

DOCUMENT RESUME

ED 342 959

CE 060 549

AUTHOR Cupp, Linda Butterfield
 TITLE Acquiring New Perspectives: The Impact of Education on Adult Students in a Traditional University.
 PUB DATE 15 Apr 91
 NOTE 26p.; A presentation based on this paper was made at the Annual Meeting of the American Association for Adult and Continuing Education (Montreal, Quebec, October 16, 1991).
 PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS *Adult Students; Attitude Change; College Seniors; Educational Research; *Goal Orientation; Higher Education; *Nontraditional Students; *Outcomes of Education; Participant Satisfaction; *Student Attitudes; Student Interests; *Universities; Values

ABSTRACT

A study explored adult undergraduate students' perceptions of the impact of the educational experience on attitudes, values, interests, and aspirations. A sequence of open-ended interview questions in four content areas was developed from a study of relevant literature, advice of a committee of adult educators, and categories that emerged from two pilot studies. Sixteen students were selected from a population of 216 students, 25 years of age and older, in their senior year in the College of Arts and Sciences at a midwestern land-grant university primarily serving traditional students. Semistructured interviews were conducted during the fall 1990 semester; every student contacted agreed to be interviewed. Data were collapsed into emergent conceptual themes, counted, and subjected to the constant comparative method of data analysis proposed by Glaser and Strauss (1967). According to the findings, adults believed that undergraduate education affirms, enhances, or accelerates developing attitudes and values; stimulates new interests; and defines, heightens, and makes possible the realization of aspirations. However, changes in perspective often began prior to returning to school, and involvement and participation in extracurricular activities decreased. Although time constraints and a lack of institutional support were perceived as major barriers to the educational process, students indicated that they would repeat the experience. (29 references) (YLB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED342959

Acquiring New Perspectives: The Impact of Education on Adult Students
in a Traditional University
Linda Butterfield Cupp
Extension Teaching, University of Missouri-Columbia

Linda Butterfield Cupp is Program Development Specialist and
Instructor, Extension Teaching, University of Missouri-Columbia,
Columbia, Missouri.

April 15, 1991

Running head: IMPACT OF EDUCATION

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it
Minor changes have been made to improve
reproduction quality

Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

L B Cupp

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

E 060 549

Acquiring New Perspectives: The Impact of Education on Adult Students in a Traditional University

Abstract

Education impacts adult students in the affective as well as the cognitive domain. The purpose of this study was to explore adult undergraduate students' perceptions of the impact of the educational experience on attitudes, values, interests, and aspirations. Interviews with 15 adult students at a large, midwestern, four year institution of higher learning primarily serving traditional age students revealed that adults believe undergraduate education alters, enhances, or accelerates developing attitudes and values; stimulates new interests; and defines, heightens and makes possible the realization of aspirations. Changes in perspectives, however, often begin prior to returning to school, and involvement and participation in extracurricular activities decrease. Although time constraints and a lack of institutional support are perceived as major barriers to the educational process, students would repeat the experience.

The outcomes of college education are often divided into the cognitive and noncognitive or affective spheres (Astin, 1977). Although the acquisition of knowledge is central to the mission of institutions of higher learning, education impacts adults in other meaningful ways (Astin, 1977; Bowen, 1977; Feldman & Newcomb, 1969; Graham, 1989; Mezirow, 1978). Darkenwald and Merriam (1982) defined adult education as "a process whereby persons whose major social roles are characteristic of adult status undertake systematic and sustained learning activities for the purpose of bringing about changes in knowledge, attitudes, values, or skills" (p. 9). Some also consider becoming aware of and questioning our perspectives of extraordinary importance to the educational mission (Bowen, 1977; Brookfield, 1986; Mezirow, 1978), for changes in the way one views the world not only affect the individual but cumulatively impact society (Bowen, 1977; Friere, 1970; Mezirow, 1989). Although the majority of studies have focused on changes in the traditional age student, changes in perspectives may also apply to the adult student (Brookfield, 1986; Schlossberg, Lynch, & Chickering, 1989).

