

ASSESSING AUXILLIARY SERVICE NEEDS OF  
RETURNING FEMALE STUDENTS AT AMARILLO COLLEGE

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## CHAPTER I

### INTRODUCTION

The challenges of the '80's are forcing Americans to re-appraise and re-design many of the established systems involving the family, work force, and education. Changes in economic demands, population shifts, role expectations, and work requirements are causing new developments in many institutions, including those of higher education (Challenges of the '80's, 1979).

One of the major concerns for colleges and universities is the changing composition of the students due to the projected decline in the number of 18-22 year olds. Recent estimates by Mackey (1980) range from a 25 percent drop in high school graduates by 1992 to a 33 percent decline in overall college enrollment by the year 2000. However, while the enrollment of full-time traditional college-age students is declining, that of part-time non-traditional students is skyrocketing. Between 1972 and 1979, total college enrollment increased by 2.3 million; over 50 percent were part-time students age 25 and over. A large proportion of the growth is due to the re-enrollment of adult women, who outnumber men in the 35 and over age group in the college enrolled population by roughly 2 to 1. The attendance of these re-entry women at postsecondary institutions has led women to outnumber men students for the first time since World War II (Hall, 1980). In 1979,

33.6 percent of the men and 37.8 percent of the women enrolled in college were 25 years or older (U.S. Bureau of the Census, 1979).

Adult women are returning to school in greater numbers than ever before. According to Brodrinski (1980), the change in college enrollment from 1970 to 1978 has risen 173 percent for female students ages 25 to 29 years, and 209 percent for female students ages 30 to 34 years. As explained by Smallwood (1980), these women are motivated to return to school for increased personal fulfillment and the hope for better career opportunities.

Changing societal and economic factors are causing more women to return to college. According to Prah1 (1980), even the most conservative projections for the 1980's forecast large increases in the labor force participation of women, especially those between the ages of 24 and 54 years. Many of these women will require further education to gain permanent roles in the labor force. More and more families are being maintained by females. One of every five mothers in the labor force is maintaining her own family, according to Young (1978). Economic necessity is forcing these women to gain new training in order to upgrade their occupations.

Re-entry women often encounter obstacles as they make the transitions involved in returning to schools. Weinstein (1980) explains that these obstacles may include institutional barriers such as policies and procedures with respect to applications, transfer of credit, and scheduling; situational obstacles such as child care and financial

limitations; and personal concerns such as general lack of confidence, unsupportive family or spouse, and guilt feelings. These special needs of the re-entry student may require special support services not traditionally available on the campus.

The present array of campus student services was planned to support the traditional student. Many of these traditional services will also be needed by the re-entry women but others will not be equally accessible or suitable for them (Creange, 1980). Re-entry women may have special scheduling requirements because of family and job obligations. Re-entry women may have been inadvertently discriminated against in regard to student services because of institutional practices and policies.

In order to develop student services which will meet the needs of all students, an educational institution needs to explore the difference in the needs of the traditional and the re-entry students. Student services cannot be separated from the total higher education enterprise. According to Brodrinski (1978), the developments which affect higher education also affect the student services. In order for the institution to continue to see an increase in the enrollment of the re-entering adult students, the institution must investigate the unique needs of this group and provide suitable student services to meet these needs.

#### Definitions of Terms

To facilitate precise communication, the following terms are defined as they were used in this study.

Day student. A student who schedules more than 50% of class work during the day.

Full-time student. A student enrolled for 12 hours or more of college credit course work.

GPA. Grade point average established by the average grade of all credit courses taken by a student.

Night student. A student who schedules more than 50% of class work at night.

Non-traditional student. A student age 24 years or over who has had an educational break. For the purpose of this study all non-traditional students were female.

Part-time student. A student enrolled in less than 12 hours of college credit course work.

Re-entry student. Synonym for non-traditional student.

Returning student. Synonym for non-traditional student.

Student services. Cluster of services, outside of regular course offerings provided by college or university. These services may consist of financial aid, student development, counseling, placement, and specialized remedial work.

Traditional student. A student between the ages of 18-22 years who has not had an educational break.

Washington Campus. The Amarillo College campus located at 24th Street and Washington.

West Campus. The Amarillo College campus located at 6400 W. 8th.

### Statement of the Problem

The problem is the absence of specific objective knowledge about the auxilliary service needs of the re-entering female students at Amarillo College. Since there is limited knowledge about the specific needs of this group, there is no information to indicate if the needs of this group differ from the needs of the traditional student or if the needs of this group are being met.

### Statement of the Purpose

The first purpose of this study was to identify the auxilliary service needs of female students at Amarillo College as measured by the Adult Learner Needs Assessment Survey. The second purpose was to examine the differences between the needs of the traditional students and the needs of the re-entering students.

### The Research Questions

To fulfill the purpose of this study, the following ten research questions were investigated:

1. What were the educational plans and preferences and the auxilliary service needs of the traditional student as measured by the Adult Learner Needs Assessment Survey?
2. What were the educational plans and preferences and the auxilliary service needs of the non-traditional student as measured by the Adult Learner Needs Assessment Survey?

3. Did differences in educational plans and preferences exist between the groups of traditional and non-traditional students?

4. Did differences in auxilliary service needs exist between the groups of traditional and non-traditional students?

5. Did differences in auxilliary service needs pertaining to life skills development exist between the groups of traditional and non-traditional students?

6. Did differences in auxilliary service needs pertaining to career development exist between the groups of traditional and non-traditional students?

7. Did differences in auxilliary service needs pertaining to educational planning exist between the groups of traditional and non-traditional students?

8. Did differences in auxilliary service needs pertaining to associations with others exist between the groups of traditional and non-traditional students?

9. Did differences in educational plans and preferences exist between the students at West Campus and the students at Washington Campus?

10. Did differences in auxilliary service needs exist between the students at West Campus and the students at Washington Campus?

#### Delimitations

The delimitations imposed upon the study were the following:

1. The participants of this study were selected from randomly selected classes in English, government, and history at Amarillo College.

2. The participants of this study were students in the selected classes who met the criteria of being either a female student between the ages of 18-22 years or a female student age 24 years or over.

3. The participants of this study included both part-time and full-time students.

4. The courses of study and the course loads of the participants varied.

5. The study randomly selected participants to meet the following proportional sampling requirements which matched the current composition of the Amarillo College student population:

- a. 46 percent traditional students
- b. 54 percent re-entering students
- c. 60 percent day students
- d. 40 percent night students

#### Limitations

The study was limited in the following ways:

1. The participants may not have been representative of racial, ethnic, or socioeconomic groups in this area.
2. The educational histories of the participants may have varied.
3. The life experiences of the participants may have varied.
4. The work histories of the participants may have varied.

5. The family and job obligations of the participants may have varied.

6. The educational goals of the participants may have varied.

7. The findings of this study have not been generalized to a larger population.

### Summary

The student composition of colleges and universities is changing. There is a decline in the number of traditional students ages 18-22 years and a rapid increase in the number of re-entering students age 24 years and over. In large measure, this increase of re-entering students is due to the return of an increasing number of women.

The returning women students are motivated to return to school for increased personal fulfillment and the hope for better career opportunities. Often these women students encounter unique obstacles as they make the transitions to return to school. These obstacles may include institutional, situational, and personal barriers. Job and family obligations may cause the returning student needs to differ from the needs of the traditional student.

Student services which are usually available on a college campus are designed to meet the needs of the traditional students. Some of these traditional student services will be needed by the re-entry women students but others may not be equally accessible or suitable for them.

In order to meet the needs of both the traditional and non-traditional students, an examination of the auxilliary service needs of these groups should be made. This study describes the auxilliary service needs of female students at Amarillo College as measured by the Adult Learner Needs Assessment Survey and determines the differences between the needs of the traditional student and the non-traditional student.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### History of Women and Education

The primary purpose of the early colleges in the United States was for the educating of men for the professions. Some of the early colleges were Harvard College, established in 1636, and William and Mary College, established before the close of the seventeenth century. The principle professions were clergy, law, teaching, and medicine, and were considered men's occupations. There was no apparent need to include women in these small and privileged student bodies until women began to push to enter the teaching profession (Newcomer, 1959).

Higher education for women in the United States began during the first half of the nineteenth century. According to Newcomer (1959), the most important factor in this educational change was the growth of the public school system. When women began to press for admissions to institutions of higher learning, they were motivated by professional aims. The profession was teaching.

These women who dared to attend college were pioneers and their desire to study considered odd--for what could a woman do with an education? One college professor wrote in the 1850's, "Of what use degrees are to be to girls, I don't see, unless they addict themselves to professional life" (McDonald, 1979, p. 10). Some believed that academic life could have an adverse effect on women. The influential

philosopher, Herbert Spencer thought that "absolute or relative infertility is commonly produced in women by mental labor carried to excess" (McDonald, 1979, p. 10). One of the earliest advocates of women's higher education was President Horace Mann of Antioch College who tried to convince his colleagues that "women emerged from the experience with more serious minds, for higher education had a strong tendency to expel all girlish romance" (McDonald, 1979, p. 10). Mann felt that the presence of women on the campus had a positive effect on the manners of the men students. He also held fast to the then-revolutionary belief that men and women could be educated better and at less expense if educated together.

Two hundred and one years after Harvard College opened, four young women enrolled at Oberlin College. Three of them received the Associate Bachelor's degree four years later in 1841. According to Newcomer (1959), this is the first undisputed instance in the United States of women receiving bachelor's degrees equal to those granted to men.

The Civil War opened new opportunities for women because the women took over work previously regarded as unsuitable for women. Gradually, far-sighted educators began admitting women to their colleges. By the 1870's, the number of major coeducational institutions had risen to 97 and some 28 women's colleges had come into existence (McDonald, 1979).

The following chart details the number of colleges open to men only, to women only, and to both sexes from 1870-1957.

Table 1  
Colleges Open to Men, Women, and Both Sexes

Year	Number of Institutions	Percentage for Men Only	Percentage for Women Only	Percentage for Both Sexes
1870	582	59	12	29
1890	1,082	37	20	43
1910	1,083	27	15	58
1930	1,322	15	16	69
1957 <sup>a</sup>	1,326	13	13	74

<sup>a</sup>•Four-year degree-granting institutions

(Newcomer, 1959, p.37)

The founders of the women's institutions, many of whom were women who had been denied access to college themselves, felt that women could be better educated in a separate environment. It was often a priority to employ women professors. These colleges as a group began producing what was to become the nation's highest proportion of achieving women in history. By 1880, women represented 33 percent of all resident degree-credit students and had even begun to enter graduate schools (McDonald, 1979).

The fifty year period between 1880 and 1930 was a time of rapid growth in the participation of women in American higher education. By 1920, the year women won the vote, women represented 47 percent of the country's undergraduate enrollment. This enrollment high of 47 percent persisted as the record until 1977 (McDonald, 1979).

This period of achievement in higher education suffered a decline and setback between 1930 and 1960. The economic and international difficulties of the period coupled with women flocking to the ideal of domesticity caused drops in the number of women enrolled and graduated from institutions of higher learning.

As described by McDonald (1979), the women's movement and new social consciousness of the sixties prompted women to adopt new patterns that reflected a desire for self-fulfillment and academic and career achievement. The 1960's and early 1970's also produced important legislation such as the Higher Education Act of 1965, Equal Pay Act of 1963, Civil Rights Act of 1964 and its amended form in 1967 to outlaw sex discrimination, the Equal Employment Opportunity Act of 1972, and the Education Amendments of 1972. These helped expand the legal resources of women administrators, faculty, employees, and students.

The following chart details the number of women enrolled at institutions of higher learning from 1870-1958.

Table 2  
Number of Enrolled Women

Year	Number of Women Enrolled (thousands)	Percentage of All Women 18-21 Years	Percentage of All Students Enrolled
1870	11	0.7	21.0
1890	56	2.2	35.9
1910	140	3.8	39.6
1930	481	10.5	43.7
1950	806	17.9	30.2
1958	1,148	23.0	35.2

(Newcomer, 1959, p.46)

By 1970, the seeds of change that had been planted in the previous decade took root and caused women on campuses everywhere to take stock of their educational and professional potential. By 1970, 43 percent of all those receiving bachelor degrees were women, compared with the 1950 figure of 23 percent (Carnegie Commission on Higher Education, 1973). The most dramatic changes have occurred in the 1970's. The presence of women in higher education has crystalized into a phenomenon represented by these following facts reported by McDonald (1979).

1. Women undergraduates now outnumber men and represent 52 percent in the under 22 years age group.

2. Women receive over 55 percent of all two-year degrees and dominate the part-time student population.

3. In the year 1977 alone, women accounted for 93 percent of the nation's total annual college enrollment growth.

4. More women from lower income families in the 18 to 24 years age group are attending college while the number of college-going men of that age is declining at all income levels.

5. Women aged 22 to 35 years comprise the fastest growing group of postsecondary students. Their college attendance increased 103 percent between 1970 and 1977.

6. Women in the over 35 years age group are running a close second to the fastest growing group of postsecondary students. Their college attendance increased 68 percent between 1972 and 1976.

7. Women are not stopping at bachelor degrees. At institutions where the master's degree is offered, 52 percent of the students are female. Where the doctorate is the highest degree offered, 40 percent of the students are female.

As the number of women college students continues to grow, the impact of their presence and contributions should be increasingly felt in higher education and in society.

#### Changes in Adult Learning

The tremendous increases in the number of women returning to school reflects changing attitudes about adult learning. Knowles (1978) raises the question that considering that the education of adults has been a concern of the human race for a very long time, why has there been so little thinking, investigation, and writing about adult education until recently?

By the onset of World War II, adult educators had scientific evidence that adults could learn and that they possessed interests and abilities that were different from those of children or youth. Knowles (1978) mentions that this followed the work of Edward Thorndike, author of Adult Learning in 1928 and Adult's Interests in 1935, Herbert Sorenson, author of Adult Abilities in 1938, and Edward Lindeman, author of The Meaning of Adult Education in 1926. Lindeman (1926) made the following assumptions about adult learning: (1) adults are motivated to learn as they experience needs and interests that learning will satisfy; (2) adult's orientation to learning is life-centered and that appropriate

units for organizing adult learning are life situations, not subjects; (3) core methodology of adult experience is the analysis of experience; (4) adults have a need to be self-directing and that the role of the teacher is to engage in a process of mutual inquiry; and, (5) individual differences among people increase with age and that adult education must make optimal provision for differences in style, time, place, and pace of learning.

During the 1940's and 1950's, the elements for a comprehensive theory of adult learning were clarified, elaborated on, and extended in an explosion of knowledge from the various disciplines in the human sciences. Some of these elements include the following: (1) psychotherapy discipline-- Maslow (1954) presented the clearest conceptualization of adult motivation and Erikson (1959) clarified the stages of personality development and contributed the concept of identity-formation; (2) developmental psychology discipline-- Havighurst (1961) identified the developmental tasks associated with the different stages of growth and Pressey and Kuhlen (1957) presented the collection of research on human development into sequential pictures of changes in personality characteristics with age through the life span; (3) sociology discipline-- social psychologists contributed important new knowledge on learning about environmental influences such as culture, race, and population characteristics and density; and, (4) education discipline-- Houle's (1961) investigation of continuing learners gave insight that

some adults are activity-oriented, some are goal-oriented, and others are learning-oriented.

All of these efforts have resulted in adult learning gaining an integrated framework. According to Knowles (1978) this concept of adult learning should be labeled "andragogy" to differentiate it from youth learning known as "pedagogy." The term "andragogy" was first coined in 1833 by a German grammar teacher, Alexander Kapsch. It was brought back in 1921 by the German social scientist Eugen Rosenstock and then introduced to the present concept in 1967 by the Yugoslavian adult educator Dusan Sovicevic. Andragogy is an intentional and professionally guided activity which aims at a change in adult persons.

Adult learning produces challenges which Knowles (1972) translates into these phases of the andragogical process: (1) establishment of a climate conducive to learning; (2) establishment of an organizational structure for participative planning; (3) diagnosis of needs for learning; (4) formulation of directions for learning; (5) development of a design of activities; (6) operation of the activities; and, (7) rediagnosis of the needs for learning. This relates to the adult learning theory described by Von der Embse and Child (1979), which says that the adult learner's readiness to learn is a product of the evolving social roles and that the adult learner's orientation is problem-centered rather than subject-centered.

The recruitment and retention of non-traditional adult students is a matter of increasing importance to colleges and universities. New structures in student service policies, procedures, and academic programs

to accomodate the non-traditional student's needs and interests are being examined. The major problem in adapting the traditional programs to non-traditional adult learners is a continuing belief in several old myths regarding the student population as described by Brodrinski (1980).

These myths include the following:

1. despite all the talk about non-traditional adult learners, freshmen are still basically the same;

2. there may be an increase in non-traditional students, but their numbers are not significant;

3. non-traditional adult students mostly enroll as part-time students and that group doesn't really have a substantial impact on any campus; and,

4. non-traditional adult students don't need and aren't really interested in student services or activities programs.

According to Miller (1979), more than one-third of all post-secondary students are 25 years or older. The realities of the situation are reflected in the following analysis of the college and university enrollment:

Table 3  
Older Age Groups' Percentages of  
College and University Enrollment

Year	Age 22-24	Age 25-29	Age 30-34	Age 35 & Over	Total 25 & Over	Total 22 & Over
1972	16.1	13.5	5.8	8.6	27.9	44.0
1973	16.3	14.3	6.1	8.8	29.2	45.5
1974	15.5	15.0	7.3	10.4	32.7	48.2
1975	15.4	14.9	7.8	10.9	33.6	49.0
1976	16.6	15.1	7.2	10.7	33.0	49.6
1977	15.6	15.7	8.6	11.5	35.8	51.4
1978	16.1	14.5	8.5	11.7	34.7	50.8

(Brodrinski, 1980, p.6)

The following chart analyzes the percent of change in college enrollment by age groups from 1970 to 1978:

Table 4  
Change in College Enrollment

Age Groups	Male	Female
14-17 years old	-18.5	+ 29.2
18-19 years old	+ 3.3	+ 20.8
20-21 years old	+11.0	+ 41.6
22-24 years old	+14.0	+ 70.4
25-29 years old	+34.8	+173.3
30-34 years old	+85.2	+209.1

(Brodrinski, 1980, p.7)

There is increasing interest in knowing more about the non-traditional adult learners. Miller (1979) reports that programmatic and financial considerations are important to the decisions made in choosing postsecondary education. Miller reports that non-traditional adults select the college they attend because the college had a good academic reputation, special programs, residency flexibility, and financial aid. "In Brief" (1979) reports that nearly 94 percent of all part-time college students live at home and 89 percent of those living at home go to college by car averaging 8.5 miles per trip.

