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# A qualitative investigation of student interactions in a learning activity center: Defining success, at-risk factors, and resiliency for developmental programs in community colleges

John L. Kalkwarf
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A QUALITATIVE INVESTIGATION OF STUDENT INTERACTIONS

IN A LEARNING ACTIVITY CENTER: DEFINING SUCCESS,

AT-RISK FACTORS, AND RESILIENCY FOR

DEVELOPMENTAL PROGRAMS IN

COMMUNITY COLLEGES

A Dissertation

Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

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December 2005

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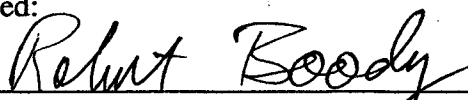
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An Abstract for a Dissertation

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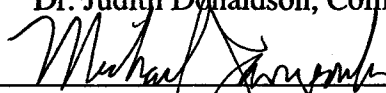of the Requirements for the Degree of

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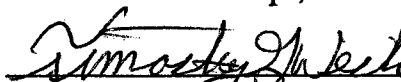
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# ABSTRACT

This purposive study selected ten students of different background in order to understand how the educational success of adults was affected by Learning Activity Centers (LAC) in a community college. The ten selected students were all non-traditional students who had at least these three at-risk factors: (a) they scored below the college minimums on a diagnostic test in reading, writing, or mathematics, (b) they were below student financial aid guidelines, and (c) they had an interrupted educational history of two or more years. The ten students were paired into five categories: (a) Sudanese males, (b) Mexican females, (c) single parent females, (d) single females over 40, and (e) males over 40. The ten selected community college students were all graduates or students who were in their final semester who had used the LAC more than 50 hours. Interviews were conducted to determine how the students viewed academic success, how they overcame their at-risk factors, how they interacted with the staff and resources in the LAC, and how the LAC affected their eventual success.

First, although students partially agree with institutional definitions of success, such as retention, GPA, and graduation, these non-traditional, at-risk students have additional definitions of success which include increased social status, independence, and stabilizing their life situations. Second, the interviews also review how students use resiliency factors to counter the negative affects of at-risk factors. Third, while the developmental curriculum teaches study skills, reading, writing improvement, mathematics, and English as a second language, students need the additional modeling, mentoring, and advising they receive in the LAC to practice what they learn, improve

their skills, and adjust to the social and academic demands of postsecondary education. The research study concludes with suggestions on how to improve staff training in the LAC and that further studies need to focus on additional diverse cultural groups to determine how students can benefit from LACs.

# DEDICATION

I want to dedicate this work to my wife. I am blessed by her loving support of me. She has encouraged me when I was discouraged, motivated me when I was unmotivated, and reminded me every day how important it is to accomplish what you set out to do. If anyone deserves to have their name on this, it is definitely Inok Kalkwarf.

# ACKNOWLEDGEMENTS

I want to express my appreciation to Dr. Robert Boody, who stuck with me for all of the time that it took to get this study complete. His patience has made all of the difference. I also would like to thank all of my colleagues who supported me this past year.

Finally, I would like to remember my parents, Gerhard and Sally Kalkwarf, with a posthumous thank you. They encouraged me in my education from the time I was a young boy. I wish they were alive to see the culmination of a lifetime of work.

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INTRODUCTION

More than 5.3 million students are enrolled in community colleges across the country (National Center for Education Statistics [NCES], 2002). While community colleges have long offered a variety of vocational and certificate programs which directly train students for a specific job or vocation, these institutions have also increased the number of transfer classes, programs, and degrees that allow students to streamline their advanced education at four-year colleges and universities (Cohen & Brawer, 2003).

Community colleges offer a variety of inducements which attract students to their doors. Tuition at most community colleges is significantly lower than at universities in the same states. Community colleges often offer courses at centers located conveniently to the students' homes. Community colleges offer classes at a variety of times which allow students to fit courses into their work schedule. Perhaps most significantly, many community colleges have an open door academic policy for admission. The open door policy means that there is no necessary minimum test score, high school grade point average (GPA), or other prerequisite beyond a high school diploma or General Education Development (GED) equivalency (Cohen & Brawer, 2003). As a result, many students enter the community college underprepared for post-secondary academics (Adelman, 1996; Boylan, 2001).

In addition, as local communities begin to recognize the needs of minority populations, particularly those for whom English is not their native language, a new student community has entered the community college with a variety of academic needs

(Boylan, 2001; Cohen & Brawer, 2003; Hamm, 2004). Furthermore, as more and more elementary and secondary schools test students for learning disabilities, community colleges also face a future which must acknowledge students with an entirely different set of needs (Hamm, 2004). The responsibility to promote academic success for such a diverse student population falls to the community college by virtue of its niche in the educational system (Ogbu, 1992). The community and the students look to the community college to provide the academic support they will need to achieve their goals (Casazza & Silverman, 1996).

In response, community colleges have instituted developmental courses, developmental programs, and learning centers (Cohen & Brawer, 2003; MacDonald & O'Hear, 1996). Yet the results of all of this effort have been mixed. While achievement testing such as ACT, SAT, COMPASS, and ASSET can identify students who are at-risk due to their academic skills, offering a developmental course does not seem to be an effective method of ensuring that students will acquire the necessary academic skills needed to succeed (Higbee & Dwinell, 1998: MacDonald & O'Hear, 1996). Only one-third of academically at-risk students persist to the completion of a program, and the number of students who graduate, transfer into a four-year program, and persist to the completion of their degree is far less (Mutter, 1992; Tinto & Russo, 1994).

Additionally, there are problems evaluating both the effectiveness of the programs and the success of the students themselves. Because they often operate very close to the margin and do not have the same financial resources as the larger four-year institutions, many community colleges have been slow to institute evaluation programs to judge the

effectiveness of curricular changes they make (Laanan, 2001; Levin & Levin, 1991; McGrath & Spear, 1991). Moreover, the traditional forms of evaluation such as pre-test/post-testing, retention analysis, and follow-up on transfer students are often less than reliable (Merriam & Caffarella, 1999). At community colleges, students often have interrupted college careers, transfer freely from one institution to another, repeat courses to obtain a higher grade, or follow other patterns of behavior which make on-going evaluation a difficult process (Hamm, 2004).

However, despite the problems instituting and evaluating developmental programs, it is clear that some students are successful (MacDonald & O'Hear, 1996; Merriam & Caffarella, 1999). While there are factors which would seem to create insurmountable academic, social, cultural, and financial obstacles to success, students manage to graduate (Boylan, 2001). Like everyone involved in developmental education, I want to increase the odds that the students who face such obstacles will succeed. In 1996, Adelman reported that there is a direct correlation between program completion and the preparatory classes taken in high school. Many developmental education instructors would take this study as a given and would simply be surprised that such a study was necessary in the first place (Long, 1998). The response to the problem identified in Adelman's (1996) work has been an increase in developmental courses across the spectrum of two-year and four-year institutions which are designed to compensate for this lack of preparedness (Cohen & Brawer, 2003; Hamm, 2004).

Yet developmental courses address only the academic issues. In my own experience, I have seen how developmental courses can assist a student in overcoming

academic obstacles to become successful. Yet I have also seen how students who take these courses fail at both these courses and at their follow-on academic work. This difference between expected success and actual results—even though it is anecdotal—has left me with the unshakable feeling that there is more to be studied in this problem.

## Variables under Consideration

Clearly, this is an area which requires further study, as it concerns a large number of students, and because so many of the previous studies have yielded inconsistent results (Cress, 2003; Pierson, 1993). This may be due, at least in part, to the extremely complex set of interacting variables in adult learning (Cross, 1981; Driscoll, 2005; Galbraith, 1998a). The problems are further complicated by the lack of consistent record keeping and insufficient study of the effectiveness of developmental programs in community colleges. Although there have been a number of studies on persistence in four-year institutions (Cress, 2003; Tinto, 1993) there have been fewer such studies in two-year institutions, and the applicability of the four-year study to the different academic and social environment of the community college has been the focus of criticism (Ashar & Skenes, 1993; Braxton, Sullivan, & Johnson, 1997; Elkins, Braxton & James, 2000).

There are a daunting number of deterrent factors—academic, social, psychological, historical, financial, motivational, cultural, linguistic, and intelligence factors, to name a few—which affect student success. Countering these, are also resilience factors which allow a student to overcome these deterrents. While developmental courses provide the academic bridge needed to move from various academic skill levels in secondary education to the necessary competencies for

proficiency in college level work, any one of the deterrent factors may be enough to keep a student from succeeding (Casazza & Silverman, 1996; Grimes, 1997).

Moreover, identifying the interaction between deterrent and resilience factors is only part of the challenge. Statistically, it is a relatively simple matter to formulate a data-base query which will answer questions about persistence or course completion and relate those to factors such as gender, race, or English language ability (Cress, 2003; Grimes, 1997). But such queries are deceptively simple because they are based upon a simplified idea of success. Persistence and course completion are not the only measures of success. While the American Association of Community Colleges National Center for Higher Education listed course persistence, academic success in subsequent course work, and student involvement as the main indicators of success, these can be augmented by considering (a) fall-to-fall persistence, (b) goal attainment, (c) degree or certificate completion, (d) work placement rates, (e) transfer rates, (f) employer assessments, (g) academic success after transfer, (h) academic value added, (i) student satisfaction, and (j) perception of professional growth (Harris, 1998). Many of these indicators are particularly useful for the community college because they fit easily into administrative formats for reporting academic success (Hamm, 2004). Some of these, like fall-to-fall persistence and degree completion, are easily quantifiable, while some, such as the level of academic value added and student social interaction, are more subjective in nature. However, there have been studies which indicate that the measurements which are meaningful to the institutions may not be meaningful to the students who are being

measured because some students have perceptions of success that differ from the institutions they are attending (Bingman & Stein, 2001; Stein, 2000).

<div align="center">Learning Assistance Centers and Social Education</div>

In 1993 of retention at four-year colleges, Tinto stated that there is a direct relationship between the academic and social aspects of postsecondary education. In speaking of persistence, he suggested that institutions must promote both intellectual and social growth in order to promote student success. While developmental programs create curriculum which is designed to stimulate intellectual growth through the development of basic skills and the exposure to new ideas, the social development is much more difficult to identify and track (Christie & Dinham, 1991). The answer may lie in an analysis of what happens in the learning assistance centers in community colleges across the country.

Unlike the four-year colleges and universities, at the community colleges it is the learning centers which often provide the majority of the social interactions associated with learning (Parsad & Lewis, 2003). Four-year institutions have a core of students who live in the dormitories and attend a wide variety of activities including those sponsored by the college as well as those springing from the social communities that students form in the colleges. For many students this social interaction forms a bond that will last well past the graduation date (Tinto, 1997). In the two-year college, there is far less social interaction (Astin, 2001; Halpin, 1990; Mutter, 1992). The community college typically has a much higher percentage of non-traditional students than its four-year counterpart. The community college has a much higher number of part-time students and students who work full and part-time while attending college (Hamm, 2004). The community

college could be characterized as a commuter college: students come in, attend the classes, turn in their homework, take their exams, and then go home (Astin, 2001; Haplin, 1990). For these reasons, the level of social interaction between students themselves, student groups, and students and faculty is much less pronounced than in a four-year school (Tinto, 1993; Cohen & Brawer, 2003).

This difference in socialization is where the academic and social interaction model developed by Tinto (1993) has drawn criticism. This model established a direct relationship between social interaction at a college and the retention of students and was later upgraded by Tinto (1997). This model divides the student experience with a postsecondary institution into three time frames—pre-entry, institutional attendance, and outcomes. Tinto then demonstrates how the pre-entry goals and commitments of students are related to the goals and commitments that students have after they have entered the institution. In the pre-entry attributes section, Tinto's model shows the relationship of family background, skills and abilities, prior schooling, and external commitments to the intentions and level of commitment on the part of the student. However, the goals and commitments of student are not static. Interactions with both the academic system and the social system affect the level of integration that a student undergoes in the institution. This integration affects the intentions and commitments of the student, which, in turn, affects the student's decision about whether to stay or leave college. Changing external commitments also affect their level of commitment. Students enter the college system with their own academic and social history. As they enter the system they incorporate their goals and expectations with those of the educational institution. When they attend

classes, they become part of an academic and social system within the larger college community. The manner in which they integrate the social systems of the academic institution and the external community with the academic system directly affects their success. As they acquire more and more experience, their expectations are modified, and their goals change accordingly. In short, it is Tinto's thesis is that interactions within the social system directly influence retention (Bean, J.P, 1985; Liu, 2002; Tinto, 1993). A diagram of Tinto's Model of Institutional Departure is shown in Figure 1.
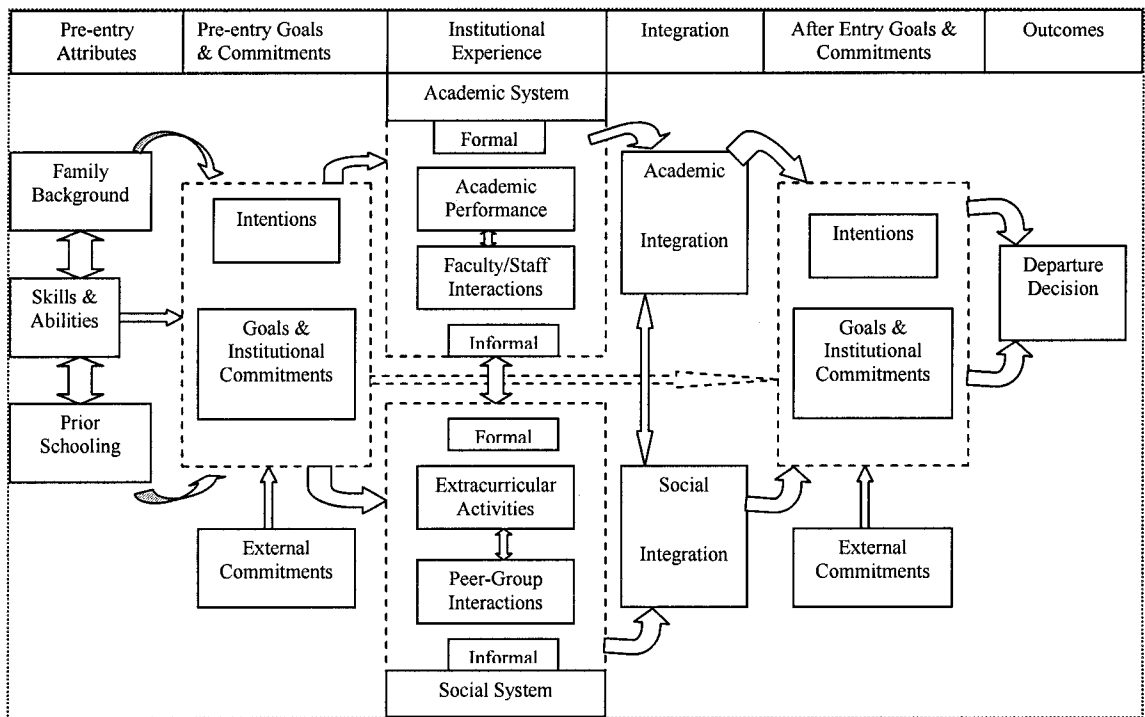


*Figure 1.* Elements of Tinto's Model of Institutional Departure (1993, p. 115)

It has been suggested that Tinto's model be modified for two-year institutions in order to compensate for the lower social interaction inherent in two-year colleges (Elkins et al., 2000). Yet even though the community college has a different level of socialization, it may be that for some students, this lower interaction may be compensated for by the type of socialization which takes place in the learning assistance centers. In other words, although there are far fewer clubs, fraternities, and other social organizations on a community college campus, it may be that the Learning Activity Centers (LAC) are providing an intensely academic socialization indispensable to the acquisition of academic proficiency (Johnson, 1997).

<div align="center">Purpose of the Study</div>

Community colleges must attempt to answer two questions. First, have the changes in developmental curriculum and academic programs really fostered student success? Secondly, what mechanisms have been responsible for that success? Adelman (1996) suggests that academic progress is affected primarily by core course preparation. Tinto (1997) argues that retention is directly correlated to socialization factors. However, although both of these perspectives have merit, it is difficult for a practitioner/researcher such as myself to believe that such a complex problem as student success can be neatly divided into an either/or scenario between these two viewpoints. I suspect that the answers will prove to be much more involved than simply providing core level courses or providing new social organizations.

This research study was designed to examine the academic success of students who used an LAC at a small community college. This college is facing many of the same

challenges that other colleges face. Enrollment of students with diverse needs and problems is increasing in community colleges across the country (Hamm, 2004). There are more students with physical disabilities and learning disorders, more underprepared students, and more students who are not native English speakers, as well as students with diverse social and psychological impediments to success (Hamm, 2004). Most community colleges have tried to adopt curriculum and program changes to accommodate the needs of these diverse populations (Cohen & Brower, 2003). Yet in spite of all of these changes, too many students still do not succeed (Horne, Peter, & Rooney, 2002; NCES, 2002).

## Statement of the Problem

This research investigated the nature of the social interactions in an LAC with particular attention to whether or not those interactions assisted students in overcoming deterrent factors and achieving success.

## Research Questions

The fundamental research questions in this study were:

1. How do at-risk community college students define success, and how does this definition differ from the institutional definition?