Purpose of Research

The purpose of this study was to explore the perceptions of adult students, 25 years of age and older, of the impact of the educational experience on their attitudes, values, interests, and aspirations in a four year institution of higher learning primarily serving traditional age students. Perspective changes as defined here include those perspectives in the noncognitive or affective domain which have been

changed or altered as a direct result of participation in the educational experience. The educational experience includes not only the academic content of courses but non-curricular activities and social interaction which, as part of the educational environment, contribute to the overall learning process. In addition, because it is important to put perspective changes in the context in which they happened (Bowen, 1977; Clark & Wilson, 1991) and because institutions must be made aware of policies which either help or hinder the educational process, the impact of the institution on students was also investigated.

Background

Certain general trends about the impact of education in the affective dimension of learning have been identified in traditional college age students. Studies on changes in self concept demonstrate a positively evolving sense of self, identity, autonomy, competence, and an integrated philosophy of life (Astin, 1977; Bowen, 1977; Chickering, 1969). Although these generalizations must be approached with caution (Bowen, 1977; Feldman & Newcomb, 1969), research indicates that four years of college builds self esteem, particularly in those students with high academic ability and performance (Astin, 1977). Other affective dimensions are also impacted by the educational experience. Bowen (1977) and Feldman and Newcomb (1969) reported an increased interest in the arts and humanities, educational aspirations, intrinsic rather than extrinsic values, and liberal education. Although content acquisition has traditionally been

of primary importance, there are also those who believe that questioning one's belief and value system is one of the major goals of a liberal education (Bowen, 1977; Brookfield, 1986; Mezirow, 1978). Research indicates that during the college experience students become more liberal and less rigid or authoritarian in social, political, and religious spheres (Astin, 1977; Bowen, 1977; Feldman & Newcomb, 1969; Perry, 1970), and exhibit increased intellectual tolerance (Bowen, 1977; Perry, 1970).

Mezirow (1989) defined a perspective transformation as a process where "as learners come to be critically reflective of the presuppositions upon which their beliefs are predicated and learn about their sources and consequences, meaning transformations become possible" (p. 172). This critical reflection on one's environment and experiences results in an understanding of cultural biases or culturally imposed dictates which influence one's thought processes, and this understanding "emancipates" one from these constraints. Once these culturally determined biases are recognized and understood, the transformation of the culturally determined perspectives into new perspectives provides the foundation for thoughtful action. Although Brookfield's (1986) theoretical foundation is not as developed as Mezirow's (Merriam, 1987), he also contended that learning requires "a sense of the culturally constructed nature of knowledge, beliefs, values, and behaviors" (p. 17) and that these formerly held belief and value systems must be challenged for the learner to consider alternative beliefs, values, and actions.

Because Mezirow's perspective transformations are only possible for adults, the boundaries between adult educational and developmental theories become difficult to distinguish. For the traditional age student, Perry (1970) contended "that aspects of intellectual and ethical development in late adolescence can be described in an orderly way" (p. 207), and according to Schlossberg (1984), Perry postulated development during the college years as a: progression from the simple to the complex; from an external orientation . . . to an inner orientation; from absolutism and dogmatism to increasing tolerance for ambiguity and uncertainty; from a tendency to perceive those outside one's own immediate group in stereotypic terms to increasing awareness of individual differences and greater empathy with others; and from a strong self-focus to a posture of conformity to the group and then to a mature focus on interdependence with others (p. 9).

Development, however, does not end with adolescence, and Mezirow (1978) contended that "to the degree our culture permits, we tend to move through adulthood along a maturity gradient that involves a sequential restructuring of one's frame of reference for making and understanding meanings" (p 104).

Methodology

A qualitative research design was selected for this study because of its appropriateness when looking for insights into and interpretations of subjective data (Merriam, 1988). Grounded theory as proposed by Glaser and Strauss (1967) provided a vehicle for

comparing the information gathered in this study to previous research and for allowing new information to surface.