Other concerns about the non-traditional adult learner involve academic preferences and results. Ommen, Brainard, and Canfield (1979) report that there are differences in the learning preferences of traditional age students and non-traditional age students. The older students definitely would choose a more traditional learning environment including an instructor who represents and acts the part of an authority figure. The older students are more theory and content oriented and have less need to interact with fellow students and instructors. The older students like to learn by listening and reading as opposed to the extensive use of audio-visual approaches and direct experience modes. According to Ommen, Brainard, and Canfield, the older students choose qualitative and people-oriented contents. They want to deal with ideas, concepts, and an intellectual understanding of how people work. Younger students expressed a desire to learn about the inanimate. The older students appear to have much higher academic expectations of themselves.

There is little evidence that systematic attempts have been made to attend to these differences.

The possible differences in grade point average (GPA) between the traditional and non-traditional student have been described. Van der Embse and Child (1979) examined chronological age and marital status as factors of academic performance. Their results showed that the older student (over age 27) is more likely than a young student to earn a GPA in the high GPA range of over 3.39. Their results showed no significant difference between married and unmarried students.

The differences in other aspects of academic work of the traditional and adult student have been described. Greer (1980) has examined the differences between the traditional and non-traditional older student in relation to retention, academic success, and selected aspects of educational goals. Greer reports the following:

1. the older student is more successful academically;
2. the older student has a higher attrition rate but leaves with a successful academic record;
3. the older student is more sure of her educational goals which are more job oriented;
4. the older student has higher expectations for remaining at college long enough to earn a degree; and,
5. the older student feels college is primarily a place to take courses with little importance placed on meeting new people, making friends, and participating in student activities.

Greer feels the traditional and older student age groups represent different sub-groups with unique characteristics.

Amarillo College has a large population of non-traditional returning students. According to the Student Profile (1978), approximately 40 percent of all credit students are over age 25 years, the average median age is 24 years, and 60 percent of the students are enrolled part-time. These non-traditional learners show special characteristics in regard to educational background, aspirations, reasons for attending college, and choice of a college major as indicated by the following charts from the Student Profile (1978).

Table 5

## AC Students' Educational Level Completed by Age

Age	Diploma	High School Diploma	Cert. of Comp.	Assoc. Degree	Bachelor's Degree	Master's Degree or Higher
17-19 %	6	92	1	0	0	0
N	71	1,019	10	2	0	0
20-24 %	7	83	4	2	2	2
N	84	1,071	53	26	22	22
25-29 %	8	70	5	4	8	5
N	60	544	35	29	65	37
30-39 %	10	64	4	5	9	8
N	79	513	35	36	70	62
40-49 %	14	60	5	6	10	5
N	48	200	17	21	32	18
50-Up %	13	54	4	3	16	10
N	18	76	6	4	23	14

(Student Profile, 1978, p.24)

Table 6

## Educational Goals of AC Students by Age

Age		No Formal Degree	Cert. of Comp.	Assoc. Degree	Bachelor's Degree	Master's Degree or Higher
17-19	%	3	9	26	36	26
	N	24	65	186	263	185
20-24	%	8	10	30	32	20
	N	58	76	231	251	154
25-29	%	11	11	31	32	15
	N	54	52	144	153	69
30-39	%	12	11	32	32	13
	N	61	56	176	167	67
40-49	%	23	11	38	21	7
	N	54	26	87	48	16
50-Up	%	38	18	21	15	8
	N	40	18	21	15	8

(Student Profile, 1978, p.26)

Table 7

## AC Student Reasons for Going to College by Age

Age	Self Emp.	V.A. or Soc. Sec.	Develop Skills for New Job	Prep. for Transfer to 4 Yr. School	Improve Skills for Current Job	Career Exploration	Gen. Knowledge & Personal Satisfaction
17-19 %	6	1	27	35	4	18	6
N	44	8	201	251	30	133	41
20-24 %	8	2	31	21	13	16	7
N	64	13	236	159	102	121	56
25-29 %	13	6	26	12	21	10	11
N	60	26	128	58	99	45	52
30-39 %	11	5	29	10	20	10	15
N	60	26	153	52	106	52	77
40-49 %	10	4	24	5	28	6	22
N	23	9	53	12	60	14	50
50-Up %	11	1	18	6	29	6	27
N	11	1	18	6	28	6	26

(Student Profile, 1978, p.28)

Table 8

## AC Students' Reasons for Selecting Majors by Age

Age		Special Interest	Job Opportunities	Prior Experience	Salary	Friends, Relatives	Reputation of Program
17-19	%	61	17	8	10	3	1
	N	374	102	51	62	18	5
20-24	%	55	20	15	6	2	2
	N	362	129	96	39	16	14
25-29	%	46	21	21	7	3	2
	N	187	86	83	29	13	7
30-39	%	52	19	23	4	1	1
	N	221	84	98	18	6	6
40-49	%	48	19	27	3	1	2
	N	90	36	51	5	2	4
50-Up	%	63	18	17	1	0	1
	N	47	14	13	1	0	1

(Student Profile, 1978, p.29)

In summary, the following information about the non-traditional student at Amarillo College is reflected in the Student Profile (1978):

1. The non-traditional age student is more likely not to have earned a high school diploma than the traditional age student.
2. The non-traditional age student is more likely to have earned a college degree than the traditional age student.
3. A greater proportion of traditional age students seek advanced degrees.

4. The non-traditional age student is more motivated to enroll to improve her current job skills and for general knowledge and personal satisfaction.

5. The non-traditional age student is more likely to choose a college major based on prior experience.

#### Changes in Women's Roles

The decade of the '70's has produced major changes in the roles of women. At the beginning of the decade, about 31 million women, or 43 percent of all U.S. women 16 years old and over, were in the labor force. By 1979, 43 million, or more than half of all women, were working or looking for work. This 12 million increase in the number of working women accounted for 60 percent of the growth of the entire U.S. labor force over the decade (Rhome, 1980).

The reasons women have returned to the work force are varied. Many women work because they have to. Rhome (1980) reports that nineteen million women in America are single, separated or divorced and, of this number, many have small children who depend upon them for support. For the 52 percent of husband-wife families in which both partners are employed, the working wives provide a significant source of income for their families (Number of Wives in Labor Force, 1981). Rising inflation often makes the wife's additional income a family necessity. Yet in addition to financial reasons, there may be personal reasons for returning to work. These reasons include a need for personal growth and satisfaction (Rhome, 1980).

Other societal factors which are affecting women's roles are summarized by Beausand (1976), the Carnegie Commission on Higher Education (1973), and Smallwood (1980). These factors include: (1) an increased life span from an average of 48 years in the early twentieth century, to an average expectation of 74 years today; (2) women remaining single longer; (3) a trend toward smaller families; (4) the reduction in time demand of housework made possible by technological advances; (5) interrupted career patterns which necessitate the return to higher education for the updating of skills; and, (6) increasing availability of educational opportunities because of changing institutional policy and easier financial and geographical accessibility.

As women face new choices and options, the return to higher education is often the choice for either increased personal fulfillment or the hope for better career opportunities (Smallwood, 1980). Rhome (1980) explains that the re-entry women students often fall into one of the following categories: (1) retoolers--women who have been out of the workforce for five to ten years who seek to sharpen their skills for employment; (2) present changers--women who have decided upon a new occupation and are preparing to enter it; (3) potential changers--women who are broadening their educational backgrounds as they examine new career options; (4) career upgraders--women who prepare themselves for major career advancement; and, (5) lifestyle transitionals--women who pursue educational interests as a result of a changing lifestyle.

More and more women are accepting the attitude that career development is a lifelong phenomenon starting in the early years and extending throughout the lifespan. According to Newburg (1978), the traditional college years are critical for the development of attitudes, skills, and knowledge important for future occupational activities. However, women frequently fail to use the traditional college stage to its fullest possible extent because of the pull between the world of work and family. Other women never have a traditional college experience. Regardless of their life experiences, most women begin to share many of the same questions as they enter developmental periods in their lifespan. According to Sheehy (1976), the lifespan between the ages of 28 and 32 is a time when men and women most commonly reappraise the decisions of the early 20's with the results of either altering or deepening commitments which causes more self-direction toward life's goals. Muskat (1978) explains that during the stage of midlife transition, a change takes place in the way in which women experience time, and there is the need to infuse the future with meaning. It is a time of increased intensity and impatience for mastery and a time to bring renewed meaning into one's life. Brandenburg (1974) describes this period as a time of renewed identity crisis when a reappraisal of oneself and one's goals and commitments take place.

The use of this career and life planning process is becoming a major technique in helping women define new roles and goals. Bolles (1979) feels that career and life planning is useless, unless at the

end of the process you are very definite about exactly what you want to do--at least for the immediate future. Useful life planning requires logical decision-making. According to Catalyst (1980), this requires the following steps: (1) define the object of the decisions and set a goal; (2) explore and evaluate resources; (3) state the alternatives; (4) evaluate the possible outcomes and risks of each alternative; and, (5) make trade-offs and then the final decisions. Career planning begins when you gather information about yourself and the reality around you and use some helpful ways of organizing that information (Burack, Albrecht, & Seitler, 1980). To gather that information, Burack, Albrecht, and Seitler (1980), suggest the following: (1) discover what values are important to you for your career; (2) Bring these values to your career decisions; (3) find how your values blend or create points of conflict with those of work associates; (4) discover how your values can change in the course of your life and career; (5) discover what a career style is and how it can help you create or choose a better working environment; (6) discover what your skill preferences are; and, (7) discover how to gain a sense of direction on careers.

For the woman who has made the choice to return to school, there are some common assumptions which Muskat (1978) explains. These include that a woman returning to college is (1) in a state of psychological transition; (2) is confronted with conflicting pressures; (3) may have anxieties from feelings of confusion; and (4) may have increased feelings of self-esteem. With these assumptions in mind, Muskat (1978) feels

that a comprehensive curriculum should be provided to help the returning female student make a successful transition back to school. This curriculum should include awareness of one's self and one's skills, expansion of options, vocational and occupational information, academic planning, strategies for implementation, and a look to the future.

Today's returning woman student can choose from a large selection of occupations and careers. No longer is there men's work and women's work. Work is determined by interest and ability, not sex. Yet research as reported by McCants (1978) shows that women fear and resist numerics or math. These mathematical competencies are a basis for most, if not all, technologies. The curricula on math education should be examined in response to the needs of women students and new curricula should be developed in an attempt to meet these needs. (McCants, 1978).

A recent study reports that despite the current emphasis on women's choices, women continue to prefer the traditional program areas. McCants (1978) notices that even though women represent 59 percent of the overall enrollment, they comprise 85 percent of the enrollment in traditional women's programs and only 3 percent in the traditional men's programs.

However, women's enrollment in medical and law school continues to rise. According to "Enrollment's Up But Women..." (1980), women's enrollment in medical school has risen 6.8 percent since 1978 and women now represent 25.3 percent of all medical students. Women's enrollment in law school has risen 5 percent since 1978 and women now represent 31 percent of all law students. Other occupations that are non-traditional

choices for women are showing increases in the number of women as illustrated by the following chart:

Table 9

## Women As a Percentage of All Employed Persons

	1960	1970
Accountants	16.5	26.2
Architects	2.1	3.6
Engineers	0.9	1.6
Lawyers and Judges	3.5	4.9
Life and Physical Scientists	9.2	13.7
Dentists	2.1	3.4
Pharmacists	7.5	12.0
Physicians, including Osteopaths	6.9	9.3
Teachers, College and University	23.9	28.6

(Carnegie Commission on Higher Education, 1973, p.27)

Women's roles are constantly changing. Women are seeking new careers and new role definitions.

Special Needs of Re-Entry Women Students

The woman who has chosen the new role of student brings many conflicts, fears, and needs with her to the college campus. The average returning woman is described in studies by Benjamin (1979), Brandenburg (1974), Johnson (1977), Magill and Cirksena (1978), and Smallwood (1980). According to these studies, the average returning woman student is an

upper-middle-class woman with a family, who typically works few or no hours at a paid job, and has been away from school for at least several years. The typical re-entry woman is a part-time student enrolled for six credit hours who has previously earned 16-30 college hours. Mitchell (1979) explains that other characteristics common to re-entering women include the following: (1) economic handicaps because of divorce, separation, loss of husband, or lack of sufficient total family income; (2) dramatic loss of self-confidence; (3) lack of basic skills for college survival such as math, study skills, or language abilities; (4) lack of goal-orientation so life changes bring her back to college confused and ill-prepared; and, (5) lack of skills and information to make educated choices about employment possibilities.

Eliason (1978) describes a special group of returning students called displaced homemakers. This group includes women left alone because of divorce or death of spouse. Eliason recommends new legislation to aid these educationally disadvantaged women which will provide financial assistance, provide for non-taxable assistance by employers for career advancement education, and broaden the definition of eligibility for displaced homemakers.

Needs perceived by re-entry women students are described by Mitchell (1979) and Ray (1979) to include the acquisition of mental readiness to return to college, determination of intellectual capacity to achieve, procurement of financial aid, efficient time management, career advancement, overcoming test anxiety, finding an identity,

procurement of employability skills, acceptance of more responsibility at work, and completion of a degree.

Driscoll (1975) reports on several questions concerning the re-entry woman student. The conditions that made the women's return to school possible include adequate finances, fewer home commitments, encouragement from significant others, and a stronger self-image. The primary obstacles in returning to school include home responsibilities, resistance from spouse, financial difficulties, and time limits. After returning to school, the problems that appear overwhelming include conflicts between academic and home responsibilities, coping with school structures, concerns about course work, and time limits, schedules, and priorities. Some suggestions for special service include career information, special orientation sessions, and the educating of school personnel to relate to the needs of returning students.

Perhaps the most common concerns for the returning woman are about her own identity and self-esteem (Hetherington & Hudson, 1981). The returning woman may need support from others to help overcome her lack of self-confidence and the resistance to her new role by family and friends. She may lack the necessary abilities to assert herself and to make decisions in the school situation (Johnson, 1977).

Many of the practical or concrete needs experienced by women returning to school are shared by other students on campus. Yet the uncertainty and insecurity of the women may be increased by college

services that are geared for younger students in a different life situation (Brandenburg, (1974).

Smallwood (1980) stresses that women need to coordinate family and job responsibilities before they can feel free to focus on academic studies. Other concerns are choosing courses, acquiring basic study skills, and exploring their own academic potential.

The personal needs of returning women students are examined by Berkove (1979). Berkove reports that women felt guilty about spending too little time with children, neglecting housework, and spending too little time with husbands. Other problems are time for the woman herself, taking on too many responsibilities, and integrating the responsibilities of mother, wife, and student.

Many of the re-entry women find their return to school causes stress and change in their relationships with their families (Roach, 1976). Roach explains that as the woman begins to achieve success on the campus, those persons closest and most important to her become less accepting of her, and they act negatively or withdraw. The most stressful period for the returning woman is the first semester back when the greatest number of personal and family adjustments must be made (Berkove, 1976).

Berkove (1976) explains that the family can help make a woman's transition to college more successful. A woman needs the cooperation, understanding, and support of the family, especially her husband. A woman also needs help with a change in the division of household labor. A lack of change is often due to a woman maintaining the status quo out

of feelings of guilt or in anticipation of the husband's negative reactions.

The family that best handles the stress of a returning woman to school is described by Hooper (1979a) as one in which the marriage is already in some ways nontraditional in role assignments and one in which the husband agrees with his wife's decision and is more supportive in household tasks. Other results by Hooper (1979b), indicate that the longer a wife is in school, the higher the husband's anxiety is, probably due to a concern about what career choices the wife will make. The more anxious a husband is, the less supportive he is of his wife. Hooper indicates that most women add the student role in addition to all the family roles and suffer considerable guilt over an apparently nonexistent negative impact on the family.

The following impact on the marriage and family of the woman returning to school is described by Katz (1976): (1) many husbands and wives feel that the marriage has improved and practically no one reported the marriage has suffered; (2) many husbands and wives report that the family has drawn closer together and the effect on the children is positive and includes greater independence, responsibility, and interest in school with the children increasing their respect for their mother; and, (3) nearly all married women students report increased self-awareness, self-esteem, and greater happiness in their personal lives.

Sciles (1978) emphasizes that life-long learning is one of the components of a satisfying, balanced life. There are four stages of

understanding and appreciating each educational opportunity. These include: (1) what's happening; (2) survival; (3) meaning or mission; and, (4) effectiveness. The returning woman student will work through this progression with increased self-confidence and better controlled life management techniques resulting in workable patterns for the student, spouse, and families.

In order to help the families of the returning woman student make good adjustments, colleges need to offer family counseling soon after the woman's re-entry. According to Hooper (1979a), husbands would be helped by counseling to clarify the reasons for the woman's return to school, the demands of the student role, and their expectations for the performance of household tasks.

The returning woman student has special needs because of her family and job responsibilities and her perceptions of her academic abilities. The college needs to be aware of these needs and develop programs to help ease them.

#### Student Services to Meet Special Needs

Student services cannot be separated from the total higher education enterprise. According to Brodrinski (1978), the developments which affect higher education affect student services. Student services need to be futuristic and become sensitive to the developments which are occurring.

Some of the current developments involving the returning woman students have already been described. In summary, Elovson (1980) reports that the enrollment of female returning students has risen 19 percent in the last two years while general enrollment has decreased. Since 45 percent of all women in public higher education are now enrolled in community colleges (Elovson, 1980), this large minority group represents new challenges for student services.

Other changes for student services are reported by Brodrinski (1978). These include the following: (1) reduction of resources; (2) increase in internal accountability; (3) focus on individual goals; and, (4) a revival of student services goals which will enhance the competitive position of the institution and help the general retention of enrolled students.

A survey by Amarillo College (Educational Needs and Perceptions, 1980) reports the reasons given by community adults concerning why they are not planning to continue their education. The reasons reported most often were the following: (1) I'm too busy with family obligations; (2) my job prevents me from enrolling; (3) the courses I would like are not offered at a convenient time; (4) I'm too old; and, (5) it costs more than I can afford. These sort of responses should be analyzed to produce the development of student services to change these from negative reasons to positive opportunities for meeting the special needs of non-traditional students.