2. How do the students' resilience factors affect the at-risk factors of students in achieving this success?

3. What does the LAC contribute to the academic abilities of students?

4. What does the LAC contribute (or fail to contribute) to the overall success of students?

## Research Methodology

Sampling was purposive. The students for the study were selected for three main characteristics. First, they all had either finished their course work at the college, or they were in their final semester. This was to ensure that the study was working with students who had overcome the deterrent factors. Second, the study focused on students who had more than fifty hours in the LAC in their first year. This was an arbitrary number, but it was one which I thought would ensure that the students would have enough experience in the LAC to provide useful information. Finally, students were chosen for individual characteristics which would provide insight into how the differing academic, social, linguistic, and cultural factors were affected by the interactions in the LAC.

The students were interviewed with general questions so that they would have a chance to recount their experiences. Questions and prompts were used to help them focus on how they overcame the deterrent factors, and what specific techniques used by faculty and staff in the LAC were effective. Collaborative background data such as test scores, grades, and income information from the college data banks was also used to assist in the research process where necessary.

It was my belief that social interactions within the LAC play a key role in student success rates, but this belief was based as much upon anecdotal evidence from my own experience as it was from background research. Casazza & Silverman (1996) suggest that in the complex interactions of LACs, it is often difficult to observe and understand the nature of all of the factors which affect those interactions. It was the purpose of this

study to describe the interactions, and then, to discover enough about those interactions to lay the foundation for further study.

<u>Definitions of Terms</u>

For the purpose of this study, special terms will be defined as follows:

1. AA degree. Associate of Arts—general degree usually requiring 64 credits. Most four-year institutions will accept such a degree and grant a student status as a junior, although the student may not get all of his or her credits to transfer within the major (Cohen & Brawer, 2003).

2. AS degree: similar to the AA degree with an emphasis in science (Cohen & Brawer, 2003).

3. AAS degree. This degree is also a two-year degree, but it more often used as a terminal degree. Students with this degree do not usually go on to the four-year institutions. Examples include Agricultural Management, Bookkeeping, Computer Network Management, Machine Shop, and many nursing programs (Cohen & Brawer, 2003).

4. African-American: The NCES in the Integrated Postsecondary Educational Data System, in its glossary, defines "Black or African-American" as "A person having origins in any of the Black racial groups of Africa." (section A) The NCES, itself has no definition for African-American, but defines "Black" as "A person having origins in any of the Black racial groups in Africa. Normally excludes persons of Hispanic origin except for tabulations produced by the U.S. Bureau of the Census," (561). These definitions do not distinguish between the diverse groups

of recent immigrants from Africa. However, the Black subjects of this study are both recent immigrant refugees from African nations. These refugees will be distinguished from the larger racial group which includes citizens who were born in the United States and who grew up in homes where English was the primary language.

5. African refugees will refer to those who are immigrants from African countries. While in other circumstances, this might also include Caucasians who immigrated from South Africa or Arabic speakers from Egypt, the primary focus of this study is on two Sudanese refugees from the Nuer tribe.

6. At-risk factors include, but are not limited to academic, social, psychological, financial, linguistic, or cultural factors which have been shown to be statistically significant in predicting student success rates. Many such factors are defined in chapter 2.

7. Certificate programs refer to those programs which do not grant a degree but which qualify a student to work in a particular field, such as Dental Hygiene, Child Care Operations, or Office Administrator.

8. Deterrent factors include, but are not limited to, the at-risk factors which become an obstacle in the path of any individual student's success. Thus, while race might be an at-risk factor for African-American students attending a community college, it might not be a deterrent factor for all Asian students. While an Asian student may qualify as a minority, race may not be a deterrent factor in attaining success in education. While single parent status may be a deterrent factor for a

woman who has three children under the age of five, it will probably not qualify as a deterrent factor for another woman with one child who has been away in the military for a year.

9. Developmental courses will be courses designed to bridge students from an inadequate secondary preparation to an academic proficiency which will enable them to function at the postsecondary level.

10. Diagnostic testing refers to initial testing which will assist in placement. COMPASS and ASSET are both examples of diagnostic tests. These tests are designed to determine a student's skill level in such areas as reading, writing, mathematics, and English as a Second Language (ESL). Unlike aptitude tests like ACT, SAT, or TOEFL, which are often used to qualify a student for admission, COMPASS and ASSET are diagnostic tests used to determine which classes would be best for the student to begin. COMPASS and ASSET are designed to be used for placement (American College Test, [ACT], 2004).

11. Four-year institutions refer to colleges and universities, both public and private which are authorized to award four-year bachelor's degrees.

12. ESL/TESOL usually refers to English as a Second Language and Teaching English to Speakers of Other Languages. Most professionals in the field prefer the second term because of controversy over the public's view of the first term.

13. Hispanic: This paper will use the Integrated Postsecondary Educational Data System (IPEDS; 2004) definition stating, "A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless

of race." (para. Section R). While some texts use terms such as Latino/Latina and Hispanic-Latino/Hispanic-Latina, the IPEDS definition will be used here for the sake of clarity and consistence with the national statistical base.

14. Learning Assistance Center (LAC) is a place which provides academic support in the form of homework assistance, one-on-one interaction with staff and faculty, and study accommodations for different academic classes. The LAC is different from other study areas such as the library because of the level of assistance that the student can receive from qualified staff.

15. Learning Assistance Program (LAP) involves both the curricular and non-curricular assistance programs for underprepared students.

16. Mentoring refers to the one-on-one social interactions which may happen between faculty and student, staff and student, or student and student. Mentoring may focus on academic subjects, but is not limited to them, and will usually include learning and study techniques, coaching, advising, and even personal counseling, depending upon the needs of the student.

17. Race/ethnicity are defined by IPEDS as follows:

> Categories developed in 1997 by the Office of Management and Budget (OMB) that are used to describe groups to which individuals belong, identify with, or belong in the eyes of the community. The categories do not denote scientific definitions of anthropological origins. The designations are used to categorize U.S. citizens, resident aliens, and other eligible non-citizens. Individuals are asked to first designate ethnicity as

Hispanic or Latino or Not Hispanic or Latino. Second, individuals are asked to indicate all races that apply among the following: American Indian or Alaska Native, Asian, Black or African-American, Native Hawaiian or Other Pacific Islander, and White (section R).

18. Remedial education is a term for developmental education which is declining in use, but which contains "Instruction for a student lacking those reading, writing, or mathematics skills necessary to perform college-level work at the level required by the attended institution." (NCES, 2002, p. 561).

19. Resiliency refers to those factors which students use to overcome deterrent factors, such as positive character traits, support networks, or past history.

20. Teaching refers to interaction between faculty and student which usually originates in a classroom environment and is focused toward course work.

21. Transfer credits refer to those which will qualify a student for part of a four-year degree and are usually identified by articulation agreements between colleges and universities.

22. Two-year institutions may include both institutions that are private or public, for profit, or not-for-profit, and which may have one year or shorter vocational programs.

23. Underprepared students are students who have test scores and academic histories which indicate that they have had less than the requisite core level of courses (Adelman, 1996).

24. Vocational programs refer to programs which are usually less than two-years, and which are designed to qualify the student for a specific job. The credits for these kinds of courses may not all transfer into other programs.

### Limitations and Assumptions

This study is designed to describe the interactions within the context of the LAC environment. As it is based upon a selected sample of students who used the LAC in one community college, its primary value will be to explore the interactions of students within that environment. While its conclusions are very limited in terms of how they can be generalized to other environments and situations, the ethnographic and narrative data provided by the students will serve to guide further studies in adult education as well as suggest new approaches to developmental programs in community colleges.

CHAPTER 2

LITERATURE REVIEW

In the literature review for this study, several aspects of Learning Assistance

Center (LAC) evaluation must be considered. First, in order to understand any program

one must have an understanding of the educational environment in which it operates.

Second, it is necessary to understand how the LAC relates to the Learning Assistance

Program (LAP) and other programs within that educational environment. Third, it is

important to understand the at-risk students who are the potential users of the LAC.

Fourth, it is important to understand how resiliency factors interact with the at-risk

factors in affecting student success. Last, it is necessary to define the aspects of the

interactions of the LAC in order to evaluate the influence of the LAC on student success.

Educational Environment of Two-year Institutions

LACs do not operate in a vacuum, but are programs designed to meet the needs of

students and institutions in very specific, individualized ways. Measuring success in an

LAC at a community college means understanding the complex relationships among a

myriad of variables. Community colleges themselves provide an environment for LACs,

and that environment varies considerably in size, mission, methodology, and stakeholders

(Cohen & Brawer, 2003).

While most LACs support developmental programs, there are often extensive

differences between the Learning Assistance Programs (LAP) from state to state, and

even from community to community. There is also considerable variety among the

stakeholders involved in LAC interactions. Students needing LAC assistance show a

remarkable diversity in motivation, socio-economic status (SES), cultural and ethnic background, academic preparation, and a host of other factors. Faculty, staff, and administration can be culturally diverse, may have received widely differing levels and types of professional development, and may approach LAC issues and interactions with opposing methods and pedagogies (Boylan, 2001; Casazza & Silverman, 1996).

There is both a recognized need for understanding the differences between four-year and two-year institutions and the necessity for deeper research into what actually happens at two-year colleges. This is a recognition that is relatively new, but as the community colleges have stepped in to fill in a vital role in the educational system of the United States, a much greater interest has been generated in them (Laanan, 2001; Levin, 2001).

Diversity among Community Colleges

There are several difficulties inherent in a study of community colleges. First, community colleges are by no means homogeneous. While all states have two-year colleges, the laws and systems governing what those colleges teach and how they are integrated into the larger educational system vary widely from state to state. Budget sources, governing boards and committees, and missions change greatly whenever a state border is crossed. Tax revenues, bond issues, and public funds of all types are raised and distributed in different ways from state to state, and even from community to community. Additionally, private funds—especially those from local businesses and companies are solicited differently from place to place. Policy in each community college is determined by a variety of different forms of elected and appointed officials, all of whom are

connected in different ways to state and local governments (Rhoads & Valadez, 1996; Richardson, Jr. & de los Santos, 2001).

In addition, community colleges are usually highly reflective of the local demographics in the communities they serve. Some urban colleges are nearly as large as the universities in their local area, and others resemble small four-year, private colleges in rural areas. Some have satellite campus sites which are hundreds of miles from the central site, while others have only one local campus. Community colleges usually have a higher percentage of minority students than four-year colleges, and they often have satellite campus sites in minority neighborhoods (Cohen & Brawer, 2003; Lutzker, 1995; O'Banion, 1989).

The missions of community colleges vary as well. Some have a heavy focus on two-year transfer degrees, such as the AA or AAS degree, while others are totally dedicated to providing vocational education. Transfer degrees now make up a sizeable portion of course work for community colleges, and in many colleges, transfer degree students outnumber vocational students (Cohen & Brawer, 1987; Hamm, 2004). Vocational education has also taken on a new face. There are still short certificate programs which train students in more traditional skills such as keyboarding or diesel engine repair. However, many colleges have responded to the needs of the local community and the work force by instituting programs which start off with certification and eventually finish with a two-year terminal degree in such areas as nursing, medical technologies, court reporting, and retail marketing. Additionally, colleges have used

vocational programs to prepare students for specific academies in areas such as criminal justice and penology (Cohen & Brawer, 2003; Horne, Peter, & Rooney, 2002).

Differences Between Two-year and Four-year Institutions

There are other dramatic differences between the public two-year college and its four-year counterpart which compel the researcher to focus on the community college. First of all, the primary mission of the four-year college is to promote bachelors and many universities also support graduate degrees. Conversely, although the two-year colleges grant two-year degrees, they have a variety of other educational missions including GED preparation, continuing education, vocational and certificate programs, and workforce development and training programs (Griffin & Connor, 1994). Additionally, four-year institutions receive billions in federal grants for research, and for many this has become their secondary mission. Community college grant applications tend to focus more on community projects, business and industrial advancement in the community, and fostering vocational and developmental education programs (Cohen & Brawer, 2003).

Instructors differ as well. Instructors in the four-year institutions average a higher education level, greater pay, and lower class loads than their two-year counterparts. Some states have certification requirements for community college instructors. Vocational programs often require only a license in the respective field for instructor qualification. Transfer level classes are often taught by instructors with master's degrees. While there is far less pressure at community colleges for publication, there is also a higher course load for most instructors (Palmer & Zimbler, 2000).

Another major difference concerns admission standards. Admission to four-year institutions tend to be limited by minimum ACT/SAT/TOEFL test scores, GPA, and class standing. For most community colleges, admission standards, if there are any at all, are limited to a high school diploma or equivalency, which can often be waived. Entrance testing at community colleges are primarily used for placement rather than for decisions about admission eligibility (Boylan, Bliss, & Bonham, 1992).

Many four-year colleges and universities have large dormitory populations and enroll a substantial number of students recruited from out-of-state and international applications. Most community colleges are *commuter* schools—relying on a very local population (Chaves, 2003). A much higher percentage of this population goes to work or returns home when classes end and have only a very limited social involvement with the school. A far greater percentage of the community college students are part-time and many are enrolled on an irregular, rather than a continuous, basis. Also, a far higher percentage of the graduates of a community college will remain in the area after graduation (Anderson, Bowman, & Tinto, 1972; Astin, 2001; Cohen & Brawer, 2003).

While this brief description of the differences between the two postsecondary systems is by no means complete, it serves to demonstrate the dramatic differences between them and to intimate some of the special problems faced by the two-year colleges. For these reasons the researcher must exercise caution when attempting to transfer conclusions obtained from four-year institutional settings to two-year institutional settings (Casazza & Silverman, 1996; Cohen & Brawer, 2003; Ewell, 1994). Furthermore, the wide variations among community colleges themselves often make it

difficult to formulate any type of statement covering all of them (Cohen, 1975; Cohen & Brawer, 1987).

<div align="center">Learning Assistance Programs</div>

Despite their prevalence, LAP's are still relative newcomers to the field of education. Increasing numbers of students who were underprepared for college level courses became a concern in the 1960's and 1970's (Howell, 2001). By the 1980's more and more colleges were designing programs to help students become better prepared for the classes and course work that they would need to navigate in order to get a degree. The open-door policy of the community colleges has magnified the need for such programs in two-year institutions, and currently 98% of all public two-year institutions have some curriculum for assisting underprepared students (Farmer & Barham, 2001; McGrath & Spear, 1991; O'Banion, 1989).

Remedial Education

With the increased need for curriculum changes that reflected the needs of the underprepared student, there also came a shift in the attitudes of educational institutions designing the new programs. In the 1960's and 1970's such programs were called *remedial*. Indeed, that term is still used today, even by the National Center for Education Statistics (NCES, 2002). Remedial curriculum was primarily focused on skills. It recognized that a growing percentage of students lacked proficiency in reading, writing, and mathematics. The remedy for this was simply to repeat the skills based training that the students should have received in their secondary education (Shaw, 1989; Venezky, Bristow, & Sabatini, 1994).

Of course, with a change in curriculum, there was a need to measure how such a change affected student success. The first efforts in measurement focused primarily on gain, grade point average, retention, and surveys (Boylan, 1981).

Gain was often measured by pre-test/post-test systems. The assessment instruments were usually norm-based, as those testing systems were the easiest and least costly to administer. While the programs showed general improvements in common skills, the overall results were often mixed. Different schools used different assessment systems. The testing of some students showed little or no change, but the students would go on to other classes and be successful. Conversely, students would complete remedial classes and still not show significant gain (Boylan, Bliss, & Bonham, 1997; Bray, 1987; Clowes, 1981).

Because they were readily available and lent themselves easily to report formats, GPA and retention data were also used. These also showed mixed results. Students who did poorly in remedial classes or skipped them altogether often did well in their postsecondary classes. Some students who did well in remedial classes did poorly in postsecondary classes. Retention rate results were similarly mixed (Grimes, 1997; O'Banion, 1994).

Survey data, however, often showed that students were satisfied with the course work. They believed that they were learning the skills they needed to become successful. This mixture of GPA, retention, and results has lead many educators to believe that the essentials of the remedial program were working, but that there was a definite need for improvement in form and content (O'Banion, 1989; Shaw, 1989).

<u>Developmental Education.</u>

New curriculum began to emerge which reflected new ideas as well as concepts developed by the fledgling field of andragogy—the pedagogy of adult education (Dick & Cary, 1996; Merriam & Caffarella, 1999). The change in terminology to *developmental* reflects a change in attitude as well as pedagogy. Educators realized that there was certain stigma attached to the term *remedial* which had several negative consequences. For some, it implied an unfortunate association with a lack of intelligence. The stigma was sometimes so strong that students would not take the needed remedial classes (Levin & Levin, 1991; McGrath & Townsend, 1997). Furthermore, students who did not do well in high school were often reluctant to take the same courses again in college. Many were convinced that if the course work did not help them in high school, it probably would not help them in college (Kerka, 1986; Knott, 1991; Richardson & Bender, 1987).

The pedagogical innovations with developmental curriculum were based upon a new understanding of cognitive and transfer models of learning by the community college system. Accordingly, the pedagogy for developmental curriculum shifted from a strictly drill-for-skills format to one that accounted for the transference of learning from one system to another. Greater effort was made to connect reading, writing, and mathematics classes together. Skill sets which could be used in multiple settings were emphasized (Alfred, Ewell, Hudgins & McClenney, 1999; Dick & Carey, 1996; Worthen, Sanders, & Fitzpatrick, 1997).