A sequence of open-ended interview questions in four content areas was developed from a study of relevant literature, the advice of a committee of adult educators, and categories which emerged from two pilot studies. An ongoing evaluation of the questions resulted in refining the questions, but the general categories of questions remained stable. The first set of questions involved if, how, and to what extent students believed that the educational experience impacted their attitudes and values as they relate to: (a) self and others; (b) social, political, religious, and moral issues; (c) behavior; and (d) relationships. A second group of questions addressed whether students perceived that exposure to many different content areas resulted in developing new or expanding former interests and whether students support the concept of liberal arts requirements for the adult student. Third, there were questions exploring perceptions of how the educational experience had affected personal, educational, and career aspirations, including future participation in educational endeavors. Finally, students were asked to address other variables such as developmental processes, effort expended, involvement in extracurricular activities, and feelings about participating in an institution comprised largely of traditional age students.

Sample

Sixteen students were selected from a population of 216 students, 25 years of age and older, in their senior year in the College of Arts

and Science at a midwestern landgrant university with a total undergraduate population of approximately 19,000 students. Eleven of the 216 adult senior students were selected through random sample, and this initial random sample was statistically representative of the total population in which 56% were between 25 and 29, 23% between 30 and 34, 12% between 35 and 39, and 9% over 40 years of age. Because it was determined that interviewing additional students over 35 would provide a distribution of ages necessary for comparative analysis, the remaining five individuals were selected through purposive sampling. The data from one interview were eliminated because of the student's erratic behavior during the interview, leaving the data from 15 interviews to be analyzed. The sample population was almost exclusively white with few children and a very wide income distribution. Six out of the seven married students were male, and four out of the five single students were female.

Data Analysis

Semistructured interviews were conducted during the Fall, 1990, semester, and it is noteworthy that every student contacted agreed to be interviewed. At the time of the interview, each student was assigned a reference code to protect his or her privacy. The data from these interviews were analyzed in two stages. The first stage, completed within 24 hours of the interview, consisted of summarizing and coding the individual responses from the taped interviews. Emerging themes and patterns provided the foundation for collapsing the data into categories, and according to the methodology proposed by

Glaser and Strauss (1967), the questions and categories were continually and jointly refined and analyzed.

The second stage of analysis involved a cross-site-analysis, and to begin the process, a document was created from the individually coded interviews. Using Miles and Huberman's (1984) Conceptually Clustered Matrix as the basis for developing this document, the data were entered into horizontal rows by individual interview and into vertical columns across interviews by question. Organizing the material into one large visual rendering of the interviews allowed the author to analyze information by individual and by concept. To facilitate data analysis, the data from the interviews were collapsed into emergent conceptual themes, counted, and subjected to the constant comparative method of data analysis proposed by Glaser and Strauss (1967). This process provided the basis for transforming descriptive data into hypotheses.

Results

The major finding of this study was that education did serve as a change event in the perceptions, aspirations, and interests of the adult students in this study, although the subjects reported that these changes often began prior to returning to an educational setting. Other findings included that the major barriers to the educational process were perceived to be time constraints and a lack of institutional support for the adult student. Despite these barriers, however, students generally believed that education had a positive affect on their lives.

Educational Impact

The purpose of this research study was to determine the perceived impact of the educational experience on the attitudes, values, interests, and aspirations of the adult student, and the findings indicate that education did serve as a change event in the perspectives of these adult students.

Changing perceptions Although changes for many of these students began prior to returning to an educational environment and for some precipitated the decision to return, most students interviewed perceived a positive impact on their self image as a result of their educational experience. Seven reported feeling more "confident" and "competent," and others reported increased "recognition," "acceptance," "self worth," "pride," "self satisfaction," sense of "well being," sense of "accomplishment," "sense of direction," "discovery of self," and courage to "try new things." Although three students in their 40's indicated decreased self-esteem resulting from grades which were lower than expected, two of these three felt increased "pride" for their effort. For example, a 41 year old female student reported a "decrease in self-esteem intellectually but an increase in personal growth."

Exploring students' perceptions about the impact of the educational experience on their attitudes toward others uncovered what appeared to be tension between becoming more tolerant and more critical. While ten students indicated they were more "sympathetic," "enlightened," or "tolerant" of different "lifestyles," "ideas,"

"opinions," "viewpoints," "young people," and "fraternities and sororities," eight students reported they were also more "critical" of others. When the six students reporting to be both more tolerant and more critical were asked to further define this, they indicated that while they were more open to or appreciative of others, other's ideas, cultures, and religions, they were also more discriminating in selecting and maintaining personal relationships with others. For example, two students reported they were reevaluating their friendships, another believed he was more critical in selecting a love relationship, and several students displayed a "lack of patience," or felt "angry" toward those whom they perceived as lacking motivation.