Several studies have been conducted to discover the most needed services by the returning students. The most needed services as

explained by Lance, Lourie, and Mayo (1979) include the following:

(1) designated re-entry admissions counselor; (2) appropriate orientation to campus; (3) an exclusive lounge area; (4) peer counselors; (5) specialized credit courses for re-entry students; (6) speed reading; (7) paper writing skills; (8) individual counseling; (9) career exploration; (10) educational-vocational information; (11) workshops on career development and communication skills; and (12) child care. The differences in responses between male and female re-entry students reflect that the females had a stronger need for child care, exclusive lounge area, peer counselors, and orientation to campus while the males preferred speed reading, note-taking, and study skills.

A study by Malin, Bray, Dougherty, and Skinner (1980), reports that the research does not support the general contention that adult women face special problems in coping with the college experience. In fact, they find men appear to be less successful in their adjustments. These problems may be explained by more demands on their time and their greater emphasis on job goals, rather than on intellectual goals in college.

Studies by Mangano and Corrado (1979a and b) reveal the following needs of adult learners: (1) pre-registration as well as speedy registration procedures; (2) life-experience credit; (3) evening, weekend and summer classes; (4) independent study courses; (5) vocabulary and math skill improvement; (6) concentration, memory, and study skills improvement; and, (7) longer class periods at night and weekends.

Throughout hearings concerning the returning women students in California, a clear call is made for such special services as child care, adequate financial aids, instructional offerings which develop marketable and academic skills as needed, and strong support services including career counseling. Other needs are short courses, flexible scheduling, open entry/open exit classes, and off-campus offerings (Mitchell, 1979). In other needs reported by Johns (1979), women want part-time classes under unit tuition. These women expressed anger and frustration because they were not offered flexible scheduling and a special orientation program for older students. Results of a study by Kelman and Stanley (1974) indicate that the highest priority needs are convenient day care, orientation to campus, social skill training, and social contact with peers.

Student services vary from campus to campus. Some of the basic services may include housing and food service, medical insurance and health care programs, student employment and graduate placement services, counseling, financial aid, and extracurricular activities. Re-entry women may need these basic services plus the addition of particular support services such as on-campus child care facilities, women's re-entry counseling programs, information on transfer and residency requirements; and refresher courses in basic skills. The basic support services may not be equally accessible to or suitable for returning woman students (Creange, 1980).

The recruitment of returning women students is a student service which may be relatively new. However, the recruitment is very important in drawing these new students. Weinstein (1980b) reports that the

information that adult women need to know falls into three categories: (1) information about the institution's educational program; (2) information which involves enrollment, transfer of credits, and course requirements; and, (3) information about services and special programs such as financial aid and women's re-entry programs. The institution can develop general brochures, booklets or handbooks, posters, and develop a public awareness campaign. Other recruitment activities include an information fair on campus, a campus open house, a re-entry speakers bureau, workshops for women, and the incorporation of information about re-entry women in already existing recruiting strategies (Weinstein, 1980b).

Obtaining essential information about an institution and its services for a returning woman may be helped by the preparation of a booklet designed specifically to meet the needs of this group. A report by Carter (1978) on the Second Wind Program at the University of Maryland describes such a booklet. This handbook was compiled by returning women and staff and provides a list and description of support services particularly relevant to re-entry women along with the phone number of a person or office to call for additional information about each item. Maes (1979) reports on a similar handbook devised by the staff at Northwestern University which also includes practical advice to women who are re-entering. Other information services can include a "hot-line" to help women obtain general information, a newsletter which is prepared especially for adult women students, a directory of adult students, faculty and staff willing to offer advice and information to potential

or newly enrolled re-entry women, the inclusion of information for and about re-entry women in existing information services, and a special reception to introduce re-entry women to the women's network and services (Creange, 1980).

Recognizing re-entry women in the regular campus publications and media activities will make the returning woman feel a welcome part of the college. Revising the student handbook and other campus publications to include this group in the content and pictures is important. Letters addressed to students should not be written only to the traditional student point of view (Brodrinski, 1980).

Since most re-entry women commute to college classes, transportation services should be analyzed. Some suggestions by Creange (1980) include working out an agreement with community bus lines for campus service, arranging for dial-a-ride or dial-a-bus service from central pick-up points, establishing a student minibus system, and considering tuition rebates to help commuting students defray the cost of driving to campus.

Lack of food service may be a problem for re-entry women, particularly evening students who are juggling responsibilities. Creange (1980) suggests that the institution can extend the hours of the cafeteria service where possible, locate vending machines in a central location, and provide a map at registration showing location, type of food service, and hours of operation.

Medical insurance and health care services need to be evaluated with the needs of the returning students in mind. Concerns about medical insurance include evaluating health insurance policies to offer plans which equitably serve full-time, part-time, day, and evening students without age limitations and which can be extended year round and offer the opportunity to purchase family plans. Needs regarding health care include services to offer adequate services both during the day and evening and services to deal with problems of mid-life women. Other health related services could include an emergency contact number so re-entry women could be contacted immediately in case of family emergency and the development of specific policy to handle missed classes or extended absences due to family illness (Creange, 1980).

Providing legal counseling for students is a relatively new concept for many colleges. Where this service is available, Creange (1980) suggests that the persons providing the legal services be knowledgeable about problems re-entry women may face such as divorce and landlord/tenant disputes. A brochure listing the campus legal service and other referral sources could be developed.

Since extracurricular activities are a big part of the campus learning process, these should be developed to include returning students. Brodrinski (1980) emphasizes that despite the myth that adult students don't need or aren't really interested in student activities programs, adult students have become involved with structured activities when appropriate opportunities are provided. Creange (1980) suggests

that the participation of returning women in extracurricular activities can be encouraged by the development of a re-entry student association, encouragement of participation in campus government, designation of a place for re-entry women to meet such as a lounge, distribution of tickets for special events, and development of activities for re-entry women and their families.

Many of the returning women students lack confidence in their own basic skills and abilities. Many women who have thought about returning do not do so because they fear they lack the necessary skills to compete with the younger students or are simply not at a skill level which will enable them to return to school successfully. This anxiety about academic concerns is reported in studies by Driscoll (1975), Lance and Lourie (1979), Mitchell (1979), Managano and Corrado (1979a), and Smallwood (1980).

Basic skills programs and refresher courses can help re-entry women improve classroom skills and academic achievement, increase self-confidence, and raise self-esteem and level of aspiration. Not all returning women will need help with basic skills but many do need help in learning how to study, how to improve reading ability, how to take examinations, how to write college papers, how to brush up in science or math, how to communicate and give presentations in class, how to manage time, and how to use the learning resource center (Prahl, 1980). According to Prahl, the institution can help meet these needs with workshops, courses, and tutorial assistance. Other support activities include self-paced individual learning courses, reading clinics or labs,

writing labs, nonthreatening math brushup courses, and time management workshops. These programs can be helpful to the institution as well as the students because it will attract new students, keep attrition rates down by helping women make the transition to college work, and encourage returning women students to realize their academic potential.

One of the primary needs most often mentioned by returning students is financial aid (Magill & Cirksena, 1978, and Ray, 1979). A report by Malin, Bray, Dougherty, and Skinner (1980) states that older students often suffer financially in order to attend college. More than 25 percent of the returning students in their study reported that their incomes decreased substantially when they returned to school. Even though federal and state student assistance programs have grown dramatically in the past fifteen years, many adults incorrectly assume they are not eligible for these programs because they never took college entrance examinations, did not have superior high school grades, are not needy enough, are too old, or wish to attend school on a part-time basis (Dunkle, 1980). To reach potential re-entry women effectively, Dunkle explains that institutions need to develop recruitment and descriptive financial aid materials specifically aimed at returning students, provide financial counseling on a walk-in basis and during hours convenient to re-entry women, and train financial aid personnel about working with non-traditional students. Since many women are intimidated by the apparent complexity of the application process, institutions need to simplify

aid applications as much as possible and make sure the forms are appropriate for both the traditional and non-traditional students.

Dunkle (1980) suggests that another obstacle for women is cash flow, not financial need in the traditional sense. Some re-entry women can only afford to pay for their education after it is completed. Institutional flexibility such as a tuition deferral program, payment by credit card or in installments over time, options for loan consolidation or income contingent repayment of loans whenever possible, and the unbundling of the price structure of the institution are suggestions to help (Dunkle, 1980). The reduction of tuition or other cost breaks could include the waiving of all or part of the tuition of low income adult learners, the waiving of all or part of the costs for the first few classes or terms, the offering of a family discount program, the providing of package prices for classes scheduled for unpopular times, and the providing of low-cost child care. Since so many returning women are part-time students, they may not know they are eligible for financial aid. Yet the institution can set aside a certain amount of the institutional budget for scholarships for needy part-time students who do not qualify for federal aid, or initiate a Re-entry Fund to provide grants, loans, or work opportunities for less-than-half-time students (Dunkle, 1980). Other financial problems are caused by the structure of the present federal student aid programs. Dunkle explains that for re-entry women students who do not receive federal aid, the institution could develop a method for calculating need which would exclude the

consideration of home equity from the needs calculation, provide for more equitable treatment for independent students, and allow a spouse's income to be excluded from the need calculation. Each institution must examine its own system and devise new ways to help the returning student.

Re-entry women students need counseling services which are relative to their unique situations. Academic, personal, and career or vocational counseling are needed. These can be offered in a variety of ways as reported by Weinstein (1980a). These include traditional individual counseling, individual peer counseling, group counseling, support groups, rap groups, assertiveness training, brown bag lunch groups, special interest groups, credit or non-credit courses which focus on specific subjects, weekend seminars, pre-admissions programs, and parenting courses. Counseling needs to begin in the recruitment of re-entry women as these potential students make the decisions to return. After the decision to return is made, academic advising needs to be done to insure the correct information about credit transfer and degree planning is understood. Vocational counseling is necessary because most returning women attend school with job preparation as a major goal. Yet many returning women are not career certain and need help in deciding on the right career and degree choice. Ways to make all the counseling services more effective are discussed by Weinstein (1980a). She suggests that the institution should increase the awareness of the counselors about the needs of returning women, periodically assess the effectiveness of counseling programs, provide counseling services at a variety

of times appropriate to re-entering women, include women counselors on the staff, and evaluate tests for appropriateness with older students. Adams (1981) recommends that the qualities of an ideal counselor for adult students include counseling skills, organizational skills, and a sensitivity to unconventional needs in a person's life and work.

Special re-entry programs specifically for women have been developed in many colleges. Mezirow and Rose (1978) report that since 1970, over 300 community colleges have established re-entry programs which are designed to foster a transformation in the way women see themselves and their relationships and to assist them in making plans for change. The major objectives in most of these programs are to help the returning woman student deal with re-entry problems and to provide a supportive atmosphere in which the returning student can assess her abilities and goals and plan for the future (Magill & Cirksena, 1978). One model re-entry program called Second Wind is described by Carter (1978) as one which is run by the returning students themselves with a minimum of professional staff. This allows leadership training for the volunteer leaders who conduct a series of workshops and courses for new re-entering students. A study by Magill and Cirksena (1978) reports the most used services of re-entry programs include the women's re-entry program office, staff counselor for re-entry women, pre-admission counseling, information center, and orientation class. Magill and Cirksena feel that re-entry programs are important so long as the social, psychological, and financial barriers to women's participation in education remain.

Often the returning woman has some previous college work which will play some role in her re-entry education plans. The longer a student has been out of school, the more likely it is she will lose transferable credits because of a change in her major or the age of past courses. She may be unable to fulfill her residency requirements or no longer fulfill graduation requirements because the institution she plans to enter has different requirements than the school where she earned her first credits (Fisher-Thompson, 1980). Institutions may help re-entry students by providing elective credit for old courses, offering CLEP testing, granting credit for prior experience, and helping students transfer from one institution to another.

The re-entry women have full-time commitment even though they may have part-time enrollment. Hall (1980) reports the following services can help this part-time student:

1. the easing of admissions requirements;
2. providing special registration considerations since many of these students have less flexibility on course times because of job responsibilities;
3. developing financial aid which is available to part-time students;
4. developing equitable fee structures to allow flexible fees for services;
5. providing flexible scheduling such as weekends, short-term evening classes which have longer class periods;

6. external degree programs;
7. block-scheduled courses so that students can include several courses in a small time segment; and,
8. extending hours in the offices of student services, child care facilities, and food services.

The providing of these services to meet special needs will be necessary because of the projected growth in the enrollment of returning women students. Prah1 (1980) reports that the projected increases for women in the labor market during the 1980's is 70 percent for women ages 25 to 54 years. Many of these women will require further education in order to play important and permanent roles in the labor force. Other women will be returning for goals of personal enrichment (Brandenburg, 1974). Weinstein (1980a) reports on a study completed by the Carnegie Council in 1980 which projects that by the year 2000, 52 percent of all undergraduate students will be women and that 50 percent of all undergraduates will be over the age of 22. Colleges and universities will be competing for this new market of students and the availability of special services will be a powerful marketing tool.

#### Summary

The returning woman student has become a growing minority group in higher education. Since women students were accepted in colleges around 1850, the numbers have increased until women now represent 52

percent of all undergraduates. The concept of adult learning is gathering new information and support for the role and the needs of the non-traditional adult learner. This concept, called andragogy, is expected to continue to grow. Women's roles have changed, especially during the last decade. More women are in the work force and this often requires re-training. Many other women are choosing to return to school for personal growth. These role changes are producing higher numbers of returning women students. The returning woman student has different student service needs than the traditional student. Modification of existing services and planning for special services to meet these unique needs will be necessary for institutions to recruit and retain this market of returning students.

## CHAPTER III

### METHODOLOGY

#### Introduction

A review of the literature revealed no formal published instruments devised to identify the student service needs of the returning student at that time. A personal conference with Dr. Lee Knowles, Executive Director of the American College Testing National Center for Educational Conferences, revealed the existence of the Adult Learner Needs Assessment under pilot study by the American College Testing Program (Knowles, L., 1980). This assessment was developed by the American College Testing Program to provide a valid and reliable evaluation of student service needs of adult learners.

#### Sample

A total of 150 students who met the following criteria participated in this research project: 1) a female student between the ages of 18-22 years taking credit course work at Amarillo College, or 2) a female student age 24 years or older taking credit course work at Amarillo College. The participants included both part-time and full-time students enrolled in Amarillo College class sections of English, government, or history. The class sections were randomly selected from the Amarillo College Spring Course Schedule (1981). The participants included both students at the West Campus and the Washington Campus.

Responses from students to match the following current composition of the Amarillo College student population were obtained.

Table 10

Student Composition of Amarillo College	
1.	46 percent traditional students
2.	54 percent non-traditional returning students
3.	60 percent day students
4.	40 percent night students

(Student Profile, 1978, p. 3)

A total of 170 questionnaires were returned. A stratified random sample was conducted to meet the following proportional sampling requirements which matched the current composition of the Amarillo College student population. A total of 150 responses were used in the study.

Table 11  
Responses for Random Sample

Student Composition Category	Number of Responses
1. traditional students	69
2. non-traditional returning students	81
3. day students	90
4. night students	60

(Student Profile, 1978, p. 3)

### Instrumentation

The Adult Learner Needs Assessment Survey was designed by the American College Testing Program to evaluate the education-related needs of adult learners. The criteria devised by the American College Testing Program for the Adult Learner Needs Assessment includes the following: (1) the instrument must contain items applicable to most postsecondary institutions; (2) the administration procedures for the instrument must be simple to understand; (3) each instrument must have a single topic orientation; (4) the instrument must provide data which may be easily translated into institutional action; (5) the resulting report of the survey data must be simple to read and use; (6) the reporting format must allow for flexibility and ease of interpretation; and, (7) the cost for using the service must be minimal (American College Testing Program, 1979).

The items for this instrument were developed after a thorough review of the pertinent literature, and after consultation with expert practitioners in the relevant fields. Preliminary versions of the instrument were reviewed by educators from a number of postsecondary institutions. The instrument was also piloted for clarity and accuracy by a small group of currently-enrolled college students. The observations and results from these experiences were used to assess content and construct validity. Following these reviews, a pilot version of this instrument with 120 items was administered to approximately 1,600 students at eight postsecondary institutions with use at some multiple

sites across the country. Data from the pilot administrations was analyzed to determine response patterns within and between institutions and to determine which items and sections seemed to confuse students. Following this analysis, by the American College Testing Program, the final form of the Adult Learner Needs Assessment Survey was developed with 105 items.

Plans to test the reliability of this instrument during 1982 have been established by the American College Testing Program. The scores of each group to which this instrument has been administered will be split into two halves and a needs indices developed for the scores in each half. The correlation between the indices of the scores of the two groups will be established to produce a correlation coefficient. This will be reported as the group reliability estimate (Voliga, 1982). A split half reliability test on a randomly selected group of ten respondents in this project was done. Using the Spearman-Brown formula, the reliability coefficient was .88 (Turney & Robb, 1971).

#### Design

Descriptive research methodology was used in this study. The present situation involving the auxilliary service needs of returning female students at Amarillo College was surveyed and characterized in terms of the available facts from the questionnaire results of the Adult Learner Needs Assessment.

According to Turney and Robb (1971), the limitations of the descriptive study include the following: (1) proof of causation is difficult to establish; (2) time at which the study is made is critical factor in the interpretation of the data; (3) sample must be representative of the population being investigated; and, (4) findings tend to be more valid if the sample is large than if the sample is small.

### Procedure

The steps followed for data collection include the following:

1. Class sections in government, history, and English at Amarillo College were randomly selected from the Amarillo College Spring Course Schedule (1981).

2. The instructors for these classes were contacted by the researcher by telephone and memo for the purpose of: (1) explaining to them the purpose and design of this research project; (b) securing their willingness to allow class time for students to participate; and (c) establishing a schedule for the use of the instrument (Appendix B).

3. At the scheduled time, the participating instructor read the prepared hand-out to his/her class which explained the purpose, requested that female students participate, and gave the directions for filling out the questionnaire (Appendix C).

4. Each participant then read the permission form sheet and her return of the questionnaire signified her permission for her participation. The University Human Subjects Review Procedures were followed.

5. Each participant filled out the Adult Learner Needs Assessment Survey instrument with the understanding her answers would be kept confidential. Finished surveys were placed in a manila envelope. When all completed surveys were collected, the envelope was sealed and the instructor returned the sealed envelope to the researcher.

### Analysis of Data

Research questions 1 and 2 did not involve intergroup comparisons. Each of these questions was treated by frequency distribution and group percentage. The SPSS Package was used for cross tabulation.