Additionally, a new series of courses began to emerge which included metaskills. Metaskills involve skill sets that are not directly connected to the hierarchical framework

of traditional skill building. It was recognized that many students did not have the social and learning management skills to succeed in their classes. Study skills classes focused on skills which would be useful not only in classes, but also in many life situations. Social skills included subjects like time management, resource management, etiquette, personal hygiene, and conflict resolution. Learning management skills included subjects like memory improvement, note-taking, learning styles inventory, and test-taking strategies. Thus developmental education advocated a dual-track approach (Baldwin, 1995; Beder & Medina, 2001; Boylan, Bliss, & Bohham, 1994).

This dual track approach was important for other reasons as well. Community colleges must be innovative in the design of their curriculum because the vocational aspect of their mission, coupled with their close ties to the local business and community needs, requires them to be flexible in meeting the challenges of a constantly changing environment. However, there has been conflict in the institution of the developmental program between the traditionalists who feel that there is a need to promote function and form, and the innovators who believe that it is necessary to accommodate individuality and andragogical principles. This dual-track system seemed to satisfy both camps. The traditional skills classes were left in the developmental curriculum but the texts and syllabi were altered to reflect the new ideas about cognitive learning. In addition, students were given special classes in skills that traditionalists recognized were lacking (Boylan, 1999; Bray, 2001).

Yet there were still flaws. Assessment instruments still showed mixed results. Retention and GPA improved for those who took the courses. There were some

indications from pretest/post-testing that gains were made in the application of appropriate skills. However, the results were not conclusive. No distinct change could be directly related to any of the curriculum variables with any high degree of reliability. While some evaluations show a change on some assessment instruments, the results were not easily duplicated (Collins, 1990; DuBois, 2001; Galbraith, 1998b).

The Evolution of LAP

Learning Assistance Programs (LAP) developed from the recognition that the obstacles faced by underprepared students were not just academic in nature. While developmental programs were designed to accommodate these academic needs, program developers recognized that there were socio-economic, cultural, psychological, and other needs which were interfering with a student's successful academic experience. Community colleges across the country began experimenting with different models of support for students in developmental courses. At first, these programs tended to form by accretion, as practitioners would adjust the developmental curriculum to accommodate the specific needs of the institution or the student populations (Bean, 1994). Later, designers became more organized in their efforts and formed different models for LAP's. These models were designed to accommodate the various needs of developmental students in a program incorporating the instruction of metaskills, advancement through levels in specific curriculum areas, counseling and advising for non-academic obstacles, and the use of technology to individualize instruction. Using a multi-task approach to integrate these different models into a comprehensive unit which reflects the mission of

the specific college and the needs of the stakeholders has become the latest goal for many LAP designers (Bray, 2001; Farmer & Barham, 2001; MacDonald & O'Hear, 1996).

Metaskills models. These are based upon the concept that motivation and information processing are related to student success. These are models which stress modification of student attitudes and behavior as well as incorporating strategies for learning. Nelson DuBois describes the basis for these models: "The degree to which a student employs self-regulated learning and motivational strategies necessary to convert information into coherent accessible knowledge is the degree to which the student will experience academic success." (2001, p. 27) These programs then focus on two facets of metaskills—the ability to self-regulate learning and information processing (Clowes, 2001; DuBois, 2001).

The first aspect of self-regulation refers to the learners' ability to orchestrate multiple strategies in learning as well as monitor their effectiveness. The second aspect involves self-motivation, the ability to endure, maintain effort over time, and manage time and other resources. The third aspect involves self-knowledge and includes honest self-evaluation, developing values, and setting and achieving goals. These self-directed or self-regulation skills teach students to recognize the habits that work against their success and change them. They teach students to apply a variety of strategies to their study in order to attain maximum benefit. They focus on the development of new attitudes and habits which will improve the students' success rate in classes. All of these self-regulation metaskills can be transferred from academic situations to life situations (DuBois, 2001).

The other facet of meta-skills involves the ability to process information. These include focusing attention, encoding and decoding, synthesizing, and retrieving what has been learned. Learners from diverse backgrounds apply different strategies with mixed results. Cultural and ethnic background, educational history, and economic status may all contribute to the use of strategies which interfere with effectiveness. Although it is clear that many these strategies may make a student successful in his or her own cultural environment, it is also clear that successful academic achievement is best fostered by student strategies which adapt to the academic demands of the institution. In other words, while developmental education classes might focus on the learning styles and strategies of diverse learners, eventually, those students will need to acquire the metaskills which will allow them to successfully process information in the manner presented in academic situations (Gaff & Ratcliff, 1997; Knott, 1991; Lutzker, 1995).

<u>Curriculum and instructional approaches</u>. These approaches involve a step-by – step pedagogy designed to build upon students' skills and abilities in order to achieve a final, criterion-based achievement. Mathematics and science courses have traditionally followed this hierarchical system, but the incorporation of cohorts and collaborative learning techniques have added to its success. There is no denying that mathematics and sciences have a hierarchical nature to their skills and need to be sequenced. Students will unlikely be able to complete calculus if they have not completed basic algebra (Gaff & Ratcliff, 1997). However, the traditional drill-for-skills method relies on a continuous accumulation of schema in order to advance. In intermediate courses like algebra, the vast number of schema often cause a breakdown in the ability to achieve a correct answer

(Driscoll, 2005). Cohorts and collaborative learning systems allow for more flexibility. In the traditional curriculum, one or two mistakes would usually cause a student to give up and quit. This caused an exaggeration in what may have already been a negative attitude toward mathematics. Collaborative learning and cohorts allow for alternate calculation and problem-solving systems that reflect real-life situations and which allow students to progress to strategies with less stress (Butterworth, 1999; Driscoll, 2005).

This curriculum shift to collaborative learning and cohorts recognizes the diversity of student cultural and educational backgrounds. Students whose cultural backgrounds foster group learning are encouraged to form cohorts and collaborative learning systems. The multicultural nature of the community college classroom is considered an asset in these systems as it allows a mixture of collaborative strategies which will often cross cultural and ethnic lines. Because all students progress at a similar rate and move through similar experiences, they develop a framework for using the new skills and strategies which is more compatible with their ethnic and cultural backgrounds (Gaff & Ratcliff, 1997; Lutzker, 1995).

The use of collaborative learning techniques can be effective in both reading and writing classes. Collaborative writing allows students of different cultures to overcome obstacles that are not directly related to the writing process, but which nevertheless hinder achieving proficiency. For example, students often feel more free to disclose personal observations to those who share their ethnicity because they are less self-conscious with members of their own ethnic group, they share common culture-related meanings, and they can shift back and forth between ethnic language terms and formal

language terms without fear of being misunderstood. Collaboration then allows expression to be formed by consensus rather than by individual effort. This eliminates some of the self-consciousness, allows for reinforcement of writing techniques, and creates metaskills for future use (Harris, 1998; Lutzker, 1995; Ogunyemi, 2001; Wynn, Belton, Porter, & Jaggers, 2001).

Technology and developmental curriculum. Early uses of computer assisted instruction (CAI) tended to focus on how well the computer could drill students in specific skills. It seemed tailor made for the drill-for-skills curricula. However, it soon became apparent that there were problems with this new technology (Higbee & Dwinell, 1997; Hudson River Center for Program Development [HRCPD], 2001).

First of all, it did not always fit easily into the curriculum. Knowing how to use CAI takes training on the part of the faculty and the curriculum designers, and this training was not always available to faculty and staff. Secondly, much of the CAI software proved less valuable than its promotion would have educators believe. Some forms were simply a rehash of the textbook. Some were so difficult to access or their syntax was so complex that students simply avoided using them whenever possible (Fagbeyiro, 2001; Kegan, 1994). Even when the CAI was well written and useful, many students were reluctant to use it because they themselves were unfamiliar with how to use a computer or did not really understand what was required of them (Kronick & Hargis, 1998; Hoffman, Llagas, & Snyder, 2003).

Another aspect of the technology problem for community colleges is that many of the non-traditional students coming back to school from the work force and many of the

new immigrant and non-native speaking populations had no experience with computers and were actually avoiding their use (Galbraith, 1998b; Hoffman, Llagas, & Snyder, 2003). Some studies even postulated a phobia for some students akin to mathematics anxiety. Regardless of whether the uneasiness comes from an irrational fear or from a lack of familiarity with an expensive and complex piece of technology, students were being forced to confront it. Computer classes were added to the curriculum, and for many schools have become a mandatory requirement for advanced courses and even graduation (Gaff & Ratcliff, 1997). Also, simple items, like calculators and dictionaries, became more and more complex. Many people found them impossible to use when left to themselves and an instruction manual. Many textbooks have added calculators and electronic devices to their skills inventories (Higbee & Dwinell, 1998).

The electronic revolution had other interesting side effects on higher education as well. Most community colleges must husband their resources carefully. They have neither the space nor the money to emulate the universities in acquiring large libraries with printed materials. Instead they rely much more heavily on library consortiums and data base services. Additionally, more and more journals and magazines are making archives of their back issues, enabling students to access a much wider base of information than ever before—as long as that student possesses the skills to manipulate the computer, organize a search, and evaluate the research as it comes on to the screen. For the non-traditional and non-native English speaker, this reliance upon electronic media necessitates the need for new skills and extends the learning curve in developmental coursework (Higbee & Dwinell, 1998; Gaff & Ratcliff, 1997).

Furthermore, more and more educational institutions are providing courses on-line. It is possible for a student to go from a community college certification program to receiving a doctorate without ever leaving the home. While students can avoid Internet and distance learning systems if they wish, more and more classes are using chat room formats, e-mail, and other electronic communications to accomplish the communication in their classes (Cohen & Brawer, 2003).

Technology has affected developmental education. Students must learn to use computers in order to print papers, do PowerPoint presentations, access the Internet, communicate with each other and their professors, do research, and complete their class assignments. For the student with no computer skills, this presents another barrier to learning (Bingman & Stein, 2001; Merrifield, 1998; Stein, 2000).

Counseling and advising needs. Two other aspects of LAP's which need to be mentioned focus on the whole student rather than on the academic skills and abilities. While the terms *counseling* and *advising* are often mistakenly intermingled, they have very different meanings. Advising refers to the function of assisting students through the academic system. It involves assisting students in registering for the proper courses. It usually places the student in contact with a college professional who is responsible for making sure that students progress toward their degree goals and assisting them in the transfer of credit to other schools. Advising is academic in nature, but it may include additional operations such as applying for financial aid, obtaining community assistance, or applying for scholarships (Gordon, 1992).

Counseling, on the other hand, focuses on other aspects of student life. Some students come to the community college with work-related issues: they get fired, their shifts change, they get laid off, or they have job-related stress which prevents them from being successful in academic endeavors. Some students have family issues: they are single parents, widowed, divorced, or simply have small children in a family where both spouses must work. Some of them have emotional and psychological issues—they are being seen by mental health professionals, they are on medication, or they are recovering alcoholics and addicts. Some have had problems with the law: they are on probation or they may be forced to miss school because of court dates. The primary role of the counselor is to assist students in minimizing the negative affect of these outside influences on their academic success (Gordon, 1992).

Counselors have another role to play. They provide emotional support to students and faculty alike. Counseling models for LAP's often incorporate some sort of staffing system that allows counselors to interact with faculty and assist in setting up systems for coping with student problems. Sometimes this means providing motivation for both students and faculty. Sometimes it means providing a system of policy guidelines for situations where faculty have no training, such as how to deal with students who have restraining orders against one another (Gordon, 1992).

Counseling and advising often overlap. In some schools, the counselors are actually advisors whose primary function is academic, but who may be involved in referral services. The counseling and advising models may work in conjunction with curriculum or metaskills models, or they may work separately in a system with no other

LAP. Yet the focus of these models is one where the development of the individual takes precedence over the development of academic skills or strategies. (Gordon, 1992).

Multi-track models. These models incorporate and integrate the other models into comprehensive programs. They incorporate skills assessment and placement in a progressive curriculum. They interview students to determine which metaskills should be learned and what venue would best match the student's learning style. Advising and counseling are performed on a regular basis to make sure that the students are progressing toward a degree and that they are coping with outside obstacles to success. They provide opportunity to learn to use the technology necessary to become successful in modern society and in modern educational systems. They ensure that the students receive adequate peer tutoring and mentoring necessary to support and motivate them to success (Bray, 2001).

### At-risk Variables among Two-year Student Populations

One of the major problems with studying student success rates lies in identifying and isolating the variables relating to students that affect educational outcomes. Studies have been done attempting to correlate educational outcomes to student factors such as race, age, or gender. Other research has focused on academic preparation, curriculum, and institutional involvement. In addition, factors such as motivation, socio-economic standing, family history, ethnic background, and psycho-sociological systems have all been targeted for study (Adelman, 1996).

Aside from the difficulty in identifying and categorizing all of these variables, the traditional quantitative concept of isolating the dependent and independent variables in

order to create a testable hypothesis has proven problematic. Various attempts have been made to identify the differences in profile and outcomes for the traditional versus the non-traditional student. Additionally, there have been numerous attempts to isolate the factors which have the most influence on successful and unsuccessful students in order to identify the student who is most at-risk. The results of such studies have been mixed (Beder, 1991; Braley & Ogden, 1997; Gunning, 2002). It may simply be that there are too many variables interacting in too many ways for any quantitative statistical study to be more meaningful than providing a general guideline for deeper study.

However, to say that it is impossible to isolate all of these variables and determine their actual effect on student outcomes does not mean that it is useless to identify student characteristics which affect success. In fact, identifying these risk characteristics, creating a profile of potential student problem areas, and matching them with student resilience factors may prove to be a successful strategy in mitigating the negative effects of the at-risk factors (Murray, 2003). There have been many studies which focus on the at-risk characteristics of the non-traditional students. In truth, the profile of the non-traditional student, by definition, must include some of the at-risk factors such as enrolling in a postsecondary institution immediately after high school, age, and financial independence (McGrath & Spear, 1991). As two-year institutions have a much higher percentage of non-traditional students than their four-year counterparts, this correlation between non-traditional and at-risk has had less impact on studies in the two-year institutions.

There are many definitions of the traditional and non-traditional students, and describing a typical traditional student may be instrumental in creating a working definition of the non-traditional student. Hamm sets the following criteria for the traditional student: "one who earns a high school diploma, enrolls full time immediately after finishing high school, depends on parents for financial support, and either does not work or works part time." (2004, p. 29). The traditional student lives in a residence hall or first apartment. The traditional student starts in a fall semester, finishes after the spring semester, and has vacations in between (Hamm, 2004).

In addition, it may be informative to look at the current understanding of the average student who is *not* at-risk. This student is between 18 and 19 years old, male, and a high-school graduate with a good background of classes which exceed the usual core required for graduation. This student reads at or above grade level, writes effective essays, is able to do research abstracts and summaries, and has fluent characteristics in speech and communication. This student comes from a family where one parent has graduated from college, has a GPA of more than 2.5 on a four point scale, and scored in the upper quartile on either the ACT or SAT tests. This student has a strong family support network, is involved in some community activities such as church, and understands how to use the various resources of the institution he is attending. This student has no mental health issues, no disabilities, speaks English as a native speaker, and has an IQ sufficient to the tasks to which he will be addressing himself. This student is used to success, has a confident manner, knows what must be done in college, and fully expects to be gainfully employed upon the completion of his education. In short, this

student does not have any of the problems that are normally associated with an unsuccessful academic career. While this profile does not guarantee success, it drastically reduces the chances of failure (Hamm, 2004).

It also describes a student who is unlikely to attend a community college. This student will probably attend a four-year institution immediately after graduation from high school, and will remain there for four-years until he obtains a degree. He will probably never take a remedial or developmental course, need a tutor, or visit an LAC for help with an assignment. While this profile is a idealistic, it does demonstrate the difficulty of defining the profile of the *at-risk* student for whom the community college wishes to provide every opportunity for success, because the at-risk student is virtually everyone else (Hamm, 2004).

A survey of the literature reveals that there may be as many as one hundred separate factors used to identify the at-risk student. This plethora of variables is part of the problem inherent in any quantitative analysis of this problem as so many variables make statistical analysis cumbersome and conclusions difficult to generalize to other situations. Different researchers have focused on different groups of variables. Adelman (1996) selected educational preparation and education in the family history as primary factors. The NCES groups students into categories based upon race/ethnic background, gender, economic status, and other factors (2002). Still others focus on motivation and other psychological and sociological categories. When I initiated this study, I simplified the variables into five broad profiles, because I believed they would be the most useful in a purposive study, but I mentally reserved the right to change them if the course of the

study and other circumstances so warranted. However, having completed the analysis, I found that these categories have held up. These are the broad categories of profiles: (a) personal profile, (b) economic profile, (c) ethnic profile, (d) educational profile, and (e) motivational profile.

Personal Profile

Included in the Personal Profile category are nine characteristics. The first of these is gender. There are more women in college than there are men. This difference is even more pronounced in community colleges. Studies show that gender is a factor in determining success as well as enrollment. There may be many reasons for this. Labor statistics show that women typically have more problems with employment than men. They are more likely to work at jobs which pay less but require more training and education. They are more likely to be in careers which are unstable—meaning more lay-offs and job changes—than men. Women typically earn significantly less in the non-high school graduate and high school graduate levels of employment (Johnson, 1997; Merriam & Clark, 1991; Thorne & Fleenor, 1993).