Other perceived changes in perspectives included seven adult students who reported being more liberal, including two students in their twenties who had changed from the Republican to the Democratic party. One 32 year old male, however, indicated that although he had become "more socially liberal," he had also become "more economically conservative." In addition, seven students indicated they had become more socially conscious and responsible, and six believed education had increased their curiosity. Other students reported being "more able to question my own value system," "more open to change," and more able to "articulate the reasons for my beliefs." For some students the impact was great, such as for a 29 year old female who indicated "50%" of her overall attitudes had been changed, altered, or enhanced and a 28 year old male who felt that "what is morally right comes from increased knowledge." Most, however, believed that the

foundation of their value system was fairly well formed when they returned to school. While only two believed that education was mostly responsible for their present attitudes and values, nine students believed education enhanced a normal developmental process, and two indicated it was too difficult to make an assessment.

Changing aspirations Education affected the aspirations of these students, with nine students indicating increased career aspirations, six of these nine reporting increased personal aspirations, and three of those reporting both increased career and personal aspirations indicating increased educational aspirations. Of the remaining six students, five reported their aspirations were well formed prior to returning. The impact was dramatic for three students in their late twenties and early thirties who returned to school with few expectations and now intend to pursue Ph.D's. Although most were not affected to this degree, career aspirations were more "defined," "heightened," or "possible" because education had either clarified vague notions of career expectations or was the vehicle for realizing aspirations determined prior to returning to school. Education "opens more doors," causes one to "aspire to greater things in personal relationships," and "personally makes alot of things possible."

Changing interests The educational environment stimulated new and expanded former interests, particularly in the arts and humanities and in social issues. This increased interest may be attributable both to the exposure to many different disciplines within the liberal arts curriculum and to the variety of arts experiences offered by the

university and community. In addition, there was overwhelming support for the liberal arts curriculum, with thirteen of those interviewed reporting they had always supported, or had come to support, liberal arts requirements. This support was not without concerns, however, and these concerns ranged from fearing a "shallow knowledge base," to believing that adult education should be more "career oriented." One 49 year old male, in strong disagreement with liberal arts requirements, indicated he believed in a "trade school approach," to higher education for adult students.

Barriers

Situational, personal, and institutional barriers as defined by Cross (1981) yielded consistent results in all categories, with time being reported as the primary situational barrier and cost the other situational barrier of significance reported. An initial fear of returning to an academic situation was acknowledged as a personal barrier by eight students, although all indicated that this fear was assuaged within a relatively short period of time. Other personal barriers mentioned included a "lack of knowledge of the system," and making a "transition to an intellectual environment." Although eleven adult students in this study found the interaction with younger students of value, four students desired increased participation with adult students their age, and most believed that adult students require increased sensitivity and additional alternatives not needed by the traditional age student.

Situational Barriers The perception of time constraints as a barrier is of major concern to students (Valentine & Darkenwald, 1990), and throughout the interview process, it became apparent that while education had many positive benefits, time constraints resulting from pursuing an education created personal frustrations for many of the students. Eleven students directly reported time constraints as a major problem, and most likely time was the major factor involved for the five who reported home and job responsibilities as barriers. In addition, seven students reported cost as one of their major barriers, supporting Cross's (1981) findings that the major situational barriers involve time and finances. "Transportation," "giving up hobbies," "no place to study," and "commuting from out of town" were also mentioned.

Extracurricular activities. While these students' interests were stimulated by professors, course content, and discussions with peers, they participated in fewer activities because of a lack of time and money. Fourteen students indicated they were not involved in college-related activities outside the classroom, and the one student who indicated increased involvement only participated in one formal extracurricular activity. Seven students indicated they were less involved in pursuing outside interests, three indicated they behaved no differently, and two indicated they were more involved. As one 35 year old female indicated, "education narrows the world because there is no time for anything else." Thus, although increased exposure to stimulating ideas may increase interest, participation decreases.