Since all subjects completed identical instruments, it was possible to make subgroup comparisons for research questions 3, 4, 5, 6, 7, 8, and 9, which required analysis of intergroup differences. Each of these seven questions was statistically treated by use of the Chi Square contingency coefficient at the .05 level of significance for differences between group proportions. The formula utilized was as follows (Hayslett, 1968, p. 139):

$$x^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

where

- (1)  $x^2$  signifies the sum of the relative squared differences;
- (2)  $O_i$  denotes the observed frequency of the  $i$  th class; and,
- (3)  $E_i$  denotes the expected frequency of the  $i$  th class.

The data for this study was nominal in nature, and nominal data usually requires treatment by a nonparametric method such as

Chi-square (Glass & Stanley, 1970). The Chi-square test was used to determine how well theoretical distributions fit empirical distributions (Spiegel, 1961).

A two-tailed test at the .05 level of significance was utilized for all subgroup comparisons in research questions 3, 4, 5, 6, 7, 8, and 9. Any result equal to or greater than 2.33 was considered to demonstrate a statistically significant difference at the 0.01 level between two subgroups being compared. Calculations were made by computer analysis. Graphic representations are presented to further illustrate the result of the study.

#### Summary

A total of 150 female Amarillo College students who met the criteria of being either between the ages of 18-22 years or age 24 years and over and in randomly selected classes reported on their student services needs through the use of the Adult Learner Needs Assessment survey. Results are reported in the following chapter.

## CHAPTER IV

### RESULTS

The analysis of data obtained from the Adult Learner Needs Assessment is presented in the following order: (a) description of subjects; (b) educational plans and preferences and the auxilliary service needs of the traditional student group; (c) educational plans and preferences and the auxilliary service needs of the non-traditional student group; (d) differences in the educational plans and preferences between the group of traditional students and the group of non-traditional students; (e) differences in auxilliary service needs between the group of traditional students and the group of non-traditional students; (f) differences in auxilliary service needs pertaining to life skills development between the group of traditional students and the group of non-traditional students; (g) differences in auxilliary service needs pertaining to career development between the group of traditional students and the group of non-traditional students; (h) differences in auxilliary service needs pertaining to educational planning between the group of traditional students and the group of non-traditional students; (i) differences in auxilliary service needs pertaining to associations with others between the group of traditional students and the group of non-traditional students; (j) differences in the educational plans and preferences between the group of Washington Campus students and the group of West Campus students;

(k) differences in the auxilliary service needs between the group of Washington Campus students and the group of West Campus students; and  
(l) research outcome.

#### Characteristics of Participants

The 150 participants were compared according to (a) campus attended; (b) age; (c) racial/ethnic groups; (d) marital status; (e) number of dependent children; (f) highest level of education completed; (g) length of time since last previous enrollment; (h) family income; (i) current employment description; and (j) type of occupation. The results of these comparisons are presented in Table 12.

Table 12

## Characteristics of Participants

Subject Characteristics N = 150	Number	Percentages by Total Group
<b>Campus Attended</b>		
Washington Campus	116	78.9
West Campus	<u>31</u>	<u>21.1</u>
Total	147	100
<b>Age Category</b>		
Traditional	69	46.6
Non-Traditional	<u>79</u>	<u>53.4</u>
Total	148	100
<b>Racial/Ethnic Group</b>		
Afro-African Black	4	2.7
Caucasion	139	92.7
Mexican-American	2	1.3
Asian-American/Oriental	2	1.3
Other	<u>3</u>	<u>2.0</u>
Total	150	100
<b>Marital Status</b>		
Unmarried	93	62.0
Married	53	35.3
Separated	3	2.0
Prefer not to respond	<u>1</u>	<u>.7</u>
Total	150	100
<b>Number of Dependent Children</b>		
None	96	64.4
One	21	14.1
Two	23	15.4
Three	7	4.7
Four or more	<u>2</u>	<u>1.3</u>
Total	149	100
<b>Highest level of Education Completed</b>		
High School	109	76.8
G.E.D.	10	7.0
Associate Degree	22	15.5
Bachelor's Degree	<u>1</u>	<u>.7</u>
Total	142	100

Table 12-Continued

## Characteristics of Participants

Subject Characteristics N = 150	Number	Percentages by Total Group
<b>Length of Time Since Last Enrollment</b>		
Previous semester	105	71.4
1 year	7	4.8
2-5 years	12	8.2
6-10 years	11	7.5
More than 10 years	<u>12</u>	<u>8.2</u>
Total	147	100
<b>Current Family Income</b>		
Less than \$5,999	24	17.8
\$6,000-\$11,999	26	19.3
\$12,000-\$19,999	30	22.2
\$20,000-\$39,000	41	30.4
Over \$40,000	<u>14</u>	<u>10.4</u>
Total	135	100
<b>Current Employment Status</b>		
Employed full-time	44	30.8
Employed part-time	46	32.2
Caring for home/family	31	21.7
Unemployed	21	14.7
Retired	<u>1</u>	<u>.7</u>
Total	143	100
<b>Current Occupation</b>		
Clerical	29	31.5
Business/Sales	16	17.4
Professional	23	25.0
Service	5	5.4
Other	<u>19</u>	<u>20.7</u>
Total	92	100

The majority of the participants were in the age range of twenty-four years or over. The traditional age student represented 46.6 percent of the total group and the non-traditional age student group represented 53.4 percent of the total group. A large majority of the

participants were Caucasian with only small percentages of the other racial/ethnic groups represented. A majority of the participants were unmarried. This category included single, divorced and widowed women. A majority of the participants had no dependent children. The percentage results of the groups having either one child or two children were very similar to each other. A majority of the participants had completed high school as the highest level of education. Only a very small percentage of the participants were educated at the bachelor's level. A majority of the participants had registered the previous semester in courses for credit. Most of the participants' total family incomes were in the \$12,000-\$19,999 range or \$20,000-\$39,000 range. A majority of the participants were employed. About the same percentage were employed full-time as those employed part-time. Most of these currently employed were working in the clerical field.

#### Preferences and Needs of Traditional Students

The first research question to be addressed was Question 1: "What were the educational plans and preferences and the auxiliary service needs of the traditional student as measured by the Adult Learner Needs Assessment Survey?".

The frequency of responses concerning the educational plans and preferences of the non-traditional student group was tabulated. The results are presented in Table 13.

Table 13

## Educational Plans and Preferences of Students

Item	Responses								Chi-Square	
	Major Reason		Minor Reason		Not a Reason		Totals		x <sup>2</sup>	p
	N	%	N	%	N	%	N	%		
A. Reasons for continuing Education										
1. To obtain a higher degree									4.72	.10
Traditional	52	75.4	12	17.4	5	7.2	69	47.9		
Non-traditional	46	61.3	15	20.0	14	18.7	75	52.1		
2. For personal satisfaction									.04	.10
Traditional	59	85.5	10	14.5	0	0	69	47.9		
Non-traditional	63	84.0	12	16.0	0	0	75	52.1		
3. To obtain or maintain certification									3.13	.21
Traditional	41	59.4	16	23.2	12	17.4	69	48.3		
Non-traditional	39	52.7	13	17.6	22	29.7	74	51.7		
4. To meet job requirements or improve job skills									.46	.80
Traditional	36	52.2	15	21.7	18	26.1	69	47.9		
Non-traditional	42	56.0	13	17.3	20	26.7	75	52.1		
5. For general self-improvement									3.08	.22
Traditional	46	66.7	20	29.0	3	4.3	69	47.9		
Non-traditional	59	78.7	15	20.0	1	1.3	75	52.1		
6. Meet new people									2.86	.24
Traditional	18	26.1	27	39.1	24	34.8	69	48.3		
Non-traditional	16	21.6	22	29.7	36	48.6	74	41.7		

Table 13-Continued

## Educational Plans and Preferences of Students

Item	Responses								Chi-Square	
Groups	Major Reason		Minor Reason		Not a Reason		Totals		x <sup>2</sup>	p
	N	%	N	%	N	%	N	%		
7. To become better educated & informed									2.41	.30
Traditional	51	73.9	16	23.2	2	2.9	69	47.9		
Non-traditional	62	82.7	10	13.3	3	4.0	75	52.1		
8. To improve my income									7.49	.03
Traditional	54	78.3	9	13.0	6	8.7	69	48.3		
Non-traditional	42	56.8	19	25.7	13	17.6	74	51.7		
9. To learn a new occupation									4.47	.11
Traditional	49	71.0	10	14.5	10	14.5	69	47.9		
Non-traditional	41	54.7	20	26.7	14	18.7	75	52.1		
10. To learn how to solve personal or community problems									1.22	.55
Traditional	9	13.0	28	40.6	32	46.4	69	48.3		
Non-traditional	14	18.9	25	33.8	35	47.3	74	51.7		
B. Source of funds for education	Major Source		Minor Source		Not a Source		Totals		x <sup>2</sup>	p
1. Personal or family savings									12.27	.01
traditional	38	55.1	19	27.5	12	17.4	69	48.6		
Non-traditional	24	32.9	17	23.3	32	43.8	73	51.4		

Table 13-Continued

## Educational Plans and Preferences of Students

Item	Responses								Chi-Square	
	Major Source		Minor Source		Not a Source		Totals		x <sup>2</sup>	p
	N	%	N	%	N	%	N	%		
2. Personal earnings										
Traditional	33	47.8	22	31.9	14	20.3	69	47.9	6.73	.04
Non-traditional	40	53.3	11	14.7	24	32.0	75	52.1		
3. Other family income										
Traditional	22	31.9	11	15.9	36	52.2	69	48.6	3.97	.14
Non-traditional	15	20.5	8	11.0	50	68.5	73	51.4		
4. Social Security benefits										
Traditional	4	5.8	4	5.8	61	88.4	69	48.6	4.25	.12
Non-traditional	1	1.4	1	1.4	71	97.3	63	51.4		
5. Veteran's benefits										
Traditional	3	4.3	0	0	66	95.7	69	48.6	.00	1.0
Non-traditional	3	4.1	0	0	70	95.9	73	51.4		
6. Educational grants										
Traditional	12	17.4	7	10.1	50	72.5	69	48.6	1.18	.56
Non-traditional	18	24.7	6	8.2	49	67.1	73	51.4		
7. Scholarships										
Traditional	12	17.4	4	5.8	53	76.8	69	48.9	1.17	.56
Non-traditional	8	11.1	5	6.9	59	81.9	72	51.1		
8. Student loans										
Traditional	9	13.0	8	11.6	52	75.4	69	48.6	.52	.78
Non-traditional	11	15.1	6	8.2	56	76.7	73	51.4		
9. Funds from relatives or friends										
Traditional	12	17.4	7	10.1	50	72.5	69	48.6	5.18	.08
Non-traditional	4	5.5	7	9.6	62	84.9	73	51.4		

Table 13-Continued  
Educational Plans and Preferences of Students

Item	Responses								Chi-Square		
	Full-time		Part-time				Totals		x <sup>2</sup>	p	
	N	%	N	%	N	%	N	%			
C. Type of enrollment status	Traditional	47	71.2	19	28.8			66	46.8	7.97	.02
	Non-traditional	38	50.7	37	49.3			75	53.2		
G. Preference for class attendance		On-campus		Off-campus		No preference		Totals		.09	.96
	Traditional	50	72.5	1	1.4	18	26.1	69	46.6		
	Non-traditional	59	74.7	1	1.3	19	24.1	79	53.4		

\*Items D, E, F, & H are on the following pages.

Table 13-Continued

Educational Plans and Preferences of Students

Item	Responses														Chi-Square	
	Morning		Noon		Afternoon		Evening		Weekend		Totals		x <sup>2</sup>	p		
Groups	N	%	N	%	N	%	N	%	N	%	N	%				
D. Type of classes most convenient to attend Traditional Non-traditional	54	84.4	1	1.6	0	0	9	14.1	0	0	64	50.4	8.87	.07		
	40	63.5	2	3.2	3	4.8	17	27.0	1	1.6	63	49.6				
E. Frequency of course meetings each week Traditional Non-traditional	Once		Twice		3-4		5 or more		No preference		Totals		7.32	.12		
	6	9.1	23	34.8	25	37.9	1	1.5	11	16.7	66	16.7				
	16	21.6	31	41.9	20	27.0	1	1.4	6	8.1	74	52.9				

Table 13-Continued

Educational Plans and Preferences of Students

Item	Responses												Chi-Square	
	Adults		Mixed		Traditional		No Preference				Totals		X <sup>2</sup>	p
Groups	N	%	N	%	N	%	N	%	N	%	N	%		
F. Type of class preferred													10.50	.02
	Traditional	4	5.8	28	40.6	9	13.0	28	40.6			69		
Non-traditional	9	11.3	46	57.5	2	2.5	23	28.8			80	53.7		
H. Preferred class format													7.10	.14
	Traditional	29	42.0	12	17.4	5	7.2	13	18.8	10	14.5	69		
Non-traditional	30	38.0	24	30.4	9	11.4	6	7.6	10	12.7	79	53.4		

The responses pertaining to the educational plans and preferences of the group of traditional students yielded nominal data information. Therefore, percentages were used to conduct a Chi-square analysis. The number and frequency of response were used to identify preferences of the group. The traditional students selected the following reasons in rank order for continuing their education: (1) for personal satisfaction; (2) to improve income; (3) to obtain a higher degree; (4) to become better educated; and (5) to learn a new occupation. The major sources of educational funding were identified in rank order as the following: (1) personal or family savings; (2) personal earnings; and (3) other family income. A large majority of the traditional students preferred full-time enrollment status. The preferred class time was the morning time frame with night classes as a second choice. No one selected either afternoon or weekend time frames. The most preferred frequency of class meetings was 3-4 times weekly with a close second choice of twice weekly. The responses to preferred class type indicated equal responses to both mixed ages and no preferences. A large majority preferred on-campus locations. The most preferred class format was lecture.

The frequency of the responses concerning the auxiliary service needs of the traditional students was tabulated. The results are presented in Table 14.

Table 14

Auxilliary Service Needs of Students

Item	Responses													Chi-Square	
	Need lot of help		Need medium help		Need little help		Need no further help		Not important		Totals		% of pos. responses	χ <sup>2</sup>	p
	N	%	N	%	N	%	N	%	N	%	N	%			
<b>A. Life Skills Development</b>															
<b>1. Increasing math skills</b>															
Traditional	19	27.9	18	26.5	13	19.1	8	11.8	10	14.7	68	45.6	54.4	.58	.97
Non-traditional	25	30.9	24	29.6	14	17.3	8	9.9	10	12.3	81	54.6			
<b>2. Improving writing skills</b>															
Traditional	9	13.0	19	27.5	20	29.0	14	20.3	7	10.1	69	46.6	40.5	5.09	.28
Non-traditional	19	24.1	24	30.4	13	16.5	15	19.0	8	10.1	79	53.4			
<b>3. Develop speaking abilities</b>															
Traditional	6	8.7	19	27.5	24	34.8	17	24.6	3	4.3	69	46.6	36.3	16.59	.01
Non-traditional	14	17.7	36	45.6	12	15.2	9	11.4	8	10.1	79	53.4			
<b>4. Improving reading comprehension</b>															
Traditional	9	13.0	10	14.5	24	34.6	23	33.3	3	4.3	69	46.3	27.5	7.65	.11
Non-traditional	16	20.0	22	27.5	21	26.3	16	20.0	5	6.3	80	53.7			
<b>5. Increasing reading speed</b>															
Traditional	12	17.4	19	27.5	18	26.1	16	23.2	3	4.7	69	46.3	44.9	4.83	.44
Non-traditional	24	30.0	19	23.8	16	20.0	16	20.0	5	6.3	80	53.7			
<b>6. Improving study skills</b>															
Traditional	10	14.5	23	33.3	19	27.5	17	24.6	0	0	69	46.0	47.8	15.92	.01
Non-traditional	26	32.1	22	27.2	23	28.4	6	9.4	4	4.9	81	54.0			

\*percent of positive responses

Table 14-Continued

Auxilliary Service Needs of Students

Item	Responses													Chi-Square	
	Need lot of help -		Need medium help		Need little help		Need no further help		Not important		Totals		% of pos. responses	X <sup>2</sup>	P
	N	%	N	%	N	%	N	%	N	%	N	%			
7. Learning how to take tests better														10.37	.04
Traditional	12	17.4	19	27.5	23	33.3	15	21.7	0	0	69	46.4	44.9		
Non-traditional	30	37.0	18	22.2	22	27.2	9	11.1	2	2.5	81	54.0	59.2		
8. Handling pressure														8.11	.09
Traditional	10	14.5	12	17.4	26	37.7	20	29.0	1	1.4	69	46.0	31.9		
Non-traditional	20	24.7	18	22.2	28	34.6	11	13.6	4	4.9	81	54.0	46.9		
9. Learning how to make better decisions														21.48	.01
Traditional	5	7.2	12	17.4	35	50.7	17	24.6	0	0	69	46.0	24.6		
Non-traditional	17	21.0	23	28.4	10	28.4	10	12.3	8	9.9	81	54.0	49.4		
10. Becoming more independent														12.16	.02
Traditional	3	4.3	15	21.7	26	37.7	24	34.8	1	1.4	69	46.0	26.0		
Non-traditional	8	9.9	19	23.5	17	21.0	26	32.1	11	13.6	81	54.0	33.4		
11. Developing and demonstrating self-confidence														4.76	.32
Traditional	9	13.0	13	18.8	25	36.2	21	30.4	1	1.4	69	46.0	31.8		
Non-traditional	16	19.8	20	24.7	24	29.6	17	21.0	4	4.9	81	54.0	44.5		
12. Setting life goals														5.33	.26
Traditional	5	7.2	12	17.4	23	33.3	29	42.0	0	0	69	46.0	24.6		
Non-traditional	8	9.9	16	19.8	23	28.4	29	35.8	5	6.2	81	54.0	29.7		