Women are more likely to be single parents than men. They are more likely to be on some form of public assistance, more likely to be the head of a household which is below the poverty line, and more likely to be owed child support than men. Additionally, women are far more likely to be the victims of crimes—particularly crimes associated with family violence or sexual assault. If a woman is a member of an ethnic minority, this is even more likely to increase the odds that she may have to cope with more than one of the other at-risk factors. For example, while being female statistically decreases

income potential, being Black and female drastically reduces the chances of being employed at a wage above the poverty level (Thorne & Fleener, 1993; Parsad & Lewis, 2003).

Age is another factor in this category. A significant break between high school graduation and postsecondary enrollment can have a negative effect on success, and of course, the student who is more than twenty-two will have such a break in enrollment. Additionally, older students have factors such as jobs, families, and health issues which impact school success rates (Thorne & Fleener, 1993; Parsad & Lewis, 2003).

Students who have high IQ levels usually have opportunities at four-year public or private institutions when they graduate from college. Students with lower abilities and skills, who aspire to lower goals, often choose a community college. As a colleague of mine once said, "Most people who are here didn't have to choose between attending Harvard on a full scholarship and coming here on a Pell Grant." While the comment was made as a hyperbole, there is a kernel of truth in the exaggeration. Students with lower abilities are attracted to the community college because of its open door policy and its reputation for working with the average student. However, the academic standards at community colleges remain high, and the courses offered at community colleges continue to articulate into the degree programs at universities and other four-year institutions. Since students must master the same basic level of material at the community college, intelligence will still play a role in the student success rate. This is not, however, to be confused with the factors listed under learning disabilities and preparedness which are

obstacles that can be overcome or mitigated with techniques and hard work (Fowler & Scarborogh, 1993; Knowles, 1990).

Health issues also play a part in the student's success rate. Physical disabilities can create obstacles to learning, but both universities and community colleges have become better at accommodating the needs of those who are blind, deaf, or bound to a wheelchair. However, the more flexible schedule of the community college has made it possible for many students with chronic illnesses to take courses at their own pace. This flexibility does not eliminate the problems of chronic illness; it only alleviates it in part. Students with these problems still must overcome the symptoms of their illness, cope with medical exigencies as they arise, and compensate for behavior patterns which are necessary for their well-being, but which run contrary to their success as a student (Higbee & Dwinell, 1998).

Additionally, many students return to the community college while in various programs for alcoholism or drug addiction. In addition to the standard problems of binge drinking, underage drinking, and drug use which plague the four-year universities, community colleges must also cope with the problems of those who are in various stages and programs for recovery. Many current recovering alcoholics and addicts choose to attend a community college as a way to change their lives for the better. Moreover, while such sentiments are admirable, not all succeed. Recovering alcoholics and addicts can underestimate the stress in the college atmosphere, and they can relapse. These relapses can have disastrous effects on their ability to succeed in college (Carbone, 1987).

Mental health issues are yet another factor affecting the at-risk student. Students with emotional behavioral disorders in high school often do not have the academic qualifications to enroll in a university. Yet these behavioral problems will still plague them in college. Depression, bi-polar disorder, Attention Deficit Disorder (ADD), Obsessive Compulsive Disorder (OCD), and other psychological problems must be overcome in order to be successful. Poor social skills, brought on by mental health problems can often cause a rippling effect throughout the student's academic structure as it makes cooperative learning nearly impossible and directly impacts upon faculty-student relationships. Often, college is looked upon as a good way to re-enter society because it has a controlled social component, it does not generate an income which would cancel disability benefits, and it has a limited duration. However, the stress of a social, yet academic interaction, homework deadlines, and testing often prove more than the student with mental health issues can bear (Christie & Dinham, 1991).

Learning disorders are another aspect of the personal profile that can have a negative affect on the student's performance. In recent years, most school districts have developed a system for determining if a student has a learning disability. Once this determination has been made, a program is put in place to assist that student in being mainstreamed into the regular school system. Iowa uses the federal Individual Educational Program (IEP) which assists the school system in optimizing its resources for students with disabilities. However, the concept of learning disorders is relatively new, and while most young students with disabilities have been identified and set up in a supportive program during their elementary or secondary years, this is not the case with

the slightly older non-traditional student. Many of these students graduated before much was known about learning disorders, and many were out of school before there was a testing system in place to detect and mitigate the academic problems that these disorders cause (Jordan, 1998; Turner, 1997).

While the effects of many learning disorders can be mitigated with some simple techniques and devices, the identification process still requires testing. As the Americans with Disabilities Act (ADA) does not provide funding at the postsecondary level, most schools require that the student or vocational rehabilitation programs bear the cost. If such a cost is prohibitive, these students often must proceed without access to any of the special accommodations to which they may be entitled. While any reading, writing, speech, or mathematics-based disorder may be a monumental deterrent to a postsecondary education, coupling several of them together can be devastating and demoralizing (Jordan, 1998; Turner, 1997).

Another factor of the personal profile which impacts upon performance is that of family issues. Students' family history, including universal factors like birth order and the number of parents in the home, impact upon performance. Furthermore, Adelman's (1996) study indicated that having one or more parents with a bachelor's degree was a very significant variable in gauging performance levels of the children. Other issues, like child abuse, sexual abuse, foster care, exposure to poverty, exposure to violence as a child, lack of medical care, will obviously affect the mental health and academic ability of the student. Unfortunately, these issues serve only to further complicate the picture because they are difficult variables to isolate due to their subtle nature and their hidden

impact in an educational context. In addition, these subtle family issues often impact other areas, such as motivation, enrollment history, and academic preparation (Cross, 1981; Grimes, 1997).

The non-traditional student brings other family issues into the mix as well. While the student coming straight from high school is usually single and has far fewer demands on his or her time, the non-traditional student often must make time for other family members. Since the population of students who are married, widowed, or divorced is higher at the public two-year college, the community colleges have a higher rate of students facing this problem (Hamm, 2004). Further, many non-traditional students have children, and a large percentage of them are single parents with children in the home or living in the home at least part time. Aside from the financial strain that college can put on a family that may already have a low Socio-Economic Status (SES), many students find that the added stress of a full time academic load is far too much for them to handle when coupled with the obvious stresses of raising a family and providing a minimal income. Divorced students and married students with no children also find themselves in stressful situations. Finally, in a household where the main care-giver or main support has a full and demanding schedule, a sick relative or child can mean a quick end to the academic year or even the academic career (Cross, 1981; Grimes, 1997; Merrifield, 1998).

Community issues also can impact on student success rates. In communities with strong involvement, the local neighbors can assist in relieving some of the stressful problems associated with families and postsecondary education. This is particularly true

of ethnic communities which stress the communal nature of extended families, which often provide emergency child care, domestic assistance, and other services. These may seem like minor resources, but for the mother who might miss a final exam because her kindergartner has the flu, or the man who has to miss a few days of class because he is unable to afford a car repair until the end of the week, these minor problems can make the difference between academic success and failure. Unfortunately, community can also have a negative impact. Landlord problems, drug use by neighbors, gang violence, and other local problems all impact on the student (Beder, 1991; Braley & Ogden, 1997).

Other difficulties within the community can also impact the student, particularly those where the student does not meet the standards of that community. Criminal history, juvenile delinquency, prison time, and other issues affect student outcomes. For some students, criminal behavior has been part of the norm in their secondary school environment. Behaviors learned at that age are likely to persist into adulthood, and cause problems when the students' values system is in direct conflict with that of the local community (Carbone, 1987; Casazza & Silverman, 1996).

A military background also can be a factor in the personal profile. In the past few years, many students who were receiving additional benefits because of their service in the reserves and the National Guard suddenly found themselves on active duty, being shipped overseas. Upon their return, many needed to go through an adjustment period involving psychological counseling and retraining. Veterans from previous eras are also in special groups because of their exposure to violence and other experiences. Veterans have a much higher tendency toward psychological and sociological problems than their

peers, and all of these problems impact upon their need for retraining and readying themselves for employment (Hamm, 2004).

Economic Profile

The economic profile includes characteristics which not only affect student success rates, but which often determine the range of choices for the college at which the student will enroll. Socio-Economic Status (SES) has been measured for many research studies. Income affects the availability of resources. The manner in which poverty impacts a family's life is influenced by the place where they live as well. While the prevailing picture would have us believing that poverty is an urban minority problem, the U.S. government's data shows that more welfare recipients are White and more live in rural and small towns than in the larger cities (Hamm, 2004).

Poverty affects resources. Living one paycheck away from eviction means that a short illness or layoff can put a family on the street. Welfare-to-work programs have pressed many families into a choice between college and work, and with the lack of skills, many choose college as the better alternative. When unemployment compensation runs out, students who are laid off and trying to retrain for another job must spend precious resources on that retraining in the hope that it will mean better opportunities in the future. Poverty is connected to a lack of health insurance. Time spent waiting for doctor visits at free clinics, coping with sick children with no medicine, and being unable to afford prescription drugs that ameliorate chronic illnesses are all factors which can impact a student's ability to attend classes, complete homework assignments, or, more importantly, learn the material (Hamm, 2004; McGrath & Townsend, 1997).

The availability of resources can be stretched to the breaking point when family financial obligations are added to the mix. Earning minimum wage becomes substandard when child support is garnished from wages. Earnings disappear when child care must be paid for every hour of class. Although a part-time job might seem the answer at first glance, it often causes problems with government benefits, requires additional child care expenditures, and impacts precious study time. Married students with a family juggle transportation costs, credit card debt, school issues, work, and a host of other distracters while trying to focus on an education (Hamm, 2004; McGrath & Spear, 1991).

<u>Ethnic Profile</u>

Ethnic profile considers such factors as race, culture, and linguistic considerations, as well as community interaction to be of primary importance. While the NCES and other government agencies have been quick to recognize major differences between Whites, Blacks, Asians, Hispanics, and Native Americans (2002), these broad categories often disguise more subtle distinctions in each group as well as among those who are members of more than one group. Each of these groups has a variety of subcategories which react differently to educational situations because of their unique situations. Other factors, such as immigrant status, community support, religious background, and linguistic heritage all affect educational progress (Larsen-Freeman & Long, 1991).

For example, under the White category in the NCES reports, there are no sub-groups for immigrant or refugee populations (2002). Currently there are Bosnians living in Iowa. While they may check White on any questionnaire listing race, they are not typical of Caucasians in the United States whose great-grandparents emigrated from

Europe and who have been totally assimilated into the culture. Even European Americans who have been in the United States for several generations are much different from each other, and these subtle differences can cause difficulties. One of my students from Atlanta, Georgia who married a local man and moved here to Marshalltown said that she felt like she had immigrated to another country. She was, "Southern and big city," and she had to learn to live in an environment that was, "Northern and small town." While at first glance, this may seem like a small adjustment to make, it must be remembered that this student did not know how to adjust for the extremes in weather that her new climate would impose upon her. She was used to jumping on a bus to go to work, and now she had to drive in from the farm. New schools for her children, new instructors for her, and a totally new cultural situation drew her focus away from learning and used resources in a totally different way from which she was accustomed.

There are similar problems in grouping Blacks together in one racial group. Like the White group, the racial distinction pf Black, totally ignores the influx of refugees of color. These refugees are often even more confused by the labeling of African-American. Many consider themselves to be African, but not American. Their culture stands out in sharp contrast to that of their new home. Among those African-Americans who have been here for generations, there are distinct sub-cultures. No one would be foolish enough to believe that a resident from the South Side of Chicago would react to education in the same way as a resident from rural Mississippi or Waterloo, Iowa. Yet, they are all reported together in one category when they check a box in the "race" column (Hoffman et al., 2003; W. Cross, 1971; Rhoads & Valadez, 1996).

Sub-categories of Hispanics and Latinos also vary widely one from another. Cuban Americans, Puerto Ricans, Mexican Americans, and those who come from Central or South American heritages all have widely differing backgrounds. Their language patterns and dialects vary widely (Rhoads & Valadez, 1996). As with most ethnic groups, an urban or rural background will often markedly contrast one group from another even though they share similar nationality. In spite of their similar language and nationality, their cultural heritage is often so radically different that they react to educational situations in very different ways (Richardson & Bender, 1987; Rhoads & Valadez, 1996).

With Asians, a few common characteristics often mask huge cultural differences, and yet many Asians are treated as if they share a common culture by the U.S. educational system. While most Asian cultures value education and most Asian families support their children in classes, there are wide variations in language, cultural heritage, and religions which affect educational outcomes. Vietnamese, Chinese, Koreans, and Japanese do not react to education in the same way (Kim, Brenner, Lang, & Assay, 2003). Additionally, the simple fact that they are all Asians does not mean that they can be grouped as one, nor does it mean they can even be encouraged to support each other. There have been generations of hatred and prejudice between certain nations and cultural groups which might preclude cooperation (Kim et al., 2003; Scollon & Scollon, 1995).

Native Americans also bring in a series of problems which are disguised by the race category. Each tribe is different and has different economic, linguistic, and cultural backgrounds. Additionally, there are differences in educational background between those who attend a tribal school and those who are educated in local public schools

(Gollnick & Chinn, 1990). Different tribes have different scholarship systems and different attitudes about higher education. Finally, there are other social problems like alcoholism and poverty which are much more dynamic in Native American societies than in the mainstream (Reder, Hart-Landsberg, Schwab & Wikelund, 1991; Scanlan, 1986).

There are other areas where the boxes under "race" are a problem. There is no box for Arabic because it is considered a language rather than an ethnic category, yet there is a growing belief that there should be some distinction for the large number of people who fit this cultural and linguistic group. It must be considered, however, that the Arab-Americans, like the Hispanics, come from a wide variety of national backgrounds. While they may share a common Arabic language, this does not mean that there are not generations of conflict between the nations from which they came. Of particular import with this group are differences in religion. While Islam might seem all of one piece to an outsider, Shiites and Sunnis have long been at odds with one another in spite of the fact that they may originate from the same country (Reder et al., 1991).

Another fast-growing group has found themselves at odds with racial categories. This group is the one which is mixed. A growing number of children in the United States are coming from homes where the parents are of different races. The last census did not adequately cope with this problem, and millions of mixed race citizens and non-citizens were forced to choose between the race of one parent and another on the form. If racial characteristics have an affect on education, then the logical question which follows must be addressed. Do students of mixed racial backgrounds have different educational experiences and expectations (Rhoads & Valadez, 1996)? To date, the census and

educational statistics have been unable to provide the field with precise answers to many of these questions simply because the instruments being used are not asking the right questions (Hamm, 2004; NCES, 2002).

Yet another aspect of this question has to do with how many generations have elapsed since immigration into the United States. Secondgeneration students usually have assimilated much more of the American culture than their first generation counterparts. While they still must cope with cultural shocks because of the differences between their parents' culture and their new situation, they often have a very different attitude toward education and the educational experience than their first generation counterparts (Cummins, 1981; Cummins & Swain, 1986).

What is also interesting is the concept of the new group of students who are between the first and second generation. Harklau, Losey, and Siegal (1999) call them the 1.5 generation. These are students who immigrated as children or adolescents and are now coming through the U.S. educational system. Their language skills are better than the first generation, but not as good as the second generation. They are more conflicted about which culture should prevail in their lives, yet they still must cope with the conflicts of culture shock without the educational background of their younger brothers and sisters. They probably had to spend much more time in ESL classes, they bring differing values to the educational institution, and they have different aspirations than their counterparts (Harklau, Losey & Siegal, 1999; Kim, et al, 2003).

Among the 35 million immigrants in the United States, there are a wide variety of problems and situations which impact education (National Council of La Raza [NCLR],

2003). The first of these is immigration status. While there are a growing number of international students who attend community colleges on a student visa, the other non-citizen classifications figure more prominently in the curricular planning and day to day educational operations of a community college. There is no truly accurate estimate of the number of illegal immigrants in the United States today. Yet the fear of INS and the desire to attain the benefits of the U.S. economy—including an education—remain a factor in the lives of the millions who have crossed our borders illegally. This underground group moves quickly when necessary, uses false identification, and continues to make statistical studies difficult (Hagedorn, Maxwell, Chen, Cypers, & Moon, 2002; Hamm, 2004; Szelenyi & Chang, 2002).

Those with a work permit may take classes, but usually must pay out-of-state tuition or if they are allowed to pay in-state tuition, are not eligible for Pell grants and other programs offered through Free Application for Federal Student Aid (FAFSA; U. S. Department of Education [DOE], 2005; NCLA, 2003). As many of these families are living at or below the poverty line, the inability to qualify for financial assistance creates additional burdens on students (Hagedorn, et al, 2002; Hamm, 2004).

Having a green card allows the student to qualify for FAFSA (DOE, 2005), but this does not eliminate other problems. First of all, those who enroll on a refugee status often bring a host of difficulties with them to the educational institution. Many have come from backgrounds where there was war and where their elementary or secondary educational experience was spotty, interrupted, or incomplete. Regime changes in some countries meant a change in curriculum, language of instruction, and citizenship status.