Relationships. Relationships with loved ones are also affected by time constraints. Although there was considerable support for returning to an academic situation from parents, children, and friends, relationships with significant others were more affected by time pressures. Students reported that they "had to make personal sacrifices" and that they lack the time for developing relationships because the "commitment to school is foremost." One woman in her fifties reported that her husband asked her "why are you doing this to us." Apparently, it is difficult to devote the amount of time necessary to be a good student and to maintain a good love relationship. Although these adults believed their children were supportive of their educational aspirations, they wished they could spend more time with them. The fact that this group as a whole had few children might account for the fact that there were few perceived problems.

Although relationships with parents did not appear to be impacted by the time component, an unanticipated response surfaced when discussing familial support. Although parents were perceived as supportive in all cases but one, it appears that adult students are still very affected by parental opinion. One 32 year old male was in school partly because he was "still trying to live up to my parents expectations," another 40 year old male indicated his "parents were very happy because they had been previously disappointed," and a 27 year old female indicated her relationship with her father had improved because "he had been angry when I dropped out." In addition, three of those interviewed were coming from crisis situations where

family, friends, and other loved ones perceived education as a much more constructive approach to life than the crises out of which they were coming, and one 41 year old female reported that the failure of an 18 year relationship had "made her want to succeed in other areas." These situations support research by Aslanian and Brickell (1980), Schlossberg (1984), and Houle (1961) that many adults return to education because of personal or career transitions.

Effort. The perception of time constraints as a barrier may relate to the amount of effort adult students expend in pursuit of an education. Eleven students in this study indicated a great expenditure of effort, two indicated moderate effort, and two indicated that the amount of effort varied with the class. When asked whether or not they worked hard as compared to traditional age students, responses were emphatic, including "absolutely, without question," "significantly greater amount of effort," "100% harder," "150%" harder, "all the regular students hate (me) because I sit in the front row," and "when they ask for a 12 page paper, I provide them 25." One 41 year old female indicated that the expenditure of energy was so great that occasionally she had to "close down" for awhile.

Institutional Support In a concluding question designed to allow students to freely discuss anything they wished to express about the educational experience, these adult students began to describe the nature of the institution in which they were enrolled. Many adult students believed that the institution in this study considers the needs of adult students as peripheral to the mission of the university.

Eight students voiced feelings about a lack of commitment to the adult student, and one student resented the lack of commitment from the state. Institutional barriers included courses that were "not available," "red tape," "rules" of the institution, "parking," and that employers would "not cooperate" with educational plans. Adult students felt they needed more support such as "special orientations," "support groups," "more outreach," "evening classes," "better advising," more "awareness of the honors college," "recognition" of their adult status, and experiential credit.

Students perceived themselves as a group with special needs not being addressed by the institution, the faculty, or the state. One student indicated that the "procedure of registration and advisement is predicated on the assumption that you're an 18 year old," and that what the institution does not realize is that the adult, lacking the social network of the traditional age student, requires "more outreach" and "greater facilitation" to be able to access the system. A student who had been unsuccessful as a traditional age student, and was now planning to pursue a Ph.D., reported that "the message is that people who have not been successful (academically) . . . are not welcome at the university" and that "some may be alienated because of a narrow definition of who needs to be educated and what is intelligence." Two students discussed the need for increased sensitivity to adult needs and problems on the part of professors as well, reporting that adult students have many responsibilities besides education and "may not miss class because of lack of interest but because of a sick child" or

an "inflexible work schedule" or employer. One student indicated he would not advise anyone to attend this university, not because of the university itself, but because of the lack of funding and support for education from the state.

Discussion

Although many of the findings in this study support earlier research, several tensions surfaced in the data analysis. Students in this study reported being more tolerant of others; they also reported being more critical or discriminating in selecting and maintaining personal relationships. Apparently these students are more tolerant in an impersonal or abstract sense but not in personal situations. Perhaps the effort expended and the increased self-esteem precipitates a comparison between their own growth and development and the growth and development of others. Another variance to earlier studies is the relative importance placed on intrinsic rather than extrinsic values. Although the traditional age senior may "place less emphasis than freshmen on money, material possessions, and security" (Bowen, 1977, p. 109), the adult senior student's practical reasons for pursuing an education (Aslanian & Brickell, 1980; Cross, 1981; Graham, 1986; Houle, 1961; Knowles, 1984, Tough, 1978) in this study appear as relevant when they leave the educational experience as when they enter it.