Table 14-Continued

## Auxiliary Service Needs of Students

Item	Responses													Chi-Square		
	Need lot of help		Need medium help		Need little help		Need no further help		Not important		Totals		% of pos. responses	$\chi^2$	p	
	N	%	N	%	N	%	N	%	N	%	N	%				
13. Managing time better																
Traditional	4	5.8	14	20.3	33	47.8	18	26.1	0	0	69	46.0	26.1	9.95	.05	
Non-traditional	11	13.6	27	33.3	29	35.8	12	14.8	2	2.5	81	54.0				46.9
14. Budgeting money																
Traditional	8	11.6	17	24.6	27	39.1	17	24.6	0	0	69	46.3	36.2	7.50	.12	
Non-traditional	15	18.8	18	22.5	25	31.3	16	20.0	6	7.5	80	53.7				41.3
15. Maintaining physical and mental health																
Traditional	3	4.4	10	14.7	28	41.2	24	35.3	3	4.4	68	45.6	19.1	6.05	.20	
Non-traditional	8	9.9	22	27.2	28	34.6	20	24.7	3	3.7	81	54.4				37.1
16. Consumer rights and responsibilities																
Traditional	4	5.9	18	26.5	27	39.7	15	22.1	4	5.9	68	45.6	32.4	2.12	.72	
Non-traditional	6	7.4	23	28.4	30	37.0	13	16.0	9	11.1	81	54.1				35.8
17. Learning on own																
Traditional	1	1.4	11	15.9	33	47.8	24	34.8	0	0	69	46.3	17.3	20.36	.01	
Non-traditional	10	12.5	22	27.5	21	26.3	20	25.0	7	8.8	80	53.7				40.0
18. Use of leisure time																
Traditional	3	4.3	15	21.7	26	37.7	24	34.8	1	1.4	69	46.0	26.0	9.32	.06	
Non-traditional	12	14.8	20	24.7	22	27.2	21	25.9	6	7.4	81	54.0				39.5

Table 14-Continued

Auxilliary Service Needs of Students

Item	Responses													Chi-Square		
	Groups		Need lot of help		Need medium help		Need little help		Need no further help		Not important		Totals		% of pos. responses	x <sup>2</sup>
	N	%	N	%	N	%	N	%	N	%	N	%				
<b>B. Career Development</b>																
1. Choosing career																
Traditional	6	8.7	12	17.4	13	18.8	34	49.3	4	5.8	69	46.0	26.1	6.00	.20	
Non-traditional	13	16.0	8	9.9	20	24.7	31	38.3	9	11.1	81	54.0	25.9			
2. Identifying career areas																
Traditional	3	4.4	12	17.6	19	27.9	31	45.6	3	4.4	68	45.6	22.0	7.36	.12	
Non-traditional	10	12.3	18	22.2	18	22.2	26	32.1	9	11.1	81	54.4	34.5			
3. Learning about job opportunities																
Traditional	11	15.9	14	20.3	28	40.6	16	23.2	0	0	69	46.0	36.2	6.87	.15	
Non-traditional	15	18.5	22	27.2	26	32.1	13	16.0	5	6.2	81	54.0	45.7			
4. Learning about training requirements																
Traditional	8	11.8	13	19.1	29	42.6	18	26.5	0	0	68	45.6	30.9	8.56	.08	
Non-traditional	11	13.6	13	16.0	25	30.9	24	29.6	8	9.9	81	54.4	29.6			
5. Learning where to get necessary training																
Traditional	7	10.3	13	19.1	24	35.3	23	33.8	1	1.5	68	45.6	29.4	9.99	.05	
Non-traditional	14	17.3	7	8.6	23	28.4	28	34.6	9	11.1	81	54.4	25.9			
6. Getting some full-time job experience in field																
Traditional	10	14.7	10	14.7	18	26.5	24	35.3	6	8.8	68	45.6	29.4	10.08	.04	
Non-traditional	16	19.8	8	9.9	12	14.8	24	29.6	21	25.9	81	54.4	29.7			

Table 14-Continued

## Auxilliary Service Needs of Students

Item	Responses													Chi-Square		
	Need lot of help		Need medium help		Need little help		Need no further help		Not important		Totals		% of pos. responses	X <sup>2</sup>	p	
	N	%	N	%	N	%	N	%	N	%	N	%				
7. Learning about income potentials																
Traditional	7	10.1	14	20.3	29	42.0	19	27.5	0	0	69	46.0	30.4	21.03	.01	
Non-traditional	19	23.5	11	13.6	14	17.3	28	34.6	9	11.1	81	54.0	37.1			
8. Discussing career with people employed in field																
Traditional	8	11.8	15	22.1	33	48.5	11	16.2	1	1.5	68	45.6	33.9	17.97	.01	
Non-traditional	16	19.8	17	21.0	16	19.8	24	29.6	8	9.9	81	54.4	40.8			
9. Getting part-time work in career field																
Traditional	11	16.2	14	20.6	24	35.3	14	20.6	5	7.4	68	45.9	36.8	17.46	.01	
Non-traditional	12	15.0	13	16.3	10	12.5	24	30.0	21	26.3	80	54.1	31.3			
10. Learning how to find job openings																
Traditional	12	17.4	16	23.2	30	43.5	7	10.1	4	5.8	69	46.0	40.6	18.23	.01	
Non-traditional	16	19.8	14	17.3	15	18.5	21	25.9	15	18.5	81	54.0	37.1			
11. Learning more about job interviewing																
Traditional	9	13.9	17	24.6	25	36.2	16	23.2	2	2.9	69	46.0	37.6	6.04	.20	
Non-traditional	9	11.1	16	19.8	24	29.6	21	25.9	11	13.6	81	54.0	30.9			
12. Learning more about job application																
Traditional	7	10.1	13	18.8	28	40.6	20	29.0	1	1.4	69	46.0	28.9	8.30	.09	
Non-traditional	6	7.4	17	21.0	25	30.9	22	27.2	11	13.6	81	54.0	38.4			

Table 14-Continued

## Auxilliary Service Needs of Students

Item	Responses													Chi-Square		
	Need lot of help		Need medium help		Need little help		Need no further help		Not important		Totals		% of pos. responses	$\chi^2$	p	
	N	%	N	%	N	%	N	%	N	%	N	%				
13. Develop a vita																
Traditional	11	15.9	15	21.7	27	39.1	13	18.8	3	4.3	69	46.0	37.6	3.06	.55	
Non-traditional	15	18.5	19	23.5	22	27.2	18	22.2	7	8.6	81	54.0	42.0			
14. Learning about available jobs near to home																
Traditional	9	13.0	23	33.3	18	26.1	13	18.8	6	8.7	69	46.3	46.3	9.06	.06	
Non-traditional	17	21.3	13	16.3	16	20.0	21	26.3	13	16.3	80	53.7	36.6			
15. Identifying strengths and weaknesses																
Traditional	2	2.9	26	37.7	25	36.2	15	21.7	1	1.4	69	46.0	40.6	10.14	.04	
Non-traditional	14	17.3	23	28.4	24	29.6	16	19.8	4	4.9	81	54.0	45.7			
C. Educational Planning																
1. Selecting educational program																
Traditional	3	4.4	21	30.9	19	27.9	19	27.9	6	8.8	68	45.6	35.3	4.70	.32	
Non-traditional	10	12.3	19	23.5	17	21.0	25	30.9	10	12.3	81	54.4	35.8			
2. Getting advice about educational plans																
Traditional	6	8.8	23	33.8	19	27.9	14	20.6	6	8.8	68	45.6	42.6	3.36	.50	
Non-traditional	13	16.0	20	24.7	19	23.5	21	25.9	8	9.9	81	54.4	40.7			
3. Learning about entrance requirements																
Traditional	5	7.4	20	29.4	22	32.4	16	23.5	5	7.4	68	46.3	36.8	5.57	.24	
Non-traditional	10	12.7	20	25.3	18	22.8	17	21.5	14	17.7	79	53.7	38.0			

Table 14-Continued

## Auxilliary Service Needs of Students

Item	Responses													Chi-Square		
	Need lot of help		Need medium help		Need little help		Need no further help		Not important		Totals		% of pos. responses	N	P	
	N	%	N	%	N	%	N	%	N	%	N	%				
4. Selecting appropriate courses																
Traditional	5	7.4	19	27.9	21	30.9	16	23.5	7	10.3	68	45.6	35.3		4.21	.38
Non-traditional	13	16.0	16	19.8	20	24.7	22	27.2	10	12.3	81	54.4	35.8			
5. Learning about enrollment																
Traditional	3	4.3	10	14.5	19	27.5	28	40.6	9	13.0	69	46.6	18.8		3.01	.56
Non-traditional	7	8.9	7	8.9	17	21.5	36	45.6	12	15.2	79	53.4	17.8			
6. Learning about financial aid																
Traditional	13	18.8	16	23.2	13	18.8	15	21.7	12	17.4	69	46.3	42.0		1.48	.84
Non-traditional	13	16.3	18	22.5	12	15.0	17	21.3	20	25.0	80	53.7	38.8			
7. Re-entry procedures																
Traditional	1	1.5	5	7.4	13	19.1	24	35.3	25	36.8	68	46.3	8.9		7.42	.12
Non-traditional	7	8.9	9	11.4	15	19.0	31	39.2	17	21.5	79	53.7	20.3			
8. Graduation requirements																
Traditional	2	2.9	12	17.6	19	27.9	25	36.8	10	14.7	68	46.9	20.5		4.20	.39
Non-traditional	8	10.4	16	20.8	22	28.6	21	27.3	10	13.0	77	53.1	31.2			
9. Transferring prior credits																
Traditional	5	7.4	18	16.5	20	29.4	15	22.1	10	14.7	68	46.6	33.9		8.81	.07
Non-traditional	13	16.7	10	12.8	16	20.5	25	32.1	14	17.9	78	53.4	29.5			
10. Securing transportation																
Traditional	0	0	5	7.4	14	20.6	26	38.2	23	33.8	68	46.9	7.4		12.60	.02
Non-traditional	7	9.1	2	2.6	7	9.1	26	33.8	35	45.5	77	53.1	11.7			

Table 14-Continued

Auxilliary Service Needs of Students

Item	Responses													Chi-Square		
	Need lot of help		Need medium help		Need little help		Need no further help		Not important		Totals		% of pos. responses	χ <sup>2</sup>	p	
	N	%	N	%	N	%	N	%	N	%	N	%				
11. Use of library																
Traditional	0	0	16	23.5	24	35.3	16	23.5	12	17.6	68	46.6	23.5	12.39	.02	
Non-traditional	11	14.1	16	20.5	23	29.5	21	26.9	7	9.0	78	53.4	34.6			
12. Child care services																
Traditional	0	0	2	2.9	4	5.9	5	7.4	57	83.8	68	46.3	2.9	23.56	.01	
Non-traditional	6	7.6	10	12.7	5	6.3	20	25.3	38	48.1	79	53.7	20.3			
13. Services for handicapped																
Traditional	2	2.9	2	2.9	3	4.4	5	7.4	56	82.4	68	46.3	5.8	5.21	.27	
Non-traditional	1	1.3	4	5.1	3	3.8	15	19.0	56	70.9	79	53.7	6.4			
14. Getting around campus																
Traditional	3	4.4	2	2.9	12	17.6	24	35.3	27	39.7	68	46.3	7.3	.43	1.0	
Non-traditional	3	3.8	3	3.8	12	15.2	31	39.2	30	38.0	79	53.7	7.6			
15. Arranging schedule to avoid conflicts																
Traditional	3	4.3	9	13.2	11	16.2	28	41.2	17	25.0	68	46.3	17.6	5.43	.25	
Non-traditional	9	11.4	8	10.1	13	16.5	22	27.8	27	34.2	79	53.7	21.5			
16. Access to campus offices																
Traditional	3	4.3	10	14.7	11	16.2	24	35.3	20	29.4	68	46.9	19.1	6.83	.15	
Non-traditional	5	6.5	5	6.5	12	15.6	19	24.7	36	46.8	77	53.1	13.0			
17. Course credit through non-traditional means																
Traditional	8	11.8	14	20.6	11	16.2	17	25.0	18	26.5	68	46.3	32.4	1.38	.85	
Non-traditional	11	13.9	14	17.7	18	22.8	18	22.8	18	22.8	79	53.7	31.6			

Table 14-Continued

Auxilliary Service Needs of Students

Item	Responses													Chi-Square	
	Need lot of help		Need medium help		Need little help		Need no further help		Not important		Totals		% of pos. responses	x <sup>2</sup>	p
	N	%	N	%	N	%	N	%	N	%	N	%			
18. Finding useful non-credit courses															
Traditional	2	2.9	12	17.6	19	27.9	16	23.5	19	27.9	68	46.3	20.5	3.88	.43
Non-traditional	9	11.4	12	15.2	21	26.6	18	22.8	19	24.1	79	53.7	19.6		
D. Associations with Others															
1. Academic advisor															
Traditional	4	5.9	13	19.1	17	25.0	26	38.2	8	11.8	68	46.3	24.0	3.01	.56
Non-traditional	9	11.4	12	15.2	24	30.4	23	29.1	11	13.9	79	53.7	26.6		
2. Communicating with instructors															
Traditional	2	2.9	17	25.0	24	35.3	19	27.9	6	8.8	68	46.3	27.9	8.12	.09
Non-traditional	13	16.5	13	16.5	24	30.4	22	27.8	7	8.9	79	53.7	33.0		
3. Relating to younger students															
Traditional	0	0	9	13.2	8	11.8	28	41.2	23	33.8	68	45.9	13.2	13.23	.02
Non-traditional	7	8.8	13	16.3	16	20.0	32	40.0	12	15.0	80	54.1	25.1		
4. Getting along better with co-workers															
Traditional	0	0	5	7.4	18	26.5	33	48.5	12	17.6	68	45.9	7.4	7.31	.13
Non-traditional	7	8.8	7	8.8	17	21.3	32	40.0	17	21.3	80	54.1	17.6		
5. Understanding and expressing personal values															
Traditional	6	8.8	11	16.2	30	44.1	19	27.9	2	2.9	68	45.6	25.0	10.74	.03
Non-traditional	14	17.3	21	25.9	17	21.0	24	29.6	5	6.2	81	54.4	43.2		

Table 14-Continued

Auxilliary Service Needs of Students

Item		Responses												Chi-Square		
Groups	Need lot of help		Need medium help		Need little help		Need no further help		Not important		Totals		% of pos. responses	X <sup>2</sup>	p	
	N	%	N	%	N	%	N	%	N	%	N	%				
6. Making friends																
Traditional		7	10.1	14	20.3	25	36.2	20	29.0	3	4.3	69	46.0	30.4	1.61	.81
Non-traditional		8	9.9	13	16.0	27	33.3	26	32.1	7	8.6	81	54.0	25.9		
7. Improving personal appearance																
Traditional		4	5.8	9	13.0	31	44.9	23	33.3	2	2.9	69	46.0	18.8	9.33	.06
Non-traditional		5	6.2	18	22.2	24	29.6	23	28.4	11	13.6	81	54.0	28.4		
8. Getting family interested																
Traditional		1	1.4	10	14.5	15	21.7	36	52.2	7	10.1	69	46.3	15.9	8.87	.07
Non-traditional		8	10.0	9	11.3	19	23.8	29	36.3	15	18.8	80	53.7	21.3		
9. Coping with problems of single parenting																
Traditional		0	0	1	1.5	3	4.4	4	5.9	60	88.2	68	45.6	1.5	24.88	.01
Non-traditional		15	18.5	7	8.6	7	8.6	9	11.1	43	53.1	81	54.4	27.1		
10. Dealing with problems of divorce or separation																
Traditional		1	1.5	2	3.0	3	4.5	3	4.5	58	86.8	67	45.3	4.5	18.73	.01
Non-traditional		15	18.5	6	7.4	6	7.4	9	11.1	45	55.6	81	54.7	25.9		
11. Raising children																
Traditional		0	0	4	6.1	5	7.6	2	3.0	55	83.3	66	44.9	6.1	44.00	.00
Non-traditional		23	28.4	13	16.0	8	9.9	11	13.6	26	32.1	81	55.1	44.4		

Table 14-Continued

Auxilliary Service Needs of Students

Item		Responses												Chi-Square	
Groups	Need lot of help		Need medium help		Need little help		Need no further help		Not important		Totals		% of pos. responses	$\chi^2$	p
	N	%	N	%	N	%	N	%	N	%	N	%			
12. Gaining understanding of different cultures															
Traditional	0	0	6	8.7	34	49.3	17	24.6	12	17.4	69	46.0	8.7	10.44	.04
Non-traditional	7	8.6	13	16.0	33	40.7	21	25.9	7	8.6	81	54.0	24.6		
13. Dealing with people with different ideas															
Traditional	2	2.9	8	11.6	34	49.3	22	31.9	3	4.3	69	46.0	14.5	6.21	.19
Non-traditional	9	11.1	12	14.8	30	37.0	23	28.4	7	8.6	81	54.0	25.9		
14. Dealing with discrimination															
Traditional	2	2.9	2	2.9	27	39.1	31	44.9	7	10.1	69	46.0	5.8	9.90	.05
Non-traditional	6	7.4	11	13.6	21	25.9	30	37.0	13	16.0	81	54.0	21.0		
15. Coping with marital stress															
Traditional	3	4.4	5	7.4	9	13.2	4	5.9	47	69.1	68	45.6	11.8	22.54	.01
Non-traditional	13	16.0	10	12.3	15	18.5	17	21.0	26	32.1	81	54.4	28.3		
16. Dealing with conflicts															
Traditional	3	4.5	10	14.9	22	32.8	21	31.3	11	16.4	67	45.6	19.4	8.14	.09
Non-traditional	15	18.8	13	16.3	17	21.3	22	27.5	13	16.3	80	54.4	35.1		

Table 14-Continued

Auxiliary Service Needs of Students

Item	Responses													Chi-Square		
	Need lot of help		Need medium help		Need little help		Need no further help		Not important		Totals		% of pos. responses	X <sup>2</sup>	p	
Groups	N	%	N	%	N	%	N	%	N	%	N	%				
17. Learning to deal with community problems																
Traditional	3	4.4	11	16.2	24	35.3	18	26.5	12	17.6	68	45.6	20.6	2.53	.64	
Non-traditional	7	8.6	12	14.8	25	30.9	27	33.3	10	12.3	81	54.4				
18. Learning to participate in government																
Traditional	8	11.8	14	20.6	18	26.5	8	11.8	20	29.4	68	45.6	32.4	3.11	.54	
Non-traditional	9	11.1	17	21.0	18	22.2	18	22.2	19	23.5	81	54.4				32.1

The responses pertaining to the auxiliary service needs of the group of traditional students yielded nominal data information. Therefore, percentages were used to conduct a Chi-square analysis. The number and frequency of responses were used to identify preferences of the group. The total of the percentages for the responses for "need a lot of help" and "need medium help" were totaled to find the percentage of positive response. This percentage of positive response was used to identify the areas of most need in rank order.