Students who had been learning in English might have been forced to learn Arabic and study the Koran in order to achieve their education. A second change in regimes, and the whole system could be reversed. Students in some countries simply were unable to attend because the school was destroyed or the teachers were drafted into the army. Refugee camp education is spotty and is usually based upon the availability of the instructors (Cummins & Sayers, 1995; Parsad & Lewis; 2003, Szelenyi & Chang, 2002).

Aside from the complications of refugee status, immigrant status carries another problem for education. While educational systems across the United States are by no means uniform, there are at least some similarities in content, curriculum, and methodology. This does not hold true for the educational experiences brought by immigrant students. Many of these students bring a tradition of oral learning because of the scarcity of the textbooks or because of the cultural heritage (Larsen-Freeman & Long, 1991). Many do not have any experience with electronic media and do not truly understand it. While most community colleges simply accept the credentials associated with high school in their home country as bona fide, this acceptance does not guarantee equality in the classroom. The truth is that such diplomas often lead students and administrators into a false sense of student ability (Amey & Long, 1998; Kerka, 1986; Long, 1998).

Even after years of study, there are still disagreements on exactly how the linguistic profile of a student affects education. While it is an accepted fact that curriculum and instructors can affect the rate at which students learn a second language, there are still many facets of that learning process which are not wholly understood and

which are still hotly debated (White, 1988). It is certain however, that postsecondary education must have a strong focus on Cognitive Academic Language Proficiency (CALP) in order to assist students in compensating for the problems inherent in second language acquisition (SLA). While true fluency is a nebulous concept which may take years to achieve, CALP is a realistic goal that mirrors a similar proficiency in a native speaker's education. For many, even though they achieve a requisite level of proficiency, they still must limit the number of courses that they take in any one semester because it takes them longer to read and write than the native speaking students (Cummins & Swain, 1986).

Another aspect of the ethnic profile has to do with the student's relationship to the ethnic community (Hagedorn et al., 2002). Some ethnic communities are very strong in their support for education, while some are not. Students who are far from community support often have problems because of homesickness and loneliness that can interfere with their education. Students who live in an area where there is wide support for them within the ethnic community often have problems because their involvement with their community slows their acquisition of enough English to be competent in postsecondary systems (Larsen-Freeman & Long, 1991). Peer groups can also be a mixed blessing. For some, following the path of an older student who has already made it will ease some of the burdens of trying to cope with a new experience. For others, peer pressure may mean gangs, crime, drugs, and alcohol (Scollon & Scollon, 1995; Sandler, 1981).

Some of these issues overlap with the factors in the educational profile. Learning theory, particularly in andragogy, emphasizes learning styles, teaching styles, and testing

as important factors in understanding how a student acquires an education (Baumgartner, Lee, Birden, & Flowers, 2003). Gardner (1983) focuses on multiple types of intelligence, and others focus on using differing pedagogies to foster learning in students with different learning styles. It is also clear that motivation is a key factor in understanding how adults learn (Wlodowski & Ginsberg, 1995). Adapting these concepts to the methods used in teaching are making it possible for students to learn more and retain more. Students who have been exposed to a wide variety of teaching styles and methodologies do consistently better than those who are wired to one system (Sternberg, 2001).

Educational Profile

However, there are more issues at hand than just whether the student has been exposed to a teaching style that matches his or her learning style. Enrollment history is also an important variable in determining success. First of all, non-traditional students are far more prone to an erratic enrollment history than their traditional counterparts (Bonham & Luckie, 1993). By definition, non-traditional students usually have a gap in their enrollment history, either between the time of their high school completion and their entrance into the postsecondary system, or between successive years in the postsecondary system itself. Many of these students also alternate between full time and part-time status depending on family and employment variables (Adelman, 1996; Burgess & Samuels, 1999).

Another important factor in educational history concerns academic preparation. Various studies have demonstrated that the level of academic rigor in a student's

academic preparation has a dynamic affect on postsecondary outcomes (Donahan, 2003). Students who take only a core level or below core level of courses are far more likely to be unsuccessful. Students who surpass core level courses in reading, writing, and mathematics have a much improved chance of success. Students who exceed not just the core level courses in reading, writing, and mathematics, but who also have a strong grounding in science, social studies, and other areas have the highest level of success (Adelman, 1996; Donahan, 2003). Again, it is difficult to determine if this is causation or merely correlation because there are so many variables which could affect the success of the students (Knowles, 1990).

Postsecondary institutions have been aware of the relationship between core courses and success. Most use some sort of diagnostic testing system to determine a student's level of competency in one or more of these basic areas (Donahan, 2003). Furthermore, community colleges, in an obvious acknowledgement of the need for in-depth preparation, have been nearly unanimous in adding these core level courses to their curriculum (Parsad & Lewis, 2003).

One aspect of educational history that is far more difficult to measure, but which intuition suggests has a definite impact on educational success is that of life history. Adults bring varying levels of experience with them to the classroom (Knowles, 1990). Some of this experience includes informal training such as military background, employment history, or on-the-job training. Other educational experience may have been attained through hobbies or skills, such as the anatomical knowledge of one who has studied the martial arts, or the biological and zoological knowledge of the hunter or

angler. Some students pick up an enormous amount of knowledge peripherally from experiences such as traveling, watching the history or crime channels, and reading for fun and pleasure (Adelman, 1996; Cross, 1981; Ewell, 1994; Knowles, 1990; Long, 1998).

<u>Motivational Profile</u>

In addition to the previous four categories, it is also necessary to consider a motivational profile of students in postsecondary education. While at first glance, motivation may seem an obvious factor in student success, it is actually a more complex issue than a simple question of "How bad do you want it?" First of all, college completion takes time—usually years. People change. What motivates a student at the beginning of one semester might not motivate them at the beginning of the subsequent semester (Chaves, 2003; Donahan, 2003). Additionally, the college experience itself changes students, as would be hoped. Many students enter college with one goal, and change that goal several times before they complete their education (Parsad & Lewis, 2003).

In 1999, Equipped for the Future (EFF), a subsidiary committee of the National Institute for Literacy (NIFL) from the U.S. Department of Education, did a long range survey to determine what adults wanted from education (Bingman & Stein, 2001; Stein, 2000). This survey was not designed to focus on specific educational goals like attaining a degree, but to investigate underlying content of what adults want from education. EFF's analysis of the survey results divides these goals into three broad categories— family goals, work goals, and citizen/community goals. Under family goals, were the aspects of promoting family members' growth and development, meeting family needs

and responsibilities, and strengthening the family system. Under work-related goals, were the aspects of doing the work with competency, working well with others, understanding and working within the big picture of the company, planning, and developing professional growth. Under citizenship/community goals were becoming and staying informed, forming and expressing ideas and opinions, working together with other citizens, and strengthening communities (Bingman & Stein, 2001; Stein, 2000).

What is interesting about this EFF survey is that the goals themselves are not personal in nature. What the survey discovered was that students are not usually oriented toward self-improvement as their final goal, but that self-improvement is a tool that can be used to achieve their final goals. Thus education, as an aspect of self-improvement, becomes a tool rather than a goal. Students themselves may be confused about this. A statement such as, "I want to get an education so that I can get a better job." might simply be a factor in the student's plan to provide a better family environment or to improve his or her position within the organization. While some short-term goals may be forced upon a student, such as retraining after a lay-off or a disabling injury, the EFF survey suggests that only by understanding the true, underlying learners' goals can educators understand the real motivations of students (Bingman & Stein, 2001; Stein, 2000).

Other factors, such as unrealistic expectations, can interfere with motivation. Some students do not understand the system of prerequisites in American education, and believe that they can finish a degree in an unrealistically short time frame. This is particularly true of many non-native English speakers who must take ESL courses in order to prepare them for the actual courses necessary for graduation. As remedial

courses are not typically given for transfer credit (Higbee & Dwinell, 1997), many students must be either coerced by mandatory placement rules or cajoled by counselors into taking them. Taking a lower level course can affect their self-esteem, put their graduation goals further into the future, and have a debilitating effect on their overall motivation (Cohen & Brawer, 2003; Hamm, 2004; Knowles, 1990).

A complete list of these variables and all of their permutations might run to thousands of pages. However, even the number of variables might not be too large a problem with modern statistical analysis and computer systems if it were not for the additional difficulty inherent in adult learning activity which makes these variables interact with each other in predictable and unpredictable ways (Johnson & Christensen, 2004).

### Resiliency Variables among Two-year Student Populations

When the anti-risk factors are entered into the mix, the entire question becomes even more complicated. The anti-risk factors as a group have been used to define a concept sometimes called resiliency and sometimes called protective factors (Werner, 1993). Yet the concept for both terms is based upon the same basic observation: two students who have the same at-risk factors may have very different outcomes. (Murray, 2003) observed this phenomenon in connection with young people who had high-incidence disabilities.

For the purpose of review, I have categorized resiliency factors into three different groups. The first I call attitude factors, which includes the emotional and spiritual characteristics of the student. The second, I call learning abilities and academic

skills, and it includes talents and abilities which can be learned or honed with training and education. The third group is the network of support factors, and this incorporates all of the influences that family, peer groups, academic institutions, and community groups can have upon a student.

Attitudinal Factors

Attitudinal factors may be key to success rates. I include temperament, self-esteem, optimism, motivation, self-determination, resilience, focus, responsibility acceptance level, and endurance in this category. The purpose in identifying them is not solely to isolate individual factors and discover their effect on any successful behavior, but to understand how each attitude may be connected to other resiliency factors in counteracting the negative aspects of the at-risk factors in determining a student's success.

The first attitudinal factor, temperament, involves a person's day-to-day internal, emotional climate. Happy, sad, angry, quiet, gregarious, friendly, selfish, and a host of other words have been used to define human emotions, but in this instance, it will be important to establish a general emotional outlook on life. Temperament is an emotional setting that is often independent of the day's events. For many students, the inability to control emotions is a major deterrent to maintaining the focus necessary to be successful. For those with mental health issues related to temperament, the barriers can be impossible to overcome. However, for those with a positive temperament, the ability to overcome obstacles is greatly enhanced (Murray, 2003; Werner, 1993).

Self-esteem is another word for the internal emotional climate. This involves the individual's self-perceptions, honesty about one's abilities and shortcomings, and the

ability to be satisfied with one's accomplishments. Self-esteem is closely related to the concept of self-efficacy. Students who have low self-efficacy and self-esteem will be adverse to taking the risks necessary for academic growth (Murray, 2003; Werner, 1993).

Optimism is yet another climate word. It involves the ability to see the advantage in all events, including those that do not turn out well. It allows the student to mitigate the negative effects of setbacks through proper planning and anticipation. It also allows the student to accept failure as part of the learning process and move on (Murray, 2003; Werner, 1993).

Other attitudinal factors is more outward in nature. Motivation is the impetus that each person has toward achieving a goal. Self-determination is the belief that such a goal is possible, and that each person has both the right and the ability to pursue such a goal. Discernment is the ability to decide which negative feedback is undeserved and should be disregarded. Focus is the character trait involved in maintaining the goal and not getting side-tracked by other events both pleasant and unpleasant. The ability to accept responsibility includes an honest appraisal of what things each individual can affect, how they can be affected, and agreeing to work within those boundaries. This means freedom from guilt for those things outside one's area of influence and honest effort to affect everything within one's area of influence (Murray, 2003; Werner, 1993).

Finally, physical and mental endurance play a role in achievement. Students who have special health problems such as addictions, mental illnesses, or physical illnesses must compensate for them somehow. Even healthy students who must also juggle work, family, and school must have or acquire both physical and mental endurance, or they will

fail. College might be compared to a marathon race with a series of short sprints. There are grueling periods of intense, unrelenting activity, such as right before finals. When such stressful periods are ended, the student must almost immediately prepare for another bout of accelerating stress as the next semester looms in the near future (Murray, 2003; Werner, 1993).

<u>Learning Abilities and Academic Skills</u>

The differentiation between these two components is that while the first has more universal application, the second is focused more directly on the skill set that comprises academic proficiency. Among the first group, are knowledge base, mnemonic ability or memory, cognition, creativity, and motor skills. In the second group, I list reading, writing, oral communication, mathematics, language aptitude, academic reasoning, and academic knowledge. Each of these was chosen because they apply to a wide range of academic work, and because they have been supported by developmental curriculum (Claxton, 1999).

Intelligence is omitted as one of the criteria for several reasons. The first is that its definition has been called into question, and research studies claiming to have a true measure of intelligence are often proven to have promulgated false theories incorporating racism, sexism, or other negative constructs . Most would agree that intelligence has an effect on academic success. The problem with intelligence is not in understanding how it affects academic success, but in defining it (Gardner, 1983). The definition of intelligence is expanding to include a wider range of concepts, outside of just the mind by itself, to include the mind in context with its environment (Merriam & Caffarella, 1999).

The concept of intelligence as it is traditionally used implies a static quotient, perhaps biologically or genetically induced, which can be measured by some form of assessment (Hergenhahn & Olson, 1997). Yet it remains a concept which is nefariously difficult to measure and even more treacherous to relate to social and educational programs. Such measurement often becomes suspect when it is used to compare minority ethnic groups to the dominant culture (Gollnick & Chinn, 1990; Hodges, 1999), and I elected instead to use terms which are less ambiguous and are often use to characterize different aspects of intelligence or multiple intelligence.

Learning abilities. Knowledge is the first key component of learning. It might be more useful to apply the term *domain knowledge* here as it is defined by Bruning et al. (2004). Domain knowledge is knowledge that encompasses declarative, procedural, and metacognitive knowledge within a certain area or scope. A knowledge domain can be in an academic field, such as mathematics, or it can be incorporated in other areas, such as gardening or familiarity with certain machines. Students often label non-academic knowledge domains as "common sense" and mistakenly consider them to be less valuable (Bruning, Gregory, Norby & Running, 2004). Torff and Sternberg (1998) differentiate between formal knowledge used for solving academic problems, and tacit knowledge used for practical problems. A general idea of a student's formal knowledge can be determined by the administration of a variety of different tests such as the ACT or the COMPASS. While Torff and Sternberg admit that it may be nearly impossible to measure the amount of tacit knowledge that anyone has because of the number of tests that would have to be administered, their hypothesis that the ability of students to learn

can be correlated to the amount of general knowledge and life experience that they have is well worth considering in this context (1998). Both types of knowledge are important in academic success. Many students, but particularly those who are first generation students, often complain that their courses have no practical application and that the problems they must solve in order to be academically successful have little relation to their ordinary lives. Some of this frustration may arise from comparing the specific training they may have received in their jobs or other programs with the more generalized studies encountered in many introductory-level courses (Hodges, 1999). Adults often come to the academic institution with the ability to solve real life practical problems that they have encountered, and the ability to transfer the tacit, practical problem-solving skill into formal, academic problem-solving may be a critical element in their retention and success (Knowles, 1990).

Memory is another key. There are many differing theories about how to enhance memory, its relationship to learning, and the different ways that memory operates (Driscoll, 2005). The purpose of this review is not to delve into the different aspects of memory, but to focus on memory as an attribute of learning that directly affects success. Regardless of which theory of memory and cognition prevails in the future, what is important for the LAP is that memory affects the ability to retain the very knowledge, skills, and concepts that the developmental curriculum seeks to teach (Casazza & Silverman, 1996).

Cognitive ability is another aspect of the ability to learn and has been the subject of many debates. However, for the purpose of this review and this study, two aspects of

cognitive ability require attention. The first is the concept that learning is constructive. The second is that mental frameworks help students organize their memory and structure their thoughts. The relationship of cognitive ability to a knowledge base and to mnemonic ability become clear in this respect, for it is in the knowledge domains and the mental frameworks that the ability to construct learning takes place (Bruning, et al., 2004). This concept of frameworks and construction impacts different ethnic groups in diverse ways, as students from different cultural backgrounds construct knowledge differently (Cummins, 1981; Gollnick & Chinn, 1990).

In some ways the most problematic aspect of creativity is in its definition. While some define creativity as an aspect of cognitive ability, preferring to list it as one of many cognitive strategies for problem solving (Driscoll, 2005). Others define creativity according to common themes: original ideas, rearranging and transferring knowledge or perspective, finding order in chaos, and a process of becoming sensitive to gaps in knowledge (Murphy & Murphy, 1997; Torrence, 1970). Others define creativity as a process rather than an aspect of learning. In this view, creativity is a single act which takes place in five stages: a) fact finding, b) problem finding, c) idea finding, d) solution finding, and e) acceptance finding (Parnes, 1967). Yet again, no matter how creativity is defined, it remains an important aspect of the ability to learn.

While many studies choose to underplay the importance of motor skills in academic success, there is much to support it as a valuable asset in the ability to learn. Eye coordination affects the ability to read. Small motor control affects the ability to write, type, and play musical instruments. Smooth speech patterns affect the ability to

communicate. Hand-eye coordination is important in successfully completing most laboratory courses. Motor skills are learned in three main phases. The first involves understanding the executive subroutine, the second incorporates practice, and the third is where the skill becomes automatic (Driscoll, 2005).

None of these abilities acts separately. Creativity enlists the knowledge base and enables the learner to go outside the usual mental framework. Motor skills are simply empty practice without the cognitive strategies to apply them. In the past, attempts have been made to measure them separately, with limited success (Gunning, 2002). Yet a consensus of learning theory and cognitive psychology all seems to list these abilities in one way or another.