Another tension which surfaced may not only be a barrier to students but a barrier to the goals of education. Although students report an increase in interests as a result of exposure to a wide

variety of curricular and noncurricular activities, their time to pursue these activities diminishes, and there may not be sufficient time for the critical reflection necessary for perspective transformations. In addition, if transforming newly realized interests or enlightened new perspectives into thoughtful action is a priority of education and if students do not have the time to pursue both education and that which it stimulates, we must question whether we are defeating part of our educational mission.

Although it must be noted that the diversity of the adult student is always an important consideration, much of the data on noncognitive educational outcomes obtained in this study support earlier studies of traditional age students. These adult students reported being more socially and politically liberal, more interested in and supportive of the liberal arts, and possessing more self-esteem or pride in their accomplishments. The three students reporting decreased self-esteem were all in their forties and were not performing as well academically as they had hoped to perform. While the relationship between age and self esteem may be an issue, the results support Astin's (1977) contention that increased self esteem is related to high ability or performance, and it is noteworthy that while increased self efficacy in the students in this study was only partially attributable to the educational experience, decreased self esteem was wholly attributable to the educational experience.

While these students believed education had altered, enhanced, or accelerated changes in their attitudes and values; stimulated new

interests; and defined, heightened, or made possible their aspirations, they also believed many of these changes had begun prior to returning to an educational environment. These findings support the earlier research conducted by Bowen (1977) and Feldman and Newcomb (1969). If changes in perspectives begin prior to returning to school for the traditional age student, one would certainly expect it to be true of the adult student who has additional experience and time to mature and formulate attitudes and values. Changes in perspectives beginning prior to returning to an educational environment, however, do not preclude education's fostering critical reflection and resultant changes in perspectives. In addition, since perspective transformations require a certain level of maturity, the interconnectedness between adult education and adult development theory must be acknowledged (Merriam, 1984), and adult education must consider developmental processes as well as content and methodology in planning educational programs for adults. Although Astin (1977) suggests that one way to assess whether changes are a product of the educational experience or of normal maturational processes is to look at the level of student involvement, adult students in this study attribute many changes to education but remain uninvolved in campus activities.

Assessing the extent to which an institution impacts a student is a difficult task but that these adult students perceived an impact was clear. Without further study it would be impossible to establish a necessary causal link between the traditional institution and its

impact on the educational experience. Because of student comments and a very low percentage of adult students at the institution in which the study was conducted, however, it seems reasonable to consider this relationship, for in 1989 only 8% of the undergraduate students at this institution were adults 25 years of age or older as compared to a 1987 national average of 35.2% (Chronicle of Higher Education, 1990). In addition, since there were not data available on the number of students who left the institution during their freshman, sophomore, and junior years because of institutional barriers, one can only speculate on the real impact from the responses of these senior students who were able to successfully negotiate the system. With changing demographics and an increasing understanding of the importance of the environment to student retention, it is essential that educational institutions evaluate the extent to which the institution and faculty are serving the adult student in order to plan, create, and implement meaningful learning experiences for adult students (Aslanian & Brickell, 1988; Levine, 1989).

Despite the problems encountered by these adult students, almost all felt the benefits of education outweighed the barriers. Twelve students indicated they would repeat the experience, two indicated they would possibly repeat it, and one felt that returning to school as an adult student was "for the birds." Students found it difficult to think of classes they didn't like, and all those interviewed indicated they would participate in continuing education programs after graduation. One individual felt so positive about the experience as an

adult student that he felt that those graduating from high school at a traditional age should be "required to do something else for at least two years" prior to entering college. Another student indicated that because adult students put in effort and time, possess life experiences, and are more serious and reflective, returning to formal education as an adult is a "growing experience, a bettering of self . . . I wouldn't pass this up for anything."