The traditional students chose the following life skills development areas as the ones in which the most respondents had need of help: (1) increasing math skills; (2) improving study skills; (3.5) increasing reading speed; (3.5) learning to take tests; (5.5) developing speaking abilities; and (5.5) budgeting money. Yet only 54.4% of the traditional students responded that they needed either a lot or medium help on increasing math skills, and 47.8% responded positively on needing help on improving study skills. Only 44.9% responded positively on needing help on both increasing reading speed and learning to take tests. The positive response for help was only 36.2% for both developing speaking abilities and budgeting money.

The traditional students chose the following career development areas as the ones in which the most respondents had need of help: (1) know about available jobs near to home; (2.5) learning about job opportunities; (2.5) identifying strengths and weaknesses;

(4.5) learning more about job interviewing; and (4.5) developing a vita. Yet only 46.3% of the traditional students responded that they needed a lot of help or medium help on knowing about available jobs near to home and 40.6% responded positively on needing help on both finding job opportunities and identifying strengths and weaknesses. The positive response for help was only 37.6% for both job interviewing and developing a vita.

The traditional students chose the following educational planning areas as the ones in which the most respondents had need for help: (1) advice about educational plan; (2) financial aid information; (3) entrance requirements information; (4.5) selecting educational program; and (4.5) selecting appropriate courses. Yet only 42.6% of the traditional students responded that they needed either a lot or medium help on advice about educational plans. Only 42.0% responded positively on financial aid information, and 36.8% responded positively on entrance requirements information. The positive response for help was only 35.3% for both selecting educational programs and selecting appropriate courses.

The traditional students chose the following areas dealing with associations with others as the ones in which the most respondents had need of help: (1) participation in government; (2) making friends; (3) communication with instructor; (4) expressing personal values; and (5) communication with academic advisors. Yet only 32.4% of the traditional students responded that they needed either a lot or medium help on participation in government; 30.4% responded positively on

making friends, and 27.9% responded positively on communication with instructors. The positive response was only 25% on expressing personal values and 24% on communication with academic advisors.

#### Preferences and Needs of the Non-traditional Students

The second research question to be addressed was Question 2: "What were the educational plans and preferences and the auxilliary service needs of the non-traditional student as measured by the Adult Learner Needs Assessment Survey?".

The frequency of responses concerning the educational plans and preferences of the non-traditional student group were tabulated. The results are presented in Table 13.

The response pertaining to the educational plans and preferences of the group of non-traditional students yielded nominal data information. Therefore, percentages were used to conduct a Chi-square analysis. The number and frequency of response were used to identify preferences of the group.

The non-traditional students selected the following reasons for continuing their education: (1) for personal satisfaction; (2) to become better educated and informed; (3) for general self-improvement; (4) to obtain a higher degree; and (5) to improve income. The major source of educational funding was identified as the following: (1) personal earnings; (2) personal or family savings; (3) educational grants; and (4) other family income. The non-traditional students were split very closely on the type of preferred enrollment status

with 50.7% preferring full-time enrollment and 49.3% preferring part-time enrollment. The preferred class time was the morning time frame with night classes as a second choice. The most preferred frequency of class meetings was twice a week with a second choice of 3-4 times a week. The response to preferred class type indicated a preference for mixed classes with no preference as a second choice. A large majority preferred on-campus locations. The two top responses for preferred class format were lecture and small groups.

The frequency of responses concerning the auxilliary service needs of the non-traditional student group was tabulated. The results are included in Table 14.

The responses pertaining to the auxilliary service needs of the group of non-traditional students yielded nominal data information. Therefore, percentages were used to conduct a Chi-square analysis. The number and frequency of responses were used to identify preferences of the group. The total of the percentages for the responses of "need a lot of help" and "need medium help" were totaled to find the percentage of positive responses. This percentage of positive responses was used to identify the areas of most need.

The non-traditional students chose the following life skills development areas as the ones in which the most respondents had need for help: (1) developing speaking abilities; (2) increasing math skills; (3) improving study skills; (4) learning to take a test; and (5) improving writing skills. There were 63.3% of the non-traditional students that responded that they needed either a lot of help or medium help in

developing speaking abilities; 60.5% indicated a need in increasing math skills, and 59.3% indicated a need in improving study skills. There were 59.2% that responded positively on needing help on learning to take tests, and 54.5% responded positively on improving writing skills.

The non-traditional students chose the following career development areas as the ones in which the most respondents felt need for help: (1.5) learning about job opportunities; (1.5) identifying strengths and weaknesses; (3) developing a vita; (4) discussing career with people employed in the field; and (5) knowing about available jobs near to home. Yet only 45.7% of the non-traditional students responded that they needed either a lot or medium help on both learning about job opportunities and identifying strengths and weaknesses. Only 42% responded positively on needing help on developing a vita, 40.8% on discussing careers with people employed in the field, and 37.6% on knowing about available jobs near to home.

The non-traditional students chose the following educational planning areas as the ones in which the most respondents felt need for help: (1) advice about educational plan; (2) financial aid information; (3) entrance requirements information; (4.5) selecting educational program; and (4.5) selecting appropriate courses. Yet only 40.7% of the non-traditional students responded that they needed either a lot or medium help on advice about educational plans, 38.8% responded positively concerning financial aid information, and 38% responded positively concerning entrance requirements information. The positive

response for help was only 35.8% for both selecting educational programs and selecting appropriate courses.

The non-traditional students chose the following areas dealing with associations with others as the ones in which the most respondents had need for help: (1) raising children; (2) understanding and expressing personal values; (3) dealing with conflicts; (4) communication with instructors; and (5) participation in government. There were 44% of the non-traditional students that responded that they needed either a lot or medium help on raising children; 43.2% responded positively concerning understanding and expressing personal values, and 35.1% responded positively concerning dealing with conflicts. Only 33% responded positively concerning communication with instructors and 32.1% responded positively concerning participation in government.

#### Differences in the Educational Plans and Preferences of the Traditional and Non-traditional Groups

The third research question to be addressed was Question 3: "Did differences in educational plans and preferences exist between the group of traditional students and the group of non-traditional students?".

The differences between the responses of the traditional and non-traditional groups concerning educational plans and preferences were analyzed using the Chi-square contingency coefficient at the .05 level of significance. The results are included in Table 15.

Table 15

Chi Square Analysis of Traditional and Non-Traditional  
Student Responses Concerning Educational Plans and Preferences

Item	F	%	$\chi^2$	p
1. Source of educational funds: personal or family savings			12.27	.01
Traditional	69	48.6		
Non-traditional	73	51.4		
2. Type of class preferred			10.50	.02
Traditional	69	46.3		
Non-traditional	80	53.7		
3. Type of enrollment status			7.97	.02
Traditional	66	46.8		
Non-traditional	75	53.2		
4. Reason for continuing education: to improve income			7.49	.03
Traditional	69	48.3		
Non-traditional	74	51.7		
5. Source of educational funds: personal earnings			6.73	.04
Traditional	69	47.9		
Non-traditional	75	52.1		

There were five items relating to educational plans and preferences which were significantly different between the group of traditional students and non-traditional students. The number and frequency of the responses are included in Table 13.

Personal or family savings as a source of educational funds was significant ( $p < .01$ ). A much higher percentage of traditional students than non-traditional students considered this a major source.

The type of class preferred was significant ( $p < .02$ ). A higher percentage of traditional students than non-traditional students indicated no preference.

The type of enrollment status was significant ( $p < .02$ ). A much higher percentage of traditional students than non-traditional students preferred full-time enrollment.

To improve income as a reason for continuing education was significant ( $p < .03$ ). A higher percentage of traditional students than non-traditional students considered this a major reason.

Personal earnings as a source of educational funds was significant ( $p < .04$ ). A higher percentage of traditional students than non-traditional students considered this a minor source, while non-traditional students either considered this a major source or not a source at all.

Differences in the Auxilliary Service Needs of the Traditional and Non-Traditional Students

The next research questions to be addressed included the following:

Question 4: "Did differences in auxilliary service needs exist between the groups of traditional and non-traditional students?"

Question 5: "Did differences in auxilliary service needs pertaining to life skills development exist between the groups of traditional and non-traditional students?"

Question 6: "Did differences in auxilliary service needs pertaining to career development exist between the groups of traditional and non-traditional students?"

Question 7: "Did differences in auxilliary service needs pertaining to educational planning exist between the groups of traditional and non-traditional students?"

Question 8: "Did differences in auxilliary service needs pertaining to associations with others exist between the groups of traditional and non-traditional students?"

The differences between the responses of the traditional and non-traditional groups concerning auxilliary service needs were analyzed using the Chi square contingency coefficient at the .05 level of significance. The results are included in Table 16.

Table 16

Chi Square Analysis of Traditional and Non-Traditional  
Student Responses Concerning Auxilliary Service Needs

Item	F	%	$\chi^2$	p
1. Raising Children			44.00	.00
Traditional	66	44.9		
Non-traditional	81	55.1		
2. Coping with problems of single parenting			24.88	.01
Traditional	68	45.6		
Non-traditional	81	54.4		
3. Dealing with divorce or separation			18.73	.01
Traditional	67	45.3		
Non-traditional	81	54.7		
4. Child Care			23.56	.01
Traditional	68	46.3		
Non-traditional	79	53.7		
5. Coping with marital stress			22.54	.01
Traditional	68	45.6		
Non-traditional	81	54.4		
6. Getting part-time work in career field			17.46	.01
Traditional	68	45.9		
Non-traditional	80	54.1		
7. Learning how to find job openings			18.23	.01
Traditional	69	46.0		
Non-traditional	81	54.0		
8. Improving study skills			15.92	.01
Traditional	69	46.0		
Non-traditional	81	54.0		
9. Developing speaking abilities			16.59	.01
Traditional	69	46.6		
Non-traditional	79	53.4		
10. Learning on own			20.36	.01
Traditional	69	46.3		
Non-traditional	80	53.7		

Table 16-Continued

Chi Square Analysis of Traditional and Non-Traditional  
Student Responses Concerning Auxilliary Service Needs

Item	F	%	$\chi^2$	p
11. Learning to make better decisions			21.48	.01
Traditional	69	46.0		
Non-traditional	81	54.0		
12. Learning about income potentials			21.03	.01
Traditional	69	46.0		
Non-traditional	81	54.0		
13. Discussing career with people in field			17.97	.01
Traditional	68	45.6		
Non-traditional	81	54.4		
14. Relating to younger students			13.23	.02
Traditional	68	45.9		
Non-traditional	80	54.1		
15. Use of library			12.39	.02
Traditional	68	46.6		
Non-traditional	78	53.4		
16. Becoming more independent			12.16	.02
Traditional	69	46.0		
Non-traditional	81	54.0		
17. Securing transportation			12.60	.02
Traditional	68	46.9		
Non-traditional	77	53.1		
18. Understanding and expressing personal values			10.74	.03
Traditional	68	45.6		
Non-traditional	81	54.4		
19. Gaining understanding of different cultures			10.44	.04
Traditional	69	46.0		
Non-traditional	81	54.0		
20. Learning to take tests better			10.37	.04
Traditional	69	46.0		
Non-traditional	81	54.0		

Table 16-Continued

Chi Square Analysis of Traditional and Non-Traditional  
Student Responses Concerning Auxilliary Service Needs

Item	F	%	$\chi^2$	p
21. Getting full-time experience in career field			10.08	.04
Traditional	68	45.6		
Non-traditional	81	54.4		
22. Identifying strengths and weaknesses			10.14	.04
Traditional	69	46.0		
Non-traditional	81	54.0		
23. Managing time better			9.95	.05
Traditional	69	46.0		
Non-traditional	81	54.0		
24. Learning where to get training			9.99	.05
Traditional	68	45.6		
Non-traditional	81	54.4		
25. Dealing with discrimination			9.90	.05
Traditional	69	46.0		
Non-traditional	81	54.0		

There were twenty-five items of auxilliary service needs showing significance. These are discussed further as they relate to life skills development, career development, educational planning, and associations with others. The number and frequency of the responses are included in Table 14.

Items of significance relating to life skills development included improving study skills ( $p < .01$ ), developing speaking abilities ( $p < .01$ ), learning on own ( $p < .01$ ), learning to make better decisions ( $p < .01$ ), becoming more independent ( $p < .02$ ), learning to take tests

better ( $p < .04$ ), and managing time better ( $p < .05$ ). A larger percentage of non-traditional students than traditional students indicated a positive need for help on the items of improving study skills, developing speaking abilities, learning on own, learning how to make better decisions, learning to take tests, and managing time better. A larger percentage of non-traditional students than traditional students responded not important to the item, becoming more independent.

Items of significance relating to career development included getting part-time work in career field ( $p < .01$ ), learning to find job openings ( $p < .01$ ), learning about income potentials ( $p < .01$ ), discussing career with people in field ( $p < .01$ ), identifying strengths and weaknesses ( $p < .04$ ), and learning where to get training ( $p < .05$ ). A larger percentage of non-traditional students than traditional students indicated a response of not important to the items of getting part-time work in the career field, learning to find job openings, getting full-time experience in career field, and learning where to get training. A larger percentage of non-traditional students than traditional students indicated a positive need for help on the items of discussing the career with people employed in the field, identifying strengths and weaknesses, and learning about income potentials.

Items of significance relating to educational planning included child care ( $p < .01$ ), use of library ( $p < .02$ ), and securing

transportation ( $p < .02$ ). In each of these items, the non-traditional students responded that they had more need of help than the traditional students.

Items of significance relating to associations with others included raising children ( $p < .00$ ), coping with problems of single parenting ( $p < .01$ ), dealing with problems of divorce or separation ( $p < .01$ ), coping with marital stress ( $p < .01$ ), relating to younger students ( $p < .02$ ), understanding and expressing personal values ( $p < .03$ ), gaining an understanding of different cultures ( $p < .04$ ), and dealing with discrimination ( $p < .05$ ). In each of these items, the non-traditional students responded that they had more need of help than the traditional students.

#### Differences in the Educational Plans and Preferences of the West Campus Students and Washington Campus Students

The next research question to be addressed was Question 9: "Did differences in educational plans and preferences exist between the students at West Campus and the students at Washington Campus?".

The difference between the responses of the Washington Campus students and West Campus students concerning educational plans and preferences were analyzed using the Chi-square contingency coefficient at the .05 level of significance. The results are included in Table 17.

Table 17  
 Chi Square Analysis of Washington Campus and West Campus  
 Student Responses Concerning Educational Plans and Preferences

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
A. Reason for continuing education						
1. To obtain a higher degree					1.75	.42
major reason	72	64.9	24	77.4		
minor reason	23	20.7	4	12.9		
not a reason	16	14.4	3	9.7		
Total	111	100	31	100		
2. Personal satisfaction					.53	.46
major reason	92	82.9	28	90.3		
minor reason	19	17.1	3	9.7		
not a reason	0	0	0	0		
Total	111	100	31	100		
3. Obtain or maintain certification					1.36	.51
major reason	58	52.7	20	64.5		
minor reason	24	21.8	5	16.1		
not a reason	28	25.5	6	19.4		
Total	110	100	31	100		
4. Meet job requirements or improve job skills					1.16	.56
major reason	58	52.3	18	58.1		
minor reason	24	21.6	4	12.9		
not a reason	29	26.1	9	29.0		
Total	111	100	31	100		
5. Self improvement					2.43	.30
major reason	83	74.8	21	67.7		
minor reason	24	21.6	10	32.3		
not a reason	4	3.6	0	0		
Total	111	100	30	100		
6. Meet new people					1.21	.25
major reason	26	23.6	7	22.6		
minor reason	35	31.8	13	41.9		
not a reason	49	44.5	11	35.5		
Total	110	100	31	100		
7. Become better educated					.06	1.0
major reason	88	79.3	24	77.4		
minor reason	20	18.0	6	19.4		
not a reason	3	2.7	1	3.2		
Total	111	100	31	100		

Table 17-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Educational Plans and Preferences

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	P
8. Improve Income					7.13	.03
major reason	68	61.8	27	87.1		
minor reason	26	23.6	2	6.5		
not a reason	16	14.5	2	6.5		
Total	110	100	31	100		
9. Learn new occupation					8.73	.02
major reason	62	55.9	26	83.3		
minor reason	26	23.4	4	12.9		
not a reason	23	20.7	1	3.2		
Total	111	100	31	100		
10. Learn to solve problems					1.83	.40
major reason	20	18.2	3	9.7		
minor reason	38	34.5	14	45.2		
not a reason	52	47.3	14	45.2		
Total	110	100	31	100		
B. Source of funds						
1. Personal or family savings					9.45	.01
major source	41	37.6	21	67.7		
minor source	30	27.5	6	19.4		
not a source	38	34.9	4	12.9		
Total	109	100	31	100		
2. Personal earnings					2.56	.28
major source	61	55.9	12	38.7		
minor source	24	21.6	9	29.0		
not a source	26	23.4	10	32.3		
Total	111	100	31	100		
3. Other family income					7.47	.03
major source	23	21.1	14	45.2		
minor source	15	13.8	4	12.9		
not a source	71	65.1	13	41.9		
Total	109	100	31	100		
4. Social Security benefits					3.06	.22
major source	5	4.6	0	0		
minor source	5	4.6	0	0		
not a source	99	90.3	31	100		
Total	109	100	31	100		

Table 17-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Educational Plans and Preferences

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
5. Veterans benefits					.000	1.0
major source	5	4.6	1	3.2		
minor source	0	0	0	0		
not a source	104	95.4	30	96.8		
Total	109	100	31	100		
6. Educational grants					8.86	.02
major source	18	16.5	11	35.5		
minor source	8	7.3	5	16.1		
not a source	83	76.1	15	48.4		
Total	109	100	31	100		
7. Scholarship					10.06	.01
major source	14	12.8	6	20.0		
minor source	3	2.8	5	16.7		
not a source	92	84.4	19	63.3		
Total	109	100	30	100		
8. Student loans					5.30	.08
major source	14	12.8	6	19.4		
minor source	8	7.3	6	19.4		
not a source	87	79.8	19	61.3		
Total	109	100	31	100		
9. Funds from relatives or friends					5.25	.08
major source	11	10.1	5	16.1		
minor source	8	7.3	6	19.4		
not a source	90	82.6	20	64.5		
Total	109	100	31	100		
C. Type of enrollment status					10.72	.01
full-time	58	52.7	25	86.2		
part-time	51	46.4	4	13.1		
Total	109	100	29	100		
D. Preferred class times					6.24	.18
morning	68	70.1	25	89.3		
noon	3	3.1	0	0		
afternoon	1	1.0	1	3.6		
evening	24	24.7	2	7.1		
weekend	5	1.0	0	0		
Total	97	100	28	100		

Table 17-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Educational Plans and Preferences

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
E. Frequency of class meetings					5.62	.24
once weekly	21	19.3	1	3.4		
twice weekly	39	35.8	14	48.3		
3-4 times weekly	35	32.1	9	31.0		
5 or more weekly	1	.9	1	3.4		
no preference	13	11.9	4	13.8		
Total	109	100	29	100		
F. Preferred Class type					9.50	.03
adults only	11	9.5	2	6.5		
mixed ages	63	54.3	7	29.0		
traditional students	6	5.2	5	16.1		
no preference	36	31.0	15	48.4		
Total	116	100	31	100		
G. Preferred class location					7.97	.02
on campus	91	78.4	16	53.3		
off campus	1	.9	1	3.3		
no preference	24	20.7	13	43.3		
Total	116	100	30	100		
H. Preferred class format					7.73	.11
lecture	41	35.3	17	56.7		
small group	32	27.6	3	10.0		
self-paced	13	11.2	1	3.3		
hands-on	14	12.1	5	16.7		
no preference	16	13.8	4	13.3		
Total	116	100	30	100		

There were nine items relating to educational plans and preferences which were significantly different between the group of Washington Campus students and West Campus students.