Academic skills. Here is where some of the more traditional aspects of developmental education fit into the LAP picture. Developmental education has traditionally focused on reading, writing, and mathematics as the main points of their programs. Mathematics was the first, in part, because traditional mathematics curriculum lent itself to the concept of building skills. Now, a majority of community colleges have programs in reading and writing as well (O'Banion, 1989).

Traditional mathematics curriculum places students at their appropriate levels according to a diagnostic testing system. Much of this curriculum is based upon a division between computational mathematics and conceptual mathematics. The rationale for making this distinction is that computational skills require the ability to apply the correct schema to the situation. Using this rationale, the computational skills must be learned first before the conceptual skills can be used. Many mathematics textbooks focus

on the ability to apply previously learned computational schema to a new series of procedures in a continuous cycle through mid-level algebra. After mid-level algebra, the traditional high school mathematics breaks off to go to the twin paths of higher mathematics, either the scientific math such as calculus, and or mathematics for specific purposes such as accounting, statistics, or quantitative methods for business (Gaff & Ratcliff, 1997). At this point, the skills-based curriculum changes, and the student is expected to use the skills in strategic thinking patterns. The student is expected to think rationally (DuBois, 2001).

Reading and writing curricula are not strongly based on a hierarchy of skills, but the traditional elementary and high school setting teaches the skills in larger and larger concentric circles of complexity. Spelling, grammar, punctuation, and vocabulary are all skills-based writing curricula. Vocabulary, note-taking, scanning, comprehension, and other skills-based curricula are all used in the reading programs. While they are not necessarily hierarchical, these skills are all learned and reviewed at various levels in elementary classes. Somewhere in the curriculum, students are expected to go from learning the skill to using the skill to learn higher order thinking skills. When they enter the college system, they are expected to have acquired the ability for rational discourse (Gaff & Ratcliff, 1997).

Increasingly, technological skills are playing a part in making a distinction between developmental and non-developmental students as well. Students are expected to be adept at keyboarding, Internet access, and e-mail. Word processing, like computational mathematics, is dependent upon a series of skills built one upon the other.

Like mathematics, frustration with computer technology can overwhelm a student and subsequently promote failure (Mayer, 2001; Gourgey, 1994).

Network Support Factors

Network support factors are often overlooked in LAP's because they are not directly related to traditional curriculum systems. Family support networks, including spousal support, parental support, and support from other relatives often make it possible for working families with children to participate in classes. Some families form support networks of students in similar situations to share child-care, transportation, and other resources (Kronick & Hargis, 1998).

Many community colleges have daycare centers and other facilities to provide additional support networks for students who lack them. However, unlike developmental courses, such programs are not supported by tuition dollars, and it is often difficult to gain support from administrations, boards, and policy makers to finance such programs. Fortunately, the federal and state governments in many communities assist in the funding of support programs. While there is some evidence that such programs have a direct affect on retention, there is very little evidence correlating single parent status or daycare to GPA or gain testing (Cohen & Brawer, 2003; O'Banion, 1989; Sandler, 1981).

Other support networks are accessed though the community college counseling system. Most notably, one aspect which students often cite as a support problem involves financial aid. While more than half of all community college students receive some sort of financial aid, the Community College Survey of Student Engagement (CCSSE) results (2004) show that complaints about financial aid eligibility remain a problem.

## Success in LAC Interactions

Defining success itself is problematic. Success has different meanings to different stakeholders in LAC interactions. Institutions have traditionally defined success in terms of retention, course completion, and successful transfer to other institutions. Students view success differently, but if asked directly, they often define success in the same way as the institutions. Students who feel unsuccessful are far more likely to become a retention problem, but because there is a difference between the way that institutions define success and the way that students define success, changing a program to address one definition or another may not really impact the problem. The LAC, because of its it is often the one aspect of the community college which provides a one-on-one relationship with the student, may be one of the best resources to address this problem in defining success, and ultimately putting both the institution and the individual student on a path which will lead to the achievement of both their goals (Casazza & Silverman, 1996).

### Institutional Definitions

One way for institutions to measure success is to measure retention. This is very popular with two-year institutions because it is a simple statistic which feeds directly in to the financial picture of the college. For the institution, students who are successful stay in school. They keep paying tuition until their program of study is completed or until they are ready to transfer to another institution. Retention statistics were one of the early motivations toward developmental curriculum. If a student could not complete low level mathematics, that student would drop out. Therefore, creating "remedial" programs

in mathematics and reading became a popular way of fighting retention problems (Clowes, 1981).

Another institutional statistic closely related to the retention numbers is completion rate. It is based upon the simple principle that those who stay long enough to get a degree, certificate, or diploma are successful, and those who do not are unsuccessful. Again, this was a primary focal point for the advocates of early developmental education programs. They rightly reasoned that students could not be expected to complete a program if they were not given the skills necessary to take the courses needed. Completion rates became a second statistical indicator of success (Tinto, 1996).

A third common indicator arose from the concerns that students receiving an associate's degree were not really qualified as college juniors and were not going to be able to succeed when they transferred to a four-year program. This concern was fueled by the necessity to maintain articulation agreements with the four-year institutions. This indicator, often referred to as "successful transfer rate," is a little more difficult to study as it involves tracking student success rates after they had graduated (Brawer, 1995; Cohen & Brawer, 1987; Szelenyi, 2002).

Tracking these three indicators has become a priority for the two-year institutions. Unlike their four-year counterparts, these schools were using an open door policy. Two-year institutions could not simply tell applicants that that they were not qualified to attend. Administrators could not use testing in its gatekeeper function; they needed to use it as a diagnostic indicator. They had to use testing to determine what level of developmental education students would need in order to be successful in their programs (Cohen &

Brawer, 1987).  As 77% of all community college programs have mandatory placement in developmental programs, the need for simple but accurate testing became paramount. In order to ensure that the testing is fair and equitable, standardized testing has become the norm throughout the community college system (Gunning, 2002).

In conjunction with the need to assess the level of students who were entering the institution, there arose a need to assess the level of students who were leaving the institution as well.  The initial question revolved around transfer students.  If they did not succeed in the follow-on institution, was it because they were inadequately prepared or were there other reasons for such failure?

Then another question developed from this one:  How much did students learn when they attended the two-year institution?  Pretest/posttest systems seemed to be the best way to assess the changes in students' abilities and levels.  In order to get a better picture of exactly how those areas are affected, many two-year colleges use criterion referenced tests.  These tests are designed to determine general progress in areas such as mathematics, science, reading, and writing (Gunning, 2002; O'Banion, 1989).

However, such tests often have some shortcomings which make them more difficult to use in LAC interactions because students use LAC's in different ways.  Some just drop in. Some come for only one type of homework assistance.  Others use the LAC regularly in one semester, but not in others.  Since the LAC is not usually geared to teach specific criteria, but is instead focused on flexibly meeting a variety of student needs, standardized criterion-based testing is not an appropriate method of measurement (Casazza & Silverman, 1996).

Student Definitions of Success

An important insight is that students do not always define success in the same manner as institutions. While the institution relates success directly to the institutional goals, students often define success in terms of their understanding of their family, social, and professional situation. It is very easy to get confused by this distinction, especially when students profess to have the same goals as the institutions they attend (Stein, 2000).

When asked, many students will state that their goal is to graduate, so terms like retention, completion, and transfer would seem to define student goals as well as they do institutional goals. However, student concepts of graduation often differ from institutional concepts of graduation (CCSSE, 2004, Ogbu, 1992; Stein, 2000).

Many students have learned conditioned responses to standard questions like: "What is your goal at this college?" For students who are coming directly from high school, this question is simply a continuation of the same one which they were asked in their secondary educational experience. As they have not spent much time in the workforce, they often answer with standardized responses which they have learned please their teachers and counselors. Non-traditional students, who have experienced life outside of a school system may not be under any compunction to please counselors or teachers with their answer, but they many not know how to articulate a different answer to such a question. In other words, their experience in postsecondary education is too limited to enable them to give any but the simplest answers (Griffin & Connor, 1994).

If pressed, many such students will expand that answer to either include expected results after they graduate, or some measure of determining success while they are still in

classes. Students will list their plan of attending a follow-on institution or of gaining a better job or improving their present position. Other students will say that success is a matter of getting a certain grade. Yet both of these answers are just elaborations of the earlier incomplete response. Traditional students have been told that the major reason they should attend college is to increase their chances for employment. For the non-traditional student, many have returned to college because they have either had a change in employment status or because they want such a change to occur. Both groups are used to the process of rating themselves by their grades. Graduation, employment, and good grades would seem to be the proper response, and it would be the response that most surveys would get if they asked the questions in a simplistic manner (CCSSE, 2004).

Yet questionnaires and surveys reveal that students' true motivations are much more complex. The EFF revealed that there is indeed a great deal of difference between what students state in a simple survey, and what a more in-depth survey will reveal. EFF determined that there were three areas that students, particularly non-traditional students, expected to see success (Stein, 2000).

The first area involved family life. Students expected that education would improve the quality of their relationships within their families and that it would improve their ability to assist their children in school and in life. The three main family goals that the EFF found were: (a) students wished to promote family members' growth and development, (b) meet the needs and responsibilities of their families, and (c) strengthen their family systems. EFF broke the goals down into subgroups, which included things like fostering informal education for children while supporting children's education,

managing family resources, and promoting family values, ethics, and cultural heritage (Stein, 2000).

A second area of goals identified had to do with work relationships. Students want to be able to work better as well as be more satisfied with their work. Many described a need to be better able to use technology in order to accomplish their work related goals. They want to be confident in their ability to respond to new challenges and changes within the work force. Another area of success that students viewed as important revolved around their ability to work and communicate with others. They expect their educational experience to teach them to communicate, give assistance, and motivate the people around them. They also want to play a larger part in the organizations where they work. They want to understand their role in the organization and be better able to understand the goals of the organization as well. Finally, they want to find work that has personal meaning to them. They want to pursue career goals that will give them personal satisfaction (Stein, 2000).

The third goal area that was discovered by the EFF survey concerns the students' role as citizens and community members. Students want to be able to be informed about community issues. They want to be able to form and express their opinions and ideas in a public format. They want to work together with other members of the community in different organizations toward a common purpose. They want to do the things they view as necessary to make their communities stronger (Stein, 2000).

The results of the EFF survey reveal that student definitions of success are often much more complicated than are revealed through a few simple questions. This may be,

in part, because both non-traditional and traditional students are not really sure what to expect from their postsecondary college experience, and it may also be that they simply are not capable of focusing on a long-term goal. Studies have revealed that many traditional students attend college because that is what their parents want them to do. Other students attend college for social reasons or to be involved in school activities (Stein, 2000).

Women are attending community colleges in increasing numbers. As the number of single parent families has increased over the previous decades, there has been a corresponding increase in the number of female students in community colleges (Hamm, 2004). However, the increase is due to more than a mere change in demographics and familial responsibilities. Women are members of the workforce, and as the economic influences on the workforce require new skills, women are entering the community colleges to acquire these skills. Previous generations of women primarily attended business and community colleges in order to gain access to jobs which would support them until they were married (Gollnick & Chinn, 1990). The current generation of women attends community college in order to obtain a career and to gain independence. Surveys reveal that women enter a community college with much a more well-defined sense of their goals than do their male counterparts. While men list improving their situation by getting a job as one of their goals, women often rate independence as a higher goal. Yet, female students indicate that they set lower goals than do males (Bingman & Stein, 2001; Stein, 2000). This finding contrasts with the data that indicates they have better grade point averages (71% women as opposed to 66% of men report a B

or higher grade point average), they are less likely to come to class unprepared, and they are more likely to report that they often work harder than they thought they could because they wished to complete an assignment (Hamm, 2004; Parsad & Lewis, 2003).

For some minority groups, the community college is an extension of the same acculturation and assimilation processes that were a part of their high school experience. Enrollment statistics reveal part of the picture. Between 1980 and 2000, African-Americans increased their attendance from 19 to 31% in the 18-24-year-old brackets. Hispanic populations increased from 16 to 22% in the same period. In the two-year colleges, White enrollments decreased, while African-American and Hispanic enrollments increased significantly. Another interesting enrollment statistic involves racial breakdowns by gender. White females outnumbered males by 56 to 44%. Hispanic female/male statistics were relatively similar to these at 57 to 43%. African-American females showed the largest gap with the females outnumbering the males 63 to 37%. Another significant statistical fact regarding minority groups in community colleges is that although all groups have seen a significant decrease in percentage of individuals, families, and children below the poverty level, African-American and Hispanic populations are still more than four times more likely to be under the poverty line than Whites (Hoffman et al. 2003).

Despite significant statistical differences in the demographic distribution and completion rates of minority students, survey data has revealed that many minority groups are more satisfied with their collegiate experience than their White counterparts. The CCSSE survey results reveal that a higher percentage of minority students report

using key academic and student services than do White students. These surveys also show overall satisfaction with the community college system, rate their engagement in classroom activities highly, and believe that their college experience prepares them for the job market. Notably, they also seem to understand that they bring problems with them to the postsecondary experience, and they cite work related problems, dependent problems, and underpreparedness as likely reasons that they would fail to continue their education (CCSSE, 2004).

Defining success for non-native English speakers becomes even more problematic. While this group must cope with the issues inherent in the interplay of minorities with postsecondary institutions such as poverty, inadequate academic preparation, and others, there are also a number of other issues which influence their definitions of success (Chaves, 2003; Gollnick & Chinn, 1990). Immigration issues, social problems, language barriers, and cultural differences all are barriers to learning, and all influence the way that students define success (Chaves, 2003; Long, 1998; Lutzker, 1995).

With the changes to immigration requirements and policies due to new regulations from the Department of Homeland Security, colleges must keep a closer watch on students who are not permanent residents of the U.S. For those without documentation, this higher level of scrutiny can provide additional hardships. Even for those with work permits, there are problems associated with attending community colleges (Chaves, 2003). First of all, documentation is not always a sufficient reason to keep a student from enrolling, but these students are not eligible for federal grants and they often must pay the higher out-of-state tuition rates. These economic problems alone

are enough to make some students switch to part-time status (Donahan, 2003; Hodges, 1999).

While those on refugee status may be eligible for in-state tuition and financial aid FAFSA, 2005), they often must overcome serious economic and social hardships in order to enroll. Low wages, lay-offs, shifting schedules, and pay problems are just some of the obstacles that their employment can create. They must also learn how to use the financial system in the United States. Many have no experience with credit-based purchases, rental contracts, financial aid, tuition, or record keeping in the U.S. economy. They must adjust to barrages of advertising, strange social customs, transportation problems, and a variety of unfamiliar laws governing their home lives, alcohol consumption, and food customs (Chaves, 2003; Gollnick & Chinn, 1990; Richardson & de los Santos, 2001).

The language barriers that non-native English speakers face in ordinary social situations become magnified in the community college system. While educators know that it takes years for a new language learner to become fluent in a language, that often contradicts the strongly held opinion of many non-native English speakers that they can learn English much faster if they study harder (Richardson & Elliott, 1994). Additionally, they are unaware that simply being fluent enough in basic interpersonal communication (BICS) is not the same as acquiring the cognitive academic language proficiency (CALP) necessary to succeed in postsecondary education systems. So, while they may have acquired enough fluency to buy clothing, write checks, and take citizenship classes, they may not have the correct fluency levels for reading textbooks, taking notes on lectures, writing essays, and taking tests (Cummins & Sayers, 1995).

Furthermore, these students' ideas about the college experience may be based on incomplete information and fallacious assumptions. Many non-native English speakers come from cultures and situations where the educational systems are quite different. Their learning experience may be oral, with more emphasis on rote memory, or it may be religious, with a single cultural or spiritual explanation for everything. Many come from educational systems which have little or no technological support, few textbooks, and teachers who are less than qualified in their respective fields. Additionally, many of these students come from school systems where their elementary or secondary education was interrupted. There might be a gap of several years between grades due to situations like war, natural disaster, or poverty. Afterwards, some of these students were simply expected to pick up their education wherever it ended, while others were expected to enter a grade appropriate for their age. Still others were forced to pick up where they left off, but to do it in an entirely different language (Boylan, 2001).

Many of these students must learn new metacognitive systems in order to become successful (Cumins & Sayers, 1995). For some, this requires a radical shift in cultural paradigms. For example, some students must shift from a circular world view containing four compass points to the Aristotelian rhetorical triangle of *ethos, pathos,* and *logos.* Others must learn to change from trying to balance the *yin* and *yang* of opposing forces to choosing one side or the other and supporting an argument with research (Cummins & Swain, 1986; Scanlon, 1986; Scollon & Scollon, 1995). For many, this requires a shift in social constructions as well. Often, tribal systems support consensus-building among hierarchies of leadership, but modern Western thought requires that they question the

reliability and validity of every new piece of information no matter what its source (Gollnick & Chinn, 1990). In practical terms, students coming from a different linguistic and cultural background bring an entirely different world view with them into their postsecondary environment. This world view may not be compatible with the Western academic world view. Therefore, in order to be successful, the non-native English speaker must not only learn a new language, but new learning strategies and new social constructs as well (Scollon & Scollon, 1995).

The sheer variety of students reveals that their views on success are based upon an extremely complex system of conflicting factors. The EFF survey data reveals that the overall goals of students relate to their families, their workplace, and their communities. However, individual students and individual groups of students have very different ideas of how to achieve those goals, and they may measure their success much differently than the institution they are attending (Szelenyi & Chang, 2002). Many students might simply rate attending as success because they must work so hard to balance jobs, dependents, and a host of other factors. Some may rate the completion of a course as success because they have to go so far in order to simply register (Stein, 2000).