Conclusion

The data presented here describe the perceptions of adult undergraduate senior students on how the educational experience impacts their attitudes, values, interests, and aspirations. Although education does appear to change or alter perspectives in the noncognitive or affective domain, students perceived that many of these changes began prior to returning to school. Therefore, there is still a question concerning the extent to which these changes are developmental rather than a direct result of the educational experience. In addition, identification of factors which are perceived as barriers to the goals of education can assist educators and administrators in developing strategies and programs which enhance the educational experience for the adult student.

References

- Aslanian, C. & Brickell, H. (1980). Americans in transition: Life changes as reasons for adult learning. New York: College Entrance Examination Board.
- Aslanian, C. & Brickell, H. (1988). How americans in transition study for college credit. New York: College Entrance Examination Board.
- Astin, A. (1977). Four critical years: Effects of college on beliefs, attitudes, and knowledge. San Francisco: Jossey-Bass.
- Bowen, H. (1977). Investment in learning: The individual and social value of American higher education. San Francisco: Jossey-Bass.
- Brookfield, S. (1986). Understanding and facilitating adult learning. San Francisco: Jossey-Bass.
- Chickering, A. (1969). Education and identity. San Francisco: Jossey-Bass.
- Clark, M. & Wilson, A. (1991). Context and rationality in Mezirow's theory of transformational learning. Adult Education Quarterly, 41(2), 75-91.
- College and university enrollment by level and age of student, Fall 1987. (1990, September 5). The Chronicle of Higher Education, p. 18.
- Cross, K. P. (1981). Adults as learners: Increasing participation and facilitating learning. San Francisco: Jossey-Bass.
- Darkenwald, G. & Merriam, S. (1982). Adult education: Foundations of practice. New York: Harper & Row.

- “
- Feldman, K. & Newcomb, T. (1969). The impact of college on students. San Francisco: Jossey-Bass.
- Freire, P. (1970). Pedagogy of the oppressed. New York: Herder and Herder.
- Glaser, B. & Strauss, A. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldine Publishing Company.
- Graham, S. (1986). Continuing education activities among post baccalaureate degree adults: Examining motivations. The Journal of Continuing Higher Education, 34 (3), 2-6.
- Graham, S. (1989). Assessing the learning outcomes for adults participating in formal credit programs. Continuing Higher Education Review, 53(2-3), 73-85.
- Houle, C. O. (1961). The inquiring mind. Madison: University of Wisconsin Press.
- Knowles, M. (1984). The adult learner: A neglected species. Houston: Gulf Publishing Co.
- Levine, A. (1989). Shaping higher education's future: Demographic realities and opportunities, 1990-2000. San Francisco: Jossey-Bass.
- Merriam, S. (1984). Adult development: Implications for adult education. Columbus: The National Center for Research in Vocational Education.
- Merriam, S. (1987). Adult learning and theory building: A review. Adult Educational Quarterly, 37(4), 187-198.

- Merriam, S. (1988). Case study research in education: A qualitative approach. San Francisco: Jossey-Bass.
- Mezirow, J. (1978). Perspective transformation. Adult Education, 28(2), 100-110.
- Mezirow, J. (1989). Transformation theory and social action: A response to Collard and Law. Adult Education Quarterly, 39(3), 169-175.
- Miles, M. & Huberman, A. (1984). Qualitative data analysis: A sourcebook of new methods. Beverly Hills, CA: Sage Publications, Inc.
- Perry, W. (1970). Forms of intellectual and ethical development in the college years. New York: Holt, Rinehart and Winston, Inc.
- Schlossberg, N. (1984). Counseling adults in transition: Linking practice with theory. New York: Springer Publishing Company.
- Schlossberg, N., Lynch, A., & Chickering, A. (1989). Improving higher education environments for adults: Responsive programs and services from entry to departure. San Francisco: Jossey-Bass.
- Tough, A. (1978). Major learning efforts: Recent research and future directions. Adult Education, 28(4), 250-63.
- Valentine, T. & Darkenwald, G. (1990). Deterrents to participation in adult education: Profiles of potential learners. Adult Education Quarterly, 41(1), 9-42.