye on the future: employers say that US schools are not teaching students the skills they must have for the 21st-century workplace. What may be needed is a sweeping change in how we think about curriculum. *Technological Horizons In Education Journal*, *34*(7), 26-28.

Fischer, G. (2000). Lifelong learning--More than training. *Journal of Interactive Learning Research*, 265.

Graham, S. & Donaldson, J. F. (1999). Adult students' academic and intellectual development in college. *Adult Education Quarterly, 49*(3), 147 - 161.

Holbrook, A, Krosnick, J. A., & Pfent, A.. The causes and consequences of response rates in surveys by the news media and government contractor survey research firms.

Hussar, W., & Bailey, T. (2009). *Projections of Education Statistics to 2018*. Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Jiang, L. (2007). Research on intercultural business communication/ Recherches sur la communication commerciale interculturelle (Report). *Canadian Social Science*, *3*(2), 87-90.

Kasworm, C. (1997). Adult meaning making in the undergraduate classroom. Paper presented at *American Education Research Association (AERA) Conference*, Chicago.

12

489 Kasworm, C. & Blowers, S. (1994). Adult undergraduate students: Patterns of involvement. Final research report to
490   U.S. Department of Education, Knoxville, TN: College of Education, University of Tennessee-Knoxville,
491   Tennessee.
492 Keeter, S., Best, J., Dimock, M., & Craighill, P. (2004, May). The pew research center study
493   of survey nonresponse: implications for practice. *Paper presented at the Annual Meeting of the American*
494   *Association for Public Opinion Research*, Phoenix, AZ

495 Knowles, M. (1998). *The adult learner: The definitive classic in adult education and human resource development.*
496   Houston, TX: Gulf Publishing.
497 Knox, A. B. (1977). *Adult development and learning*. San Francisco: Jossey-Bass.
498 Loewen, S., & Erlam, R. (2006). Corrective feedback in the chatroom: An experimental study. *Computer Assisted*
499   *Language Learning*, *19*(1), 1-14.
500 Lundquist, R. (1999). Critical thinking and the art of making good mistakes. *Teaching in Higher Education, 4*(4),
501   523-530.
502 Ma, A .W. (2009). A longitudinal study of the use of computer supported collaborative learning in promoting
503   lifelong learning skills. *Issues in Informing Science & Information Technology*, *6*, 65-87.
504 National Center for Education Statistics (NCES). (2009). *Percentage of undergraduates receiving aid, by type and*
505   *source of aid and selected student characteristics: 2007-08*. Washington, DC: U.S. Department of
506   Education.
507 National Center for Education Statistics (NCES). (2002). *Labor force participation in formal work related education*
508   *in 2000-2001*. Washington, DC: U.S. Department of Education.
509 Naretto, J.A. (1995). Adult student retention: The influence of internal and external communities. *NASPA Journal,*
510   *32*(2), 90 -100.
511 Niwaz, A., Bokhari, M.A., Bokhari, T.A., & Tahirkheli, T.A. (2010). Evaluation of adult literacy programmes in
512   psychological perspectives. *Canadian Social Science, 6*(5), 88-93.
513 Noblitt, L., Vance, D. E., & Smith, M. L. (2010). A comparison of case study and traditional teaching methods for
514   improvement of oral communication and critical-thinking skills. *Journal of College Science*
515   *Teaching*, *39*(5), 26.
516 O'Higgins, E., & Kelleher, B. (2005). Comparative perspectives on the ethical orientations of human resources,
517   marketing and finance functional managers. *Journal of Business Ethics,*
518   *56*(3), 275-288.
519 Richardson, J.T. (1994). Mature students in higher education: Academic performance and intellectual ability. *Higher*
520   *Education, 28*(3), 373-386.
521 Richter-Antion, D. (1986). Qualitative differences between adult and younger students. *NASPA Journal, 23*, 58-62.
522 Ritt, E. (2008). Redefining tradition: Adult learners and higher education. *Adult Learners, 19*(1-2), 12-17.
523 Robinson, C. C., & Hullinger, H. (2008). New benchmarks in higher education: Student engagement in online
524   learning. *Journal of Education for Business, 84*(2), 101-108.
525 Rosenthal, G. T., Folse, E. J., Alleman, N. W., Boudreaux, D., Soper, B. & Von Bergen, C. (2000). The one-to-one
526   survey: Traditional versus non-traditional student satisfaction with professors during one-to-one contacts.
527   *College Student Journal, 34*(2), 315-320.
528 Rowe, A. L., & Wehrmeyer, W. (2010). Education for sustainability: developing MBA students' critical reflective
529   and action learning in their work context. *Review of Business Research*, *10*(2), 145-150.
530 Sauro, S. (2009). Computer-mediated corrective feedback and the development of L2 grammar. *Language,*
531   *Learning, & Technology, 13*(1), 96-121.
532 Sheng, C.-W. , Tian, Y.-F. , & Chen, M.-C. (2010). Relationships among teamwork behavior, trust, perceived team
533   support, and team commitment. *Social Behavior and Personality: An International Journal*, 38(10), 1297-
534   1316.
535 Smith, C. M., & Smith, T. J. (2010). Perceived job skill limitations and participation in

536   education and training opportunities: Differences between US native-born and non-

537   native-born individuals. *Vocations and Learning, 3*(1), 55-69. doi: 10.1007/s12186-009-

538   9030-9

539   Tell, B. (Ed.). (2000). *Serving adult learners in higher education: Principles of effectiveness.* Chicago, IL: Council
540   for Adult and Experiential Learning.
541   Terrell, P. S. (1990). Adapting institutions of higher ed to serve adult students' needs. *NASPA Journal, 27*, 241-247.
542   Thon, A. J. (1984). Responding to the non-academic needs of adult students. *NASPA Journal, 21*, 28-34.
543   Vitell, S. J., Paolillo, J. P. G., & Thomas, J. L. (2003). The perceived role of ethics and social responsibility: A study
544   of marketing professionals. *Business Ethics Quarterly, 13*(1), 63-86.
545   Wilde, D. (2010). Personalities into teams: we take different approaches to problems, and the best solutions are
546   achieved by the greatest diversity. *Mechanical Engineering-CIME*, *132*(2), 22-26.
547   Winefield, H. R. (1993). Study-work satisfaction and psychological distress in older university students. *Work and
548   Stress, 7*(3), 221-228.
549   Woppman, G. (2010). Nurturing your culture goes to the bottom line. *EE-Evaluation Engineering*, *49*(11), 10-13.
550