Additionally, there are problems in comparing the success factors of an institution against the way that students rate their success. While institutions rate success as a function of persistence or program completion, students might rate success as receiving enough training to get a promotion or to make a career change. Others may require only a semester of classes before they transfer to a school with a program which matches their career or educational goals. Others may drop out in order to care for relatives or

dependents. Some may have to drop and reregister because of changes in employment. In fact, the average time for students to complete their two-year degree is four-years (Hamm, 2004). Persistence and program completion may be important ways for institutions to mark their success, but they are not necessarily the best way for students to measure success (Hodges, 1999; Kim, et al., 2003; Szelenyi & Chang, 2002).

Similarly, transfer and articulation are easy ways for a college to determine if students have acquired the requisite knowledge and skills to progress to a four-year program, but it is far less apt for the students to use for themselves (Bonham & Luckie, 1993; Brawer, 1995; Cohen & Brawer, 1987). Survey data shows that students who do not have a parent who has completed postsecondary education will be far less likely to believe that they can complete the requirements for a four-year degree (Hodges, 1999). Others believe that completion of developmental courses is not a measure of success because the credits from these courses do not transfer and do not count toward their degree programs (Hamm, 2004). While traditional, institutional-centered methods of determining success may be helpful for determining the need for developmental programs and curricular changes, they are limited in that they do not illuminate what individual or small groups of students may need in order to achieve that success. In other words, while transfer and completion rates may be useful indicators for an institution trying to determine the success of its programs, they are not helpful in determining why any one student or group of students may not be meeting their own standards for success. The institutional-centered methods allow the institution to demonstrate success to the community, but the community is not the only stakeholder in the success equation. Each

individual student must also determine success for himself or herself (Brawer, 1996; Fields, 2004).

The LAC is often in the center of this problem in evaluating success. As part of the institution they support, LACs have a vested interest in the institutional definitions of success. Persistence, program completion, and articulation are all issues which must be faced by LACs (Cress, 2003; Maxwell, 1997). This is particularly true since LACs are not funded directly by tuition, but usually receive their funding indirectly through college budgets or as a part of LAP. In other words, students do not usually pay directly for the services they receive. LAC budgets do not usually reflect credit hours or other billable items. Therefore, LACs are dependent upon administrative support for their existence (Casazza & Silverman, 1996; Cohen & Brawer, 2003).

Additionally, LACs must reflect the needs of the faculty as well as the student body and the administration. Community college faculty typically teach more classes per semester than university faculty. Moreover, community colleges often rely heavily on adjunct instructors to round out yearly variations in attendance. This means that the community college instructor may have less time available or less experience and training in coping with the diversity of students who attend the community college. Furthermore, since community colleges are typically commuter colleges, the faculty is less likely to make social contact with students on the level required for mentoring relationships than faculty at four-year institutions. Faculty at many of the two-year institutions rely more heavily on the LAC to assist them with diverse student populations (Palmer & Zimbler, 2000).

Students look to the LAC for a variety of different services. The LAC in many community colleges is the contact point for developmental education. The LAC often has computer labs in it or adjacent to it, and community college students are far more likely to have low levels of experience in the use of computers for educational purposes than students at the four-year institution. LACs provide drop-in help with homework problems, tutoring, accommodations for students with special needs, and a host of other academic services. Additionally, as more than 30% of all community college students never receive any form of orientation, the LAC is often the first place that students go for information on a variety of other services provided by both the college and the local community (Hamm, 2004).

This puts the LAC in a delicate political balance. As part of the institution, the LAC must share in the vision and contribute to the goals of the college, and it must do so in a way that is demonstrable in some form other than direct tuition dollars (Maxwell, 1997). It must accommodate the faculty of the college by assisting in ways which allow the faculty to focus on their main task of providing instruction to the mainstream of students. It must accommodate students by providing assistance in both academic endeavors and in overcoming the social, psychological, and cultural obstacles that impede student success (Casazza & Silverman, 1996).

This is often a difficult task. It often puts the LAC staff in the position of mediating relationships between students, as well as facilitating meetings between students and faculty, and providing additional assistance for students who do not understand or who are unfamiliar with the requirements of college administrations,

financial aid, and school regulations. LAC staff serve as educators, mentors, facilitators, social workers, advisors, counselors, and a host of other roles depending upon the situation. Yet they often have a very difficult time judging their own success.

Success in the LAC

While it may be efficacious for institutions to evaluate their success based upon statistical data such as retention and program completion, this is less appropriate for the LAC. There are several reasons for this, but one which stands out is that the LAC has a supporting role rather than a direct influence on the grades, graduation, or transfer of students (Bray, 2001; Casazza & Silverman, 1996).

Put simply, 98% of all public two-year institutions have developmental curriculum of one sort or another. Political developments put the community college in the business of developmental education. Educators and public administrators alike recognize the need for it, and organizations such as the National Association for Developmental Education (NADE) have been formed to assist in the development of guidelines for assessing the needs of developmental students. In recent years there has been change in the attitude of federal and state governments and college administrators as well as the other stakeholders in forming viable developmental education programs (McGrath & Spear, 1991; Cohen & Brawer, 2003).

Yet the primary focus of developmental programs has been curricular in nature. NADE guidelines focus on the assessment of students, the design of developmental programs, the training of instructors, and the evaluation of program success. NADE guidelines strive to encompass a variety of learning theories, as well as focus on the

needs of the total student. This has resulted in a shift from remedial programs to multi-track programs in recent years (Bray, 2001). While multi-track programs have developed alternative assessment instruments for individual students, little has been done to develop an evaluation system for the actual LAC itself.

The basis for this study lies in the following four basic concepts. First, the educational experience of community college students is fundamentally different than that of traditional four-year college students (Alfred et al., 1999; Elkins et al., 2000). Second, the community college is a different educational institution from its four-year counterparts (Hamm, 2004). Third, Learning Assistance Programs (LAP) form some part of the curriculum in nearly all community colleges (Casazza & Silverman, 1996). Fourth, Learning Assistance Centers are a vital part of the LAP, but, because of their nature, they do not lend themselves easily to quantitative research and evaluation (Alfred et al., 1999; Casazza & Silverman, 1996).

The educational experience of community college students is different from the four-year students because the profile of community college students is fundamentally different, because the goals of community college students are primarily different, and because the way that the student participates in the educational experience is fundamentally different (CCSSE, 2004). Community college students are far more likely to be academically underprepared, non-traditional, minority students than those who attend four-year institutions (Hamm, 2004). The community college student often has a different goal than the four-year student. This goal may include certificate programs, a terminal two-year degree, or transfer classes, but it may simply be that the student wishes

to improve the quality of his or her life (Cohen & Brawer, 2003). Unlike the four-year student, who is more likely to live at the institution, attend full time, and refrain from working excessively, the community college student commutes to the institution, often attends sporadically or on a part-time basis, and works at least part-time while attending (Alfred et al., 1999; Bean, R. 1992; Boylen, 1981; Cohen & Brawer, 2003).

Community colleges are different than their four-year counterparts (Cohen & Brawer, 1987; Hamm, 2004). Their mission includes a variety of programs. They are much more focused on and responsive to the needs of the local community (Cohen & Brawer, 2003). Where four-year institutions may have an admissions policy which accepts students of low academic standing only on a probationary basis, if at all, community colleges accept nearly all students through an open door policy (Hamm, 2004). Community colleges are far more likely to have some form of an LAP than their four-year counterparts, and the LAP is likely to be highly individualized according to the mission of the college and the nature of the stakeholders (Casazza & Silverman, 1996).

LAP's are in 98% of the community colleges across the country (NCES, 2002). Some LAP's reflect a traditional remedial program with the purpose of imparting skills training. Some include a more wide-reaching developmental program, which focuses on metaskills training in addition to the standard reading, writing, and mathematics improvement. Some include a multi-track program which provides counseling, advising, and mentoring in addition to curriculum-based educational services. But regardless of which type of program the community college has developed, nearly all colleges have recognized the need for the inclusion of Learning Assistance Programs (LAP) which

include developmental curriculum designed to provide skill enhancement for vocational and college programs and Learning Assistance Centers (LAC) designed to provide individual and group assistance to students on a more informal basis (Bray, 2001; Casazza & Silverman, 1993).

The fourth concept is that while developmental learning curriculum is designed to provide classroom instruction for the improvement of academic skills, Learning Assistance Centers are designed to provide additional services which, because of their very nature, are difficult to research and evaluate using quantitative methods (Carbone, 1987; Clowes, 1981). LACs vary widely from college to college (Casazza & Silverman, 1993). They may be called writing centers, mathematics labs, or even learning resource centers, but whatever the name, the function of an LAC is to assist students in the learning process. This assistance may take the shape of drop-in homework help, long-term mentoring, peer tutoring, cooperative learning programs, computer assisted instruction, or a host of combinations. What the LACs have in common is that they provide assistance outside of the structured developmental curriculum that is usually taught in classrooms (Bray, 2001; Casazza & Silverman, 1993). Traditional, quantitative measurement of their effect is difficult to achieve because it is difficult to isolate the variables of LAC interaction from those of curriculum-oriented assistance. LAC interaction varies in time, scope, and process from student to student and from program to program (Bray, 2001). The diversity among the community colleges, the stakeholders in the college and the community, and in the students themselves all work against a systematized approach to understanding what community colleges do and how well they

do it. As the literature review demonstrated, quantitative research results are often inconclusive or contradictory, and while such researches may provide an understanding of broad interactions within the system, it is less useful in determining the nature of interactions between the diverse groups within the systems. The knowledge gained from the interaction of students and staff in a learning center was not something that would allow me to use the a quantitative, statistical lens, but would force me to use a different methodology.

<center>The Research Problem</center>

The research problem is relatively simple to state, but more complex to study. Succinctly, the research problem involves understanding three parts of the learning process of at-risk students. The first process entails understanding how at-risk students learn. The second process involves how they overcome the obstacles and barriers that interfere with their learning process—basically, how they survive the community college experience to achieve success. The third process involves how the LAC contributes, or fails to contribute, to that success.

As I delved into the background for my literature review, I slowly began to understand that not much was known about what happens in the one-on-one interactions in the LAC. Much of the work in understanding LAC operations went toward supporting the needs of students as they are assessed (Bray, 2001). Many LACs are beginning to broaden their scope so that they can reach more students and address a wider variety of needs (Maxwell, 1997). However, less is understood about the actual mechanics of how

those needs affect success, or how good a job LACs are doing of actually meeting the total needs of the student.

<div align="center">The Research Questions</div>

As was revealed in the literature review, there were so many variables involved in trying to determine what actually leads to success in LAP's that it seemed unlikely that I would discover anything new with a study that compared outcomes and attendance. In fact, I was not sure whether I could identify what was meant by the term success. It was clear from the *Equipped for the Future* EFF studies that students had a much broader view of success than do the institutions they attend (Bingman & Stein, 2001; Stein, 2000). So, I decided that one aspect of the research I should clarify was exactly what success means to students who attend an LAC.

The literature review also revealed that student success—especially for the non-traditional student—was in many ways dependent on a complex interaction between the at-risk factors and the resilience factors. Students who struggled with jobs seemed more likely to succeed if they had good family support. Students who did not have good family support seemed more likely to succeed if they had positive attitudes and good motivation. This became a second point that I wished to clarify—how do resilience factors balance at-risk factors in successful students?

Still another question focused less on the emotional and social support of students and asked the basic question all educators must ask—is the LAC helping students learn the academic skills and knowledge that they need to know to get through college? While the balance between resilience and at-risk factors is one of social and emotional

significance, the academic question must also be addressed as a community college is, after all, an educational institution.

There is one more question that practitioners ask themselves—how does the program I work in help my students? I think I can safely say that every practitioner wants to feel as if his or her efforts make a difference. We all want to know that we are helping students obtain success. As a corollary to that desire, we would all like to know how we can do it better. However, so many different programs in operation across the country, and with so many of them changing by accretion and adaptation rather than through a specific understanding of how such interactions affect learning (Clowes, 2001), it seemed important to find out more about how LAC interactions affect student learning.

These became the four main questions for my research:

1.  How do at-risk community college students define success, and how does this definition differ from the institutional definition?

2.  How do the student's resilience factors affect the at-risk factors of students in achieving this success?

3.  What does the LAC contribute to the academic abilities of students?

4.  What does the LAC contribute (or fail to contribute) to the overall success of students?

CHAPTER 3

METHODOLOGY

Research Design

The research questions are descriptive in nature. Before student success can be measured, it must be defined. Before the interactions in the LAC can be measured, they need to be described. My methodology grew from a book I had read by Laurent Daloz (1999) on mentoring. The book is a collection of stories designed to illustrate different aspects of mentoring and is told from a first-person perspective by a man who was serving as an advisor and instructor to non-traditional students. I was fascinated by the relationships that this man built with his students and the effect this relationship had on both the mentor and the student. It seemed to fit with what Tinto (1993) discovered about the relationship between social interaction and retention. It also seemed to fit with the LAC, as this is a place where there is an intense, but fluid, one-on-one mentoring relationship between staff and student.

Pilot Study

In order to better understand how this relationship works, I conducted a pilot study with two students, both to see if my basic questions could be addressed in such a manner, and to see if my questions were viable. The research methodology for this study was relatively simple. I chose two students to be interviewed because they were appropriate, they were willing, and they were both non-traditional students. With a tape recorder, I sat down with them and started asking questions.

The questions were of three basic types. I asked background questions in order to get a sense of how well the student was prepared for college and what the student's educational experience had been and what had happened to make them come back to college. I asked questions about what they wanted from life, what their goals were, and what they wanted from their educational experience because I wanted to find out more about how they defined success. Because I wanted to understand the nature of the mentoring relationship, I asked them questions about why they came to the LAC, what they learned there, and how it affected them.

The pilot study was less than successful. I was a novice at the interview process. The interviews tended to wander away from the topics, and in the end, I was unsure about the usefulness of what I had discovered. However, after my literature review, I began to see that some of the things I had learned supported the literature. Both students had experienced an event that changed their attitudes about education. The female student had been laid off after a fire in the processing plant where she worked. The male student had been fired from his job because of alcohol problems, and he had gone through an Alcoholics Anonymous treatment program which had convinced him that he needed to quit being a bartender and find a job that was more suited to a sober lifestyle. This seemed to fit with the observation by Knowles (1990) that the non-traditional student experiences a change in motivation due to a life-changing event, which causes the student to realize that there is a difference between where they perceive themselves to be in the present, and where they should be in a successful future. Also, some of their statements showed that their goals followed the categories reported by Stein (2000) in the EFF.

Part of what intrigued me about the pilot study was that, although there were marked differences between these two people, there were also some intriguing similarities between them. As I mentioned, they had both experienced life-changing events, and they both defined success in line with the *Equipped for the Future* (EFF) categories (Stein, 2000). Additionally, they both stated that they did not believe they would do well at college, but that they only hoped to get *C*'s or to pass. Both of them achieved a GPA of more than 3.0, and they both expressed surprise at their achievement. Both of them expressed a desire to let their family know how well they were doing, so that their family could share in their success. One of the most marked differences was that the male student had a relapse, returned to drinking, and dropped out. Another difference was that the female student was much more willing to follow the prescribed curriculum path based upon her scores, while the male student believed that his success in the lower level developmental courses was a signal that he was ready to skip over some of the "review" courses and move to higher level courses so that he could get his degree more quickly.

I was not really sure what conclusions could be drawn from this pilot study. But it did galvanize my thinking and help me refine the directions for the research for my dissertation. The pilot study confirmed my hypothesis that there were aspects of the LAC interaction that would not show up in pretest/posttest data or grade comparisons. The pilot study's support of Knowles' (1990) belief that adult learners are motivated by an event which demonstrates the difference between their current status and their potential status convinced me that a broader study might shed more light on different aspects of

motivation in adult learners. I decided that the pilot study should be expanded in order to learn more about the different interactions that take place in the LAC and how these interactions affect the academic progress, perceived emotional support, and social growth of the students who use it.

Context of the Study

I decided to conduct my study at the community college LAC where I work. One concern with to this decision was that I might be too close to the population that I was going to study, and my status in the LAC might affect the veracity of the data that I was collecting. There were countervailing reasons why this makes sense.

First, selection was not random, but this was purposive. I wanted to get a descriptive sampling of students who were non-traditional, who were underprepared academically, and who worked with the staff in the Learning Assistance Center (LAC) as mentors in order to gain an understanding of student and staff interaction. I wanted to find students who were representative of different general groups, but like the two students in my pilot study were different enough from each other that they might provide more insight into how these LAC interactions take place.

Second, I wanted to choose either graduates, or those who were near to graduation because I wanted to find out how the LAC contributed to their success. It might be useful to study students who fail and find out why they failed, but I felt that working with successful students would be the best way to provide a framework for any future studies.

The third reason was more practical. In working within a familiar setting I had three advantages. First, I had access to a pool of students I could interview, and that I

could quickly ask back for a second interview if I felt that I missed something or that I needed more information. Going to another college meant that I would have to be prepared to interview many students in order to find those that I felt were suitable, and it would mean that I would have to conduct the interviews with students I did not know in a context that was unfamiliar. The second advantage was that I was already familiar with the local system and so was less likely to be confused when a student mentioned a course or program with which I was unfamiliar. The final advantage was that I could work with issues that might inform the field, but I would find information that would help me in my own local situation.