Personal or family savings as a source of educational funds was significant ( $p < .01$ ). A much higher percentage of West Campus students than Washington Campus students considered this a major source.

Scholarships as a source of educational funds was significant ( $p < .01$ ). A higher percentage of West Campus students than Washington Campus students considered this either a major or minor source.

The type of enrollment status was significant ( $p < .01$ ). A much higher percentage of West Campus students than Washington Campus students preferred full-time enrollment.

To learn a new occupation as a reason for continuing education was significant ( $p < .01$ ). A much higher percentage of West Campus students than Washington Campus students considered this a major reason.

Educational grants as a source of educational funds was significant ( $p < .02$ ). A higher percentage of West Campus students than Washington Campus students considered this a major source.

The preferred class location was significant ( $p < .02$ ). A higher percentage of Washington Campus students than West Campus students preferred on-campus locations.

To improve income as a reason for continuing education was significant ( $p < .03$ ). A higher percentage of West Campus students than Washington Campus students indicated this was a major reason.

Other family income as a source of educational funds was significant ( $p < .03$ ). A higher percentage of West Campus students than Washington Campus students considered this a major source.

The type of class preferred was significant ( $p < .03$ ). A higher percentage of Washington Campus students than West Campus students indicated a preference for mixed ages. A higher percentage of students from West Campus than Washington Campus indicated a preference for classes of traditional students.

#### Differences in the Auxilliary Service Needs Between the West Campus Students and Washington Campus Students

The last research question to be addressed was Question 10: "Did differences in auxilliary service needs exist between the students at West Campus and the students at Washington Campus?".

The differences between the responses of the Washington Campus students and West Campus students concerning auxilliary service needs were analyzed using the Chi square contingency coefficient at the .05 level of significance. The results are included in Table 18.

Table 18

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Auxilliary Service Needs

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
A. Life Skills development						
1. Increasing math skills					17.20	.01
lot of help	37	31.9	7	22.6		
medium help	37	31.9	5	16.1		
little help	21	18.1	4	12.9		
no further help	12	10.3	4	12.9		
not important	5	7.8	11	35.5		
Total	116	100	31	100		
2. Improving writing					20.26	.01
lot of help	26	22.6	2	6.5		
medium help	38	33.0	5	16.1		
little help	27	23.5	5	16.1		
no further help	17	14.8	12	38.7		
not important	7	6.1	7	22.6		
Total	115	100	31	100		
3. Develop speaking abilities					12.12	.02
lot of help	16	13.9	4	12.9		
medium help	50	43.5	5	16.1		
little help	26	22.6	8	25.8		
no further help	15	13.0	11	35.5		
not important	8	7.0	3	9.7		
Total	115	100	31	100		
4. Improving reading comprehension					6.50	.17
lot of help	22	19.0	1	3.2		
medium help	26	22.4	6	19.4		
little help	35	30.2	10	32.3		
no further help	28	24.1	11	35.5		
not important	5	4.3	3	9.7		
Total	116	100	31	100		
5. Increasing reading speed					6.18	.20
lot of help	29	25.0	5	16.1		
medium help	32	27.6	6	19.4		
little help	25	21.6	9	29.0		
no further help	24	21.6	9	29.0		
not important	6	5.2	3	6.5		
Total	116	100	31	100		
6. Improving study skills					15.23	.01
lot of help	30	25.6	4	12.9		
medium help	34	29.1	11	35.5		
little help	37	31.6	5	16.1		
no further help	12	10.3	11	35.5		
not important	4	3.4	0	0		
Total	117	100	31	100		

Table 18-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Auxilliary Service Needs

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
7. Learning to take tests					5.59	.23
lot of help	33	28.2	7	22.6		
medium help	29	24.8	8	25.8		
little help	38	32.5	7	22.6		
no further help	15	12.8	9	29.0		
not important	2	1.7	0	0		
Total	117	100	31	100		
8. Handling pressure					6.21	.19
lot of help	22	18.8	6	19.4		
medium help	25	21.4	5	16.1		
little help	45	38.5	9	29.0		
no further help	20	17.1	11	35.5		
not important	5	4.3	0	0		
Total	117	100	31	100		
9. Learning how to make decisions					7.62	.11
lot of help	15	12.8	6	19.4		
medium help	31	26.5	4	12.9		
little help	47	40.2	10	32.3		
no further help	17	14.5	10	32.3		
not important	7	6.0	1	3.2		
Total	117	100	31	100		
10. Becoming more independent					2.71	.61
lot of help	9	7.7	1	3.2		
medium help	26	22.2	8	25.8		
little help	35	29.9	8	25.8		
no further help	37	31.6	13	41.9		
not important	10	8.5	1	3.2		
Total	117	100	31	100		
11. Developing self-confidence					4.0	.41
lot of help	20	17.1	4	12.9		
medium help	27	23.1	6	19.4		
little help	41	35.0	8	25.8		
no further help	25	21.4	12	38.7		
not important	4	3.4	1	3.2		
Total	117	100	31	100		
12. Setting life goals					10.4	.04
lot of help	12	10.3	0	0		
medium help	24	20.5	4	12.9		
little help	37	31.6	8	25.3		
no further help	39	33.3	19	61.3		
not important	5	4.3	0	0		
Total	117	100	31	100		

Table 18-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Auxilliary Service Needs

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	P
13. Managing Time					4.37	.36
lot of help	12	10.3	2	6.5		
medium help	36	30.8	5	16.1		
little help	46	39.3	15	48.4		
no further help	22	18.8	8	25.8		
not important	1	.9	1	3.2		
Total	117	100	31	100		
14. Budgeting money					5.98	.21
lot of help	20	17.2	3	9.7		
medium help	30	25.9	4	12.9		
little help	35	30.2	16	51.6		
no further help	26	22.4	7	22.6		
not important	5	4.3	1	3.2		
Total	116	100	31	100		
15. Managing health					2.40	.67
lot of help	9	7.7	2	6.7		
medium help	24	20.5	7	23.3		
little help	45	38.5	10	33.3		
no further help	33	28.2	11	36.7		
not important	6	5.1	0	0		
Total	117	100	30	100		
16. Consumer rights					4.93	.30
lot of help	9	7.7	0	0		
medium help	28	23.9	12	40.0		
little help	46	39.3	11	36.7		
no further help	23	19.7	5	16.7		
not important	11	9.4	2	6.7		
Total	117	100	30	100		
17. Learning on own					2.45	.66
lot of help	7	6.0	3	9.7		
medium help	28	24.1	4	12.9		
little help	41	35.3	13	41.9		
no further help	34	29.3	10	32.3		
not important	6	5.2	1	3.2		
Total	116	100	31	100		
18. Use of leisure time					1.88	.76
lot of help	11	9.4	3	9.7		
medium help	29	24.8	5	16.1		
little help	38	32.5	10	32.3		
no further help	33	29.2	12	38.7		
not important	6	5.1	1	3.2		
Total	117	100	31	100		

Table 18-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Auxilliary Service Needs

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
<b>B. Career Development</b>						
<b>1. Choosing career</b>					3.90	.43
lot of help	16	13.7	2	6.5		
medium help	18	15.4	2	6.5		
little help	26	22.2	7	22.6		
no further help	48	41.0	16	51.6		
not important	9	7.7	4	12.9		
Total	117	100	31	100		
<b>2. Identifying career areas</b>					2.99	.57
lot of help	11	9.4	1	3.3		
medium help	24	20.5	6	20.0		
little help	31	26.5	6	20.0		
no further help	41	35.0	15	50.0		
not important	10	8.5	2	6.7		
Total	117	100	30	100		
<b>3. Job opportunities</b>					8.79	.07
lot of help	21	17.9	4	12.9		
medium help	33	28.2	3	9.7		
little help	39	33.3	15	48.4		
no further help	19	16.2	9	29.0		
not important	5	4.3	0	0		
Total	117	100	31	100		
<b>4. Training requirements</b>					11.62	.03
lot of help	17	14.5	1	3.3		
medium help	22	18.8	4	13.3		
little help	44	37.6	10	33.3		
no further help	26	22.2	15	50.0		
not important	8	6.8	0	0		
Total	117	100	30	100		
<b>5. Necessary training sites</b>					14.35	.01
lot of help	19	16.2	1	3.3		
medium help	18	15.4	2	6.7		
little help	38	32.5	9	30.0		
no further help	32	27.4	18	60.0		
not important	10	8.5	0	0		
Total	117	100	30	100		
<b>6. Getting full-time experience</b>					8.45	.08
lot of help	22	18.8	3	10.0		
medium help	11	9.4	7	23.3		
little help	24	20.5	6	20.0		
no further help	35	29.9	12	40.0		
not important	25	21.4	2	6.7		
Total	117	100	30	100		

Table 13-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Auxilliary Service Needs

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
7. Income potentials					2.78	.60
lot of help	20	17.1	5	16.1		
medium help	19	16.2	6	19.4		
little help	34	29.1	9	29.0		
no further help	35	29.9	11	35.5		
not important	9	7.7	0	0		
Total	117	100	31	100		
8. Discuss career					4.51	.35
lot of help	22	18.8	1	3.3		
medium help	25	21.4	7	23.3		
little help	37	31.6	11	36.7		
no further help	26	22.2	9	30.0		
not important	7	6.0	2	6.7		
Total	117	100	30	100		
9. Getting part-time work					6.84	.15
lot of help	20	17.2	2	6.7		
medium help	20	17.2	7	23.3		
little help	24	20.7	10	33.3		
no further help	28	24.1	9	30.0		
not important	24	20.7	2	6.7		
Total	116	100	30	100		
10. Finding job opportunities					6.82	.15
lot of help	21	17.9	6	19.4		
medium help	24	20.5	6	19.4		
little help	32	27.4	13	41.9		
no further help	21	17.9	6	19.4		
not important	19	16.2	0	0		
Total	117	100	31	100		
11. Job interviewing					5.77	.22
lot of help	16	13.7	2	6.5		
medium help	24	20.5	8	25.8		
little help	36	30.8	13	41.9		
no further help	28	23.9	3	25.3		
not important	13	11.1	0	0		
Total	117	100	31	100		
12. Job applications					4.31	.37
lot of help	10	8.5	2	6.5		
medium help	24	20.5	6	19.4		
little help	39	33.3	14	45.2		
no further help	32	27.4	9	29.0		
not important	12	10.3	0	0		
Total	117	100	31	100		

Table 18-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Auxilliary Service Needs

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
13. Developing a vitae					10.31	.04
lot of help	22	18.8	3	9.7		
medium help	30	25.6	4	12.9		
little help	38	32.5	11	35.5		
no further help	18	15.4	12	38.7		
not important	9	7.7	1	3.2		
Total	117	100	31	100		
14. Know about available jobs					11.98	.02
lot of help	22	19.0	3	9.7		
medium help	22	19.0	14	45.2		
little help	29	25.0	5	16.1		
no further help	25	21.6	8	25.8		
not important	18	15.5	1	3.2		
Total	116	100	31	100		
15. Identifying strengths & weaknesses					2.09	.72
lot of help	12	10.3	3	9.7		
medium help	39	33.3	10	32.3		
little help	40	34.2	8	25.8		
no further help	23	19.7	8	25.8		
not important	3	2.6	2	6.5		
Total	117	100	31	100		
C. Educational planning					11.47	.03
1. Selecting educational program						
lot of help	11	9.4	1	3.3		
medium help	36	30.8	4	13.3		
little help	31	26.5	5	16.7		
no further help	29	24.8	14	46.7		
not important	10	8.5	6	20.0		
Total	117	100	30	100		
2. Advice about education plan					17.95	.01
lot of help	17	14.5	1	3.3		
medium help	38	32.5	5	16.7		
little help	31	26.5	6	20.0		
no further help	25	21.4	10	33.3		
not important	6	5.1	8	26.7		
Total	117	100	30	100		
3. Entrance requirements					11.70	.02
lot of help	12	10.3	2	6.9		
medium help	36	31.0	4	13.8		
little help	35	30.2	5	17.2		
no further help	21	18.1	11	37.9		
not important	12	10.3	7	24.1		
Total	116	100	29	100		

Table 18-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Auxilliary Service Needs

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
4. Selecting appropriate courses					17.87	.01
lot of help	16	13.7	1	3.3		
medium help	33	28.2	2	6.7		
little help	34	29.1	7	23.3		
no further help	25	21.4	12	40.0		
not important	9	7.7	8	26.7		
Total	117	100	30	100		
5. Enrollment information					8.40	.08
lot of help	8	6.9	1	3.3		
medium help	16	13.8	1	3.3		
little help	32	27.6	4	13.3		
no further help	46	39.7	17	56.7		
not important	14	12.7	7	23.3		
Total	116	100	30	100		
6. Financial aid information					3.29	.52
lot of help	22	19.0	4	12.9		
medium help	29	25.0	5	16.1		
little help	17	14.7	7	22.6		
no further help	23	19.8	9	29.0		
not important	25	21.6	6	19.4		
Total	116	100	31	100		
7. Re-entry procedure					2.92	.58
lot of help	7	6.1	0	0		
medium help	12	10.5	2	6.5		
little help	22	19.3	6	19.4		
no further help	42	36.8	12	38.7		
not important	31	27.2	11	35.5		
Total	114	100	31	100		
8. Graduation requirements					5.88	.21
lot of help	9	8.0	0	0		
medium help	22	19.6	6	19.4		
little help	35	31.3	6	19.4		
no further help	32	28.6	13	41.9		
not important	14	12.5	6	19.4		
Total	112	100	31	100		
9. Transferring prior courses					11.30	.03
lot of help	18	15.9	0	0		
medium help	21	18.6	7	22.6		
little help	31	27.4	4	12.9		
no further help	26	23.0	13	41.9		
not important	17	15.0	7	22.6		
Total	113	100	31	100		

Table 18-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Auxilliary Service Needs

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
10. Securing transportation					4.70	.32
lot of help	6	5.3	1	3.3		
medium help	7	6.2	0	0		
little help	15	13.3	6	20.0		
no further help	38	33.6	14	46.7		
not important	47	41.6	9	30.0		
Total	113	100	30	100		
11. Use of library					4.18	.39
lot of help	9	8.0	0	0		
medium help	24	21.2	8	25.8		
little help	39	34.5	8	25.8		
no further help	27	23.9	10	32.3		
not important	14	12.4	5	16.1		
Total	113	100	31	100		
12. Child care services					1.94	.75
lot of help	4	3.5	2	6.5		
medium help	10	8.8	2	6.5		
little help	8	7.0	1	3.2		
no further help	18	15.8	7	22.6		
not important	74	64.9	19	61.3		
Total	114	100	31	100		
13. Handicap services					2.41	.67
lot of help	3	2.6	0	0		
medium help	4	3.5	2	6.5		
little help	5	4.4	1	3.2		
no further help	14	12.3	6	19.4		
not important	88	77.2	22	71.0		
Total	114	100	31	100		
14. Getting around campus					2.40	.67
lot of help	6	5.3	0	0		
medium help	4	3.5	1	3.2		
little help	19	16.7	4	12.9		
no further help	41	36.0	14	45.2		
not important	44	38.6	12	38.7		
Total	114	100	31	100		
15. Arranging schedules					6.13	.19
lot of help	11	9.6	0	0		
medium help	13	11.4	4	12.9		
little help	21	18.4	3	9.7		
no further help	39	34.2	11	35.5		
not important	30	26.2	13	41.9		
Total	114	100	31	100		

Table 18-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Auxilliary Service Needs

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
16. Access to campus offices					3.04	.56
lot of help	7	6.3	0	0		
medium help	13	10.7	3	9.7		
little help	18	16.1	5	16.1		
no further help	31	27.7	12	38.7		
not important	44	39.3	11	35.5		
Total	112	100	31	100		
17. Non-traditional course credit					10.82	.03
lot of help	17	14.9	2	6.5		
medium help	22	19.3	6	19.4		
little help	23	20.2	5	16.1		
no further help	21	18.4	14	45.2		
not important	31	27.2	4	12.9		
Total	114	100	31	100		
18. Useful non-credit courses					2.26	.69
lot of help	9	7.9	1	3.2		
medium help	19	16.7	5	16.1		
little help	32	28.1	8	25.8		
no further help	24	21.1	10	32.3		
not important	30	26.3	7	22.6		
Total	114	100	31	100		
D. Associations with others					4.77	.32
1. Academic advisors						
lot of help	12	10.5	0	0		
medium help	21	18.4	4	12.9		
little help	31	27.2	9	29.0		
no further help	36	31.6	13	41.9		
not important	14	12.3	5	16.1		
Total	114	100	31	100		
2. Instructors					7.48	.12
lot of help	14	12.3	0	0		
medium help	26	22.8	4	12.9		
little help	37	32.5	11	35.5		
no further help	28	24.6	12	38.7		
not important	9	7.9	4	12.9		
Total	114	100	31	100		
3. Younger students					1.96	.75
lot of help	6	5.2	1	3.2		
medium help	17	14.8	5	16.1		
little help	21	18.3	3	9.7		
no further help	44	38.3	15	48.4		
not important	27	23.5	7	22.6		
Total	115	100	31	100		