Setting for the Study

This study would be best done in a community college that had experienced a change in its demographics, developmental curriculum, and had instituted an LAC.

Demographic information. I conducted this study in a small Midwestern community college. Iowa colleges have experienced a 5.70% increase in enrollments, and the 2003 enrollment was at 111,745. While there has been an increase in all racial groups, there has been an increase of 9.23% in the Hispanic enrollments and a 15.59% increase in African-American enrollments for the same period. Hispanic enrollments represent 2.00%, and African-American enrollments represent 3.36% of total enrollments in Iowa community colleges (Iowa Department of Education, [IDOE], 2003).

This college is one of two colleges in a district comprised of 14 counties. The district has shown an increase of 14.5% enrollment for Hispanic students and an increase of 3.9% for African-American students. Hispanics represent 3.7% and African-American

students represent 4.1% of the total enrollments for 2004. American Indian/Alaskan enrollment increased 24.4% between 2003 and 2004, and this population represents 2.0% of the total population in the district (IDOE, 2003).

Minority populations in Iowa tend to group around metropolitan centers with the exception of Native American population groups. Therefore, it is necessary to understand that there may be dramatic differences between the minority populations from one area to another. For example, in the rural counties which feed this community college, the population is more than 99% White. The White population in Iowa makes up 93.9% of the total population as opposed to the 75.1% White population in the United States as a whole. Additionally, 2.1% of the population in Iowa is Hispanic, compared with 12.5% nationwide (IDOE, 2003).

There are two exceptions to the majority White trends of rural counties in Iowa. The first is Tama County, which is the site of the Mesquawkie Indian Nation. This county holds a 6.0% Native American population and a 3.8% Hispanic population. Marshall County has a minority population dominated by Hispanics at 9.0%, and this percentage is primarily of Mexican ethnicity. As the college is in Marshall County, this means that there will be a greater need to serve the Hispanic population. Additionally, as the college has close ties with representatives from the Mesquawkie nation, there will also be a significant population of Native Americans in the college. Because of its location, and because of the tendency of minority students to prefer community colleges as their first choice for postsecondary education (Hamm, 2004; IDOE, 2003), the college has made a particular effort to accommodate these minority groups.

There is a small group of immigrants from Western African nations. Census data for this group is more difficult to collect and use for several reasons. First, the population is small. Second, the majority of the population seems to be male due to the fact that males were the first to immigrate via refugee status, but this statistic may be obfuscated by the cultural mores which put women in chattel status. Males may or may not feel obligated to report the presence of females. Third, on census and college admissions forms, these group tends to list themselves as African-American, but grouping them together with all African-Americans who are native-born citizens tends to obscure the problems specific to this group relating to their language, culture, and immigrant status (Thomas & Collier, 2001).

Initial assessment of students. All incoming freshmen are required to take the COMPASS test unless they have taken the ACT prior to enrollment. The COMPASS test is a computer adaptive test (CAT) that gives a score in reading, writing/grammar, and mathematics. This test has been correlated with the ACT and is used by many colleges across the nation as a basic diagnostic instrument for placement in developmental curriculum (ACT, 2004). The COMPASS test is given for free, and all students are encouraged to do their best because advisors will use those test scores as one of the tools for determining which courses students should register to take in their first semester. COMPASS has provided data which allows for comparison of ACT scores in the three major testing areas. COMPASS scores are used primarily to determine recommendations for students in developmental curriculum. The scores are related to specific skills in the three areas. These skills have been matched with curriculum for different course levels.

A certain range of scores is considered to be an indicator that students will be successful in college level classes (ACT, 2004). Students who score below these scores, called *cut-off scores,* on the reading, writing, and mathematics tests were encouraged to take developmental courses. Students who scored low in reading or writing as well as indicating that English was not their primary language were encouraged to take the COMPASS-ESL in order to determine which English as a Second Language (ESL) classes to recommend.

In 2002, 49% of the freshmen class was below the cut-off scores in mathematics, 43% was below cut-off in reading, and 26% was below cut-off in writing. In all, 59% were below cut-off scores in one of the three areas. Statistics for the college show an increase in both underprepared students and in students who qualify for Pell Grants and other financial assistance over the past four-years. Two common at-risk factors which are easily measured statistically are financial need and academic preparedness. Administrative and faculty response to the increased number of students who fit in these categories at the community college has resulted in the development of a multi-track LAP which includes both curriculum—traditional classroom courses in developmental courses—and academic support in the form of drop-in centers, homework labs, peer tutoring, and other accommodations.

Learning Assistance Program (LAP) curriculum. Curriculum for the LAP follows five main tracks—mathematical, writing, reading, study skills, and ESL. COMPASS testing yields diagnostic information on mathematics, writing, and reading skills for Native English Speakers (NES). COMPASS/ESL yields diagnostic scores for reading,

writing, and speaking/listening for Non-Native English Speakers (NNES) on English language skills (ACT, 2004).

The mathematics and writing tests lead to a progressive curriculum. Mathematics curriculum progresses through a specific series of courses. The Refresher Math course is designed primarily for vocational students who require minimal levels of mathematical skills in order to complete their certification. The Basic Math course is designed for students with low computational competency and is designed to bring students up to the pre-algebra level. Students then move through Pre-algebra and an Elementary Algebra course. These courses are designed to bring students up to a level where they will have the competencies necessary for college level mathematics. Those with low writing scores are advised to take a Basic English course which will prepare them for the freshman composition courses that are requirements for graduation.

A low reading score indicates a need for the reading classes. Having two or more low scores means that students will be advised to take the study skills classes. If their scores in reading and writing are very low, these students may also be advised to take courses in vocabulary and spelling improvement. Vocabulary, spelling, and study skills courses are not part of a progressive curriculum, but derive their pedagogical base from the recognition that many students lack metaskills such as note-taking, recognizing and learning terminology, scanning, time management, and library functions. Additionally, there is a fundamentals of computer course for students who are totally unfamiliar with the computer.

ESL courses are designed to prepare NNES students along similar tracks as the programs for NES students. The ESL curriculum is divided into three tracks, and the tracks are separated into levels. The level in each of the tracks is determined by the scores on the COMPAS-ESL test. The three tracks include writing, reading, and oral communications.

The writing course is set up in three progressive levels. The first level has basic grammar instruction coupled with writing instruction designed to work on the sentence and paragraph levels of competency. The second level is designed for more advanced grammar, and is designed to teach the paragraph and short essay skills. The third level has advanced grammar and is designed to assist students in writing on a post secondary academic level. Students who complete the third level are tracked into the freshman composition courses with NES.

The oral communications skills evaluations for NNES are derived from the COMPASS-ESL listening test and a short interview with a trained evaluator. There are two levels to this track. The lower level teaches listening and note-taking skills, small group communication skills, and the basics of platform speech. The second course teaches presentations, large group communication and participation, and listening as an academic competency. Both levels teach a variety of social skills and American customs. Upon completion, the student will be recommended for the freshman speech class with NES, which is a requirement for graduation.

The reading course is tracked at three levels. The first works on comprehension from short essays and articles—stressing low-level academic vocabulary and deriving

meaning from context. The second level uses longer, more complex articles—stressing high-level vocabulary and secondary meanings of words in differing contexts. The third course stresses textbook reading and reading for research purposes. It focuses on the skills involved in making summaries and in evaluating the veracity of what is read. The reading courses do not have a follow-on course in the mainstream academic program like the writing and oral communications courses. Most students will finish the third level of reading before they attempt courses in science, social science, or humanities unless they are very familiar with the subject matter.

Students may retest at the end of a semester if they wish to move ahead to a higher level course. Students with good grades who are progressing rapidly are encouraged to retest with COMPASS-ESL so that it can be determined if they need to move ahead. Students may be in different levels in different tracks, or their test scores may indicate that they do not need to take courses in one or more tracks. Students who are low in all three areas or who have low high school GPA, are also advised to take the study skills classes with native speakers. ESL students are also encouraged to register for classes which are less dependent upon specific linguistic competencies, such as painting or physical education.

The Learning Assistance Center (LAC). The LAC is responsible for some of the curricular and most of the non-curricular academic aspects of the LAP. The Basic Math and the Refresher Math courses use Computer Assisted Instruction (CAI) in the form of the software PLATO from Plato Learning™ which has also been correlated to the COMPASS test (PLATO, 2003). These courses are self-paced and are supervised by

members of the LAC staff. Staff is always available to assist students in their course work. The Vocabulary Improvement and Spelling Improvement courses are taught using a system of arranged self-study and testing in the LAC.

The non-curricular programs include the peer tutoring program, study groups, and drop-in assistance. The peer tutoring program, which involves student tutors who have been recommended by their instructors, has more than tripled in the past four-years. There are study groups for students to use which are organized informally and which students can attend as they wish. There is a mathematics clinic and a writing center in the LAC which allows students to meet with their instructors on a regular basis.

The drop-in center allows students to study in an area where they can work together, ask questions from staff, or work on their own. Drop-in usage has increased by more than 250% in the past five years. Students bring questions concerning homework in any class that they are taking. Many students are unfamiliar with computers, or lack the specific computer skills necessary to format papers, create PowerPoint presentations, make charts, or use e-mail for academic purposes. While there are computers available at different times in the computer labs, these labs lack instructors. Students may also use the computers in the LAC to do homework or to work on Internet classes

Methodology

Based upon the pilot study, I decided that this research should be done with free-form interviews of students who represent different social, economic, and cultural groups of students on campus. This research was done in six steps. Step one entailed the selection of subjects. Step two determined the questions to be asked in each interview.

Step three was the interview process. Step four was the analysis of the data collected including tapes, notes, and additional sources as needed. Step five was the additional interviews which were required. Step six was the final analysis of all data.

One of the reasons for the secondary analysis in step five was that I was concerned about unintentional cultural and gender bias. As I am to be the primary researcher, I have to consider any bias I might bring into the study. I am fifty years old, Caucasian, and male. I am well traveled, as I spent a number of years working with the army as a translator in Korea. My educational background also includes a masters in Teaching English to Students of Other Languages (TESOL), and I have spent a great deal of time in a classroom, both as an instructor and as a student. I know that it will be nearly impossible for me to engage in such a study without bringing my own bias into play. However, I hope to minimize such bias—especially during the interview—by saying as little as possible and trying to get the participants to tell their stories.

Step 1: Selection of Subjects

For the purpose of this study, I worked with dyads of students. I decided to do this because I felt that the dyads would allow me to make comparisons within a cross case analysis between students who had relatively similar backgrounds or who were working to overcome similar obstacles. Additionally, working with pairs of students allowed me to use the students themselves to evaluate the data that I collected as I will explain in steps four and five. I wanted to work with a group that was of a manageable size, and yet would be large enough to give me variety in the student groups that they would represent. It was also my intent that working with pairs who represent different

groups would give me the background and experience that I would need to do more in-depth studies of individual groups at a later date. I decided to work with five groups because it seemed that five groups would be diverse enough to produce enough verifiable data to show how the LAC interactions differ between groups of students. Having two members of each general category of student, gave enough diversity similarities and differences not only among group members but between the different groups themselves.

Additionally, it seemed necessary to limit my study to those who had sufficient contact within the LAC to form an opinion about how it affected them, and to those who had sufficient experience in the collegiate environment to overcome obstacles to success and define the meaning of success for themselves within the context of academic endeavors. In order to make sure that I worked with those who had enough experience with the LAC, I checked the sign-in logs and chose students who had in excess of 50 hours in the center. Most had far more than that. In order to meet the criteria of academic experience, I decided to interview students who had either graduated or had completed their third semester (48 credit hours) toward their AA or AS degree. I decided to limit the study to AA or AS degrees in order to simplify my understanding of how students set their goals and how they determine success.

Of course, it is not possible to get two people of exactly similar circumstance and character. I had to decide on the general groups which I believed might represent the student population in which I was interested. I chose the following groups: (a) Sudanese male refugees, (b) Mexican female immigrants, (c) single parent females, (d) single White females over 40, and (e)White males over 40.

The Sudanese males represented a much larger group than the African female refugees. So far, there have not been as many African female refugees who have enrolled in the community college, and none have graduated. However, at the time of this study, there were 25 full and part-time immigrant and refugee African students in our classes, all of whom were male. They represented a group who had experienced a very difficult transition from one culture to another which was radically different, and they had their own agenda for obtaining success.

The Mexican female immigrants represented a separate group, as well. First, Mexican school systems are radically different from American school systems. They are much more oral in their pedagogy, and their system of assessing achievement is different as well. The cultural, linguistic, and educational problems facing these women are further complicated by socio-economic factors, and their own expectations.

The rising divorce rate and the increase in single mothers over the past three decades have produced a number of female heads-of-household that are affecting the make-up of the community colleges. The welfare-to-work program, the changing economy, and other shifting social factors have brought many women back to school.

These economic and social factors also affect men and women who are over forty no matter what their marital status. While there are more men than women in community colleges, and their reactions to college courses are different, the two groups will provide a counterpoint to each other in understanding two types of student that do not usually choose the university as their first educational goal.

I decided that it would also be beneficial to be able to compare different dyads to each other as well as comparing individuals within each dyad. I found, for example, that an analysis of the interactions of the Sudanese males also engendered some level of understanding of the Mexican females in spite of their obvious differences. Comparing the two individual members of each group, and then comparing the different dyads to each other, provided insight that could not be found by studying one group by itself. Furthermore, the purpose of this study was not to just provide definitive conclusions about any one group, but it was to provide insight on how both groups and individuals are affected by their interactions in the LAC.

Background of the Interviewees

The interviewees were chosen from five general classes of students: (a) Sudanese male refugees, (b) Mexican female immigrants, (c) single parent females, (d) single White females over 40, and (e) White males over 40. All of those chosen were students who had been identified by COMPASS testing as being below cut-scores on one or more of the diagnostic tests in reading, writing, or mathematics. All of the students selected were either community college graduates or were in the final semester of their respective programs. All of them had taken one or more of the developmental courses in ESL, English composition, reading, study skills, vocabulary/spelling improvement, or mathematics. All of them would be considered non-traditional, at-risk students for the following reasons: (a) they had experienced a break of one year or more between high school and their present college experience; (b) they were financially independent from their parents; (c) they had three or more of the at-risk factors as established in Chapter 2,

such as having dependents, working more than part-time, having limited Cognitive Academic Language Proficiency (CALP) as defined by Cummins (1981), having physical or mental health issues, having learning disabilities or disorders, or being academically underprepared. I have given the subjects pseudonyms in alphabetical order in order to make it easier to remember them as the analysis progresses.

Sudanese Refugees

It is important to provide some background on this area of the world, its recent history, and its culture, in order to better understand the educational experience of these two students in the community college. First of all, many East African nations have been at war for of years. In Sudan, this war has killed millions and left thousands homeless. Those who manage to get to refugee camps often must wait for long periods of time before they receive an opportunity to emigrate to Europe or the United States. Many refugees are recruited by companies such as packing plants or manufacturing plants to fill a need for cheap, unskilled labor.

The students who are enrolled in this college are primarily from the tribal group which speaks the Nuer language. Their tribal culture is patriarchal in nature, and, as yet, not many of the women have shown an interest in furthering their education after they have immigrated to America. Those women who have expressed such an interest are all young and unmarried, coming to the college directly from high school, and have not yet been at the college long enough to satisfy my first criteria of being successful. The male Sudanese students are more widely represented at the community college, and some of

them have graduated, so I selected the two who were recent graduates to represent this group.

Both of these students share some common characteristics. First, they both had little, if any formal education before coming to the community college. Second, although there is a written form of the Nuer language, its alphabet is a very modern invention, (Minor, 2003). Also, like most Nuer speakers these two men did not spend much time learning to read and write in their own language, but focus on English or Arabic due to the conflict (Bezwick, 2004). Third, both of these subjects have mastered enough English to score in the 40 to 60 range on the diagnostic COMPASS tests in ESL. This made them eligible for the more advanced ESL courses offered for credit by the college rather than the non-credit, ABE classes in survival English in the Continuing Education Division of the college. Lastly, they both majored in something related to computers— one in computer networking management and the other in webpage design.

Student Alfred. Alfred is a 34-year-old male who was born in Sudan. He is a refugee with a green card, meaning he has most of the educational rights of a citizen. His first language is Nuer. He has never been married and has no children. He did not work during the time frames of the regular semester and attended the college on a full time basis. The interviews were conducted in January of 2005. Ten interviews were done, and they lasted from 43 to 96 minutes. He lived in a small apartment near the college. He has had no interruptions in his college career.

Alfred's personal story is one which mixes tragedy and heart in a way that is so often inspirational for those of us who work with refugee populations. When he was

fifteen, the alarm went up one night among the people in his village and his parents told him to take his younger siblings and run up into the hills surrounding their village. They waited all night and through the next day for their parents to come and get them. The second night, Alfred stole into the village. His parents were both dead and mutilated. His home was burned to the ground. Everyone in the village was dead. The soldiers were gone. He went back up to the hills. He decided to take his brother and sister to the refugee camps across the border rather than try to rebuild his home. They lived in the refugee camp until