Table 18-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Auxilliary Service Needs

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
4. Co-workers					1.74	.79
lot of help	6	5.2	1	3.2		
medium help	9	7.8	3	9.7		
little help	30	26.1	5	16.1		
no further help	49	42.6	15	48.4		
not important	21	18.3	7	22.6		
Total	115	100	31	100		
5. Expressing personal values					7.05	.14
lot of help	18	15.5	1	3.2		
medium help	26	22.4	6	19.4		
little help	38	32.8	9	29.0		
no further help	28	24.1	14	45.2		
not important	6	5.2	1	3.2		
Total	116	100	31	100		
6. Making friends					4.49	.35
lot of help	13	11.1	2	6.5		
medium help	24	20.5	3	9.7		
little help	40	34.2	12	38.7		
no further help	32	27.4	13	41.9		
not important	8	6.8	1	3.2		
Total	117	100	31	100		
7. Improving personal appearance					2.35	.68
lot of help	8	6.8	1	3.2		
medium help	22	18.8	5	16.1		
little help	42	35.9	13	41.9		
no further help	34	29.1	11	35.5		
not important	11	9.4	1	3.2		
Total	117	100	31	100		
8. Getting family interested					1.72	.79
lot of help	8	6.9	1	3.2		
medium help	15	12.9	4	12.9		
little help	27	23.3	7	22.6		
no further help	48	41.4	16	51.6		
not important	18	15.5	3	9.7		
Total	116	100	31	100		
9. Single-parenting coping					5.19	.27
lot of help	12	10.3	2	6.7		
medium help	5	4.3	3	10.0		
little help	10	8.5	0	0		
no further help	9	7.7	4	13.3		
not important	81	69.2	21	70.0		
Total	117	100	30	100		

Table 18-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Auxilliary Service Needs

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
10. Divorce or separation coping					11.13	.03
lot of help	15	12.8	0	0		
medium help	6	5.1	2	6.9		
little help	8	6.8	1	3.4		
no further help	6	5.1	6	20.7		
not important	82	70.1	20	69.0		
Total	117	100	29	100		
11. Raising children					6.80	.15
lot of help	20	17.1	2	7.1		
medium help	15	12.8	2	7.1		
little help	12	10.3	1	3.6		
no further help	8	6.8	5	17.9		
not important	62	53.0	18	64.3		
Total	117	100	28	100		
12. Understanding different cultures					1.23	.88
lot of help	6	5.1	1	3.2		
medium help	16	13.7	3	9.7		
little help	53	45.3	13	41.9		
no further help	29	24.8	9	29.0		
not important	13	11.1	5	16.1		
Total	117	100	31	100		
13. Dealing with different					2.17	.71
lot of help	10	8.5	1	3.2		
medium help	16	13.7	4	12.9		
little help	49	41.9	14	45.2		
no further help	33	28.2	11	35.5		
not important	9	7.7	1	3.2		
Total	117	100	31	100		
14. Discrimination coping					3.82	.44
lot of help	5	4.3	2	6.5		
medium help	12	10.3	1	3.2		
little help	35	29.9	12	38.7		
no further help	47	40.2	14	45.2		
not important	18	15.4	2	6.5		
Total	117	100	31	100		
15. Marital stress coping					9.07	.06
lot of help	16	13.7	0	0		
medium help	14	12.0	1	3.3		
little help	15	12.8	8	26.7		
no further help	16	13.7	5	16.7		
not important	56	47.9	16	53.3		
Total	117	100	30	100		

Table 18-Continued

Chi Square Analysis of Washington Campus and West Campus  
Student Responses Concerning Auxilliary Service Needs

Item	Washington		West		Chi Square	
	N	%	N	%	$\chi^2$	p
16. Dealing with conflicts					6.79	.15
lot of help	16	13.9	2	6.7		
medium help	21	18.3	2	6.7		
little help	30	26.1	7	23.3		
no further help	29	25.2	14	46.7		
not important	19	16.5	5	16.7		
Total	115	100	30	100		
17. Dealing with community problems					3.14	.54
lot of help	8	6.8	2	6.7		
medium help	17	14.5	6	20.0		
little help	35	29.9	12	40.0		
no further help	37	31.6	8	26.7		
not important	20	17.1	2	6.7		
Total	117	100	30	100		
18. Government participation					3.92	.42
lot of help	13	11.1	3	10.0		
medium help	22	18.8	9	30.0		
little help	26	22.2	9	30.0		
no further help	23	19.7	3	10.0		
not important	33	28.2	6	20.0		
Total	117	100	30	100		

There were sixteen items of auxiliary service needs which were significantly different between the groups of Washington Campus students and West Campus students. These are discussed further as they relate to life skills development, career development, educational planning, and associations with others.

Items of significance relating to life skills development included increasing math skills ( $p < .01$ ), improving writing skills ( $p < .01$ ), improving study skills ( $p < .01$ ), developing speaking abilities ( $p < .02$ ), and setting life goals ( $p < .04$ ). In each of these items, the Washington Campus students responded that they had more need of help than the West Campus students.

Items of significance relating to career development included learning where to get training ( $p < .01$ ), knowing about available jobs ( $p < .02$ ), learning about training requirements ( $p < .03$ ), and developing a vita ( $p < .04$ ). In each of these items, the Washington Campus Students responded that they had more need of help than the West Campus students.

Items of significance relating to educational planning included getting advice about educational plans ( $p < .01$ ), selecting appropriate courses ( $p < .01$ ), gaining entrance requirements information ( $p < .02$ ), selecting educational programs ( $p < .03$ ), transferring prior credits ( $p < .03$ ), and gaining credit for non-traditional courses ( $p < .03$ ). In each of these items, the Washington Campus students responded that they had more need of help than the West Campus students.

Items of significance relating to associations with others included coping with divorce or separation ( $p < .03$ ). A higher percentage of Washington Campus students responded that they had more need of help than the West Campus students.

### Research Outcome

In summary, the research results obtained from the Adult Learner Needs Assessment included the following information.

### Description of majority of subjects:

1. Age range of twenty-four years or older
2. Caucasian
3. Unmarried
4. No dependent children
5. Highest level of completed education--high school diploma
6. Registered the previous semester
7. Total family income range of either \$12,000-\$19,999 or \$20,000-\$39,000
8. Employed in clerical field either full-time or part-time

### Educational plans and preferences of traditional student group:

1. Reasons for continuing education:
  - (1) for personal satisfaction
  - (2) to improve income
  - (3) to obtain a higher degree
  - (4) to become better educated
  - (5) to learn a new occupation

2. Major source of educational funds:
  - (1) personal or family savings
  - (2) personal earnings
  - (3) other family income
3. Preferred enrollment status--full-time.
4. Preferred class time--morning time frame.
5. Preferred class frequency--3 to 4 times weekly.
6. Preferred class type--no preference and mixed classes.
7. Preferred class location--on-campus.
8. Preferred class format--lecture.

Auxilliary service needs of traditional student group:

1. Needs in area of life skills development:
  - (1) increasing math skills
  - (2) improving study skills
  - (3) increasing reading speed
  - (4) learning to take tests
  - (5) developing speaking abilities
  - (6) budgeting money
2. Needs in area of career development:
  - (1) know about available jobs near to home
  - (2) learning about job opportunities
  - (3) identifying strengths and weaknesses
  - (4) job interviewing
  - (5) developing a vita

3. Needs in area of educational planning:
  - (1) advice about educational plan
  - (2) financial aid information
  - (3) entrance requirements information
  - (4) selecting educational program
  - (5) selecting appropriate courses
4. Needs in area of associations with others:
  - (1) participation in government
  - (2) making friends
  - (3) communication with instructor
  - (4) understanding and expressing personal values
  - (5) communication with academic advisors

Educational plans and preferences of non-traditional student group:

1. Reasons for continuing education:
  - (1) for personal satisfaction
  - (2) to become better educated and informed
  - (3) for general self-improvement
  - (4) to obtain a higher degree
  - (5) to improve income
2. Major source of educational funds:
  - (1) personal earnings
  - (2) personal or family savings
  - (3) educational grants
  - (4) other family income

3. Preferred enrollment status--either full-time or part-time.
4. Preferred class time--morning time frame.
5. Preferred class frequency--twice a week.
6. Preferred class type--mixed classes.
7. Preferred class location--on-campus.
8. Preferred class format--lecture and small groups.

Auxilliary service needs of non-traditional student group:

1. Needs in area of life skills development:
  - (1) developing speaking abilities
  - (2) increasing math skills
  - (3) improving study skills
  - (4) learning to take a test
  - (5) improving writing skills
2. Needs in area of career development:
  - (1) learning about job opportunities
  - (2) identifying strengths and weaknesses
  - (3) developing a vita
  - (4) discussing career with people employed in field
  - (5) knowing about available jobs near to home
3. Needs in area of educational planning:
  - (1) advice about educational plans
  - (2) financial aid information
  - (3) entrance requirements information

- (4) selecting educational program
- (5) selecting appropriate courses
- 4. Needs in area of associations with others:
  - (1) raising children
  - (2) understanding and expressing personal values
  - (3) dealing with conflicts
  - (4) communication with instructors
  - (5) participation in government

Differences in educational plans and preferences of the traditional and non-traditional student groups:

- 1. Personal or family savings as source of educational funds.
- 2. Type of class preferred.
- 3. Type of enrollment status.
- 4. To improve income as a reason for continuing education.
- 5. Personal earnings as a source of educational funds.

Differences in auxilliary service needs of the traditional and non-traditional student groups:

- 1. Differences pertaining to life skills development:
  - (1) improving study skills
  - (2) developing speaking abilities
  - (3) learning on own
  - (4) learning to make better decisions
  - (5) becoming more independent
  - (6) learning to take tests better
  - (7) managing time better

2. Differences pertaining to career development:
  - (1) getting part-time work in career field
  - (2) learning to find job openings
  - (3) learning about income potentials
  - (4) discussing career with people in field
  - (5) identifying strengths and weaknesses
  - (6) learning where to get training
3. Differences pertaining to educational planning:
  - (1) child care
  - (2) use of library
  - (3) securing transportation
4. Differences pertaining to associations with others:
  - (1) raising children
  - (2) coping with problems of single parenting
  - (3) dealing with problems of divorce or separation
  - (4) coping with marital stress
  - (5) relating to younger students
  - (6) understanding and expressing personal values
  - (7) gaining an understanding of different cultures
  - (8) dealing with discrimination

Differences in educational plans and preferences of the

Washington Campus and West Campus students:

1. Personal or family savings as a source of educational funds.
2. Scholarships as a source of educational funds.
3. Type of enrollment status.
4. To learn a new occupation as a reason for continuing education.
5. Educational grants as a source of educational funds.
6. Preferred class location.
7. To improve income as a reason for continuing education.
8. Other family income as a source of educational funds.
9. Type of class preferred.

Differences in auxilliary service needs between the Washington Campus  
and West Campus students:

1. Differences pertaining to life skills development:
  - (1) increasing math skills
  - (2) improving writing skills
  - (3) improving study skills
  - (4) developing speaking abilities
  - (5) setting life goals
2. Differences pertaining to career development:
  - (1) learning where to get training
  - (2) knowing about available jobs
  - (3) learning about training requirements
  - (4) developing a vita

3. Differences pertaining to educational planning:
  - (1) getting advice about educational plans
  - (2) selecting appropriate courses
  - (3) gaining entrance requirement information
  - (4) selecting educational program
  - (5) transferring prior credits
  - (6) gaining credit for non-traditional courses
4. Differences pertaining to associations with others:
  - (1) coping with divorce or separation

Further conclusions and implications are discussed in the following chapter.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

Women are returning to college in increasing numbers, and their concerns are different from the traditional student who is between the ages of eighteen and twenty-three years. The purposes of this study were to describe the service needs of female students at Amarillo College and to determine the differences between the needs of the traditional student and the needs of the returning adult student. This descriptive study of 150 female students was completed at Amarillo College in the spring of 1981. Data were collected by the Adult Learner Needs Assessment. This included 95 identified concerns and 11 characteristics of the students. Data were analyzed by calculating frequencies, percentages, rank order, and by use of the Chi Square contingency coefficient at the .05 level of significance.

The analysis of the 11 background characteristics of this sample provided a description of the participants. The majority of the students in this study were twenty-four or over, attended the Washington Campus, Caucasian, unmarried, and with no dependent children. The majority had completed high school as the highest level of education, were registered the previous semester and had total family incomes either in the \$12,000-\$19,999 range or \$20,000-\$39,000 range. The

majority were employed either part-time or full-time with the majority in the clerical field.

Ten research questions were designed to fulfill the purposes of this study. The first and second questions sought to identify the needs of the traditional and non-traditional students. These needs were organized regarding educational plans and preferences and auxilliary service needs. Concerning both educational plans and preferences and auxilliary service needs, the traditional students indicated only moderate percentages of need for most of these items. The non-traditional students indicated a higher percentage of need for most of these items.

The next question was directed to the differences between the educational plans and preferences of the traditional and non-traditional students. This study identified five significant differences. The results were that the traditional students considered personal or family savings and personal earnings as major sources of educational funds, preferred full-time enrollment, indicated no preference for class composition, and considered improving income as a major reason for continuing her education much more often than the non-traditional students.

The fourth question was directed to the differences between the auxilliary service needs of the traditional and non-traditional students. This study identified twenty-four significant differences which were organized into the areas of life skills development, career development,

educational planning, and associations with others. The next four research questions dealt with the differences in each of these areas. The results pertaining to life skills development indicated the non-traditional student felt more need of help on the items of improving study skills, developing speaking abilities, learning on own, learning how to make better decisions, learning to take tests, and managing time better. The non-traditional students indicated less need on the item of becoming more independent. The results pertaining to career development indicated the non-traditional students felt more need of help on the items of discussing the career with people employed in the field, identifying strengths and weaknesses, and learning about income potentials. The non-traditional students indicated less need of help on the items of getting part-time work in the career field, learning to find job openings, getting full-time experience in the career field, and learning where to get training. The results pertaining to educational planning indicated the non-traditional students felt more need of help on the items of child care, use of library, and securing transportation. The results pertaining to associations with others indicated the non-traditional students felt more need of help on the items of raising children, coping with problems of single parenting, dealing with problems of divorce or separation, coping with marital stress, relating to younger children, understanding and expressing personal values, gaining an understanding of different cultures, and dealing with discrimination.

The last two research questions were directed to the differences between the Washington Campus students and the West Campus students. This study identified nine significant differences pertaining to educational plans and preferences. The West Campus students considered personal or family savings, scholarships, educational grants, and other family income as major sources for educational funds. The West Campus students considered learning a new occupation and improving income as major reasons for continuing their education and preferred full-time enrollment and traditional age classes. The Washington Campus students preferred on-campus locations. This study identified sixteen significant differences pertaining to auxiliary service needs. The Washington Campus students indicated more need of help than the West Campus students on each of the following items: increasing math skills, improving writing skills, improving study skills, developing speaking abilities, setting life goals, learning where to get training, knowing about available jobs, learning about training requirements, and developing a vita. Other items in this group included getting advice about educational plans, selecting appropriate courses, gaining entrance requirement information, selecting educational program, transferring prior credits, gaining credit for non-traditional courses, and coping with divorce or separation.

### Conclusions

The items of concern identified by the traditional students in this study were very similar to the concerns identified by the non-traditional students. These similarities indicate the auxiliary service needs of these two groups were not very different. The non-traditional students did indicate more need of help than the traditional students on almost all of the identified concerns. The evidence of this study indicated a lack of self-confidence in the non-traditional group concerning academic abilities, career planning, general college information, and skills involving associations with others. This supports the need for more support services designed to help the re-entering adult student make the transition back to college. The Washington Campus student indicated much more need of help on most of the items than did the West Campus students. This supports the perspective that students at the West Campus have more career certainty and more support from their department faculty than do the students at the Washington campus.

### Recommendations

The design and findings of this study would suggest the following alternatives for further research:

1. Alternative samples need to be described. These might include newly returned adult female learners, non-traditional female learners who have finished two semesters at Amarillo College, and adult male non-traditional students.

2. Comparisons of the support service systems currently in operation at the West Campus and Washington Campus need to be made.

3. A sample of non-traditional students who have received services from the Office of Women's Programs needs to be described with attention directed to which services these women rated as most valuable.

4. New services should be developed to meet the needs identified in this study.

The importance of studies in this area are related to institutional planning as well as to the development of non-traditional students. Research studies may facilitate the marketing of the institution to a growing group of returning students and may help to prepare non-traditional students to meet personal and economic goals.

APPENDIX A

Adult Learner Needs Assessment Survey - copyright 1981 by the American College Testing Program Institutional Services, Box 168, Iowa City, Iowa, 52243. Cost - 63¢ per instrument for handling and scores plus \$4.50 for package of 25 instruments.

APPENDIX B

April 21, 1981

Dear Colleague,

As we discussed on the telephone, I appreciate your help in distributing the questionnaires to be used in my study concerning the auxilliary service needs of female students at Amarillo College.

The attached questionnaires are the instruments for the collection of data for this project. I plan to determine if there is a difference between the auxilliary service needs of female students between the ages of 18-22 years and those of female students age 24 years and over.

It would be a tremendous help if you could distribute these questionnaires to all female students who are willing to participate and who meet the age criteria of the two groups described above. Please explain that their answers will be held in strict confidence and will be used only to develop reports on the entire group.

I would appreciate your allowing the participants to have an opportunity in class to answer the questionnaire. Please read the directions on the enclosed sheet to your class. Please return all completed questionnaires to the Life Development Center in this manila envelope before May 8. Thanks so much for your help.

Sincerely,

Michele Gilmour

APPENDIX C

INSTRUCTIONS FOR STUDENTS USING  
THE ADULT LEARNER NEEDS ASSESSMENT SURVEY

A project is currently underway to analyze the student service needs of the female students at Amarillo College. Your help in filling out this Adult Learner Needs Assessment Survey would be appreciated. By answering these questions, you will assist college officials in planning for programs and services.

The information you supply on this questionnaire will be kept confidential. Do not sign your name or social security number. The information you supply will be used for research purposes and will not be individually listed on any report.

Please read the consent form which accompanies the questionnaire. The directions for filling out the survey are printed at the top of the survey. Read and follow these directions. Remember to use a number 2 pencil. Thank you for your help on this project.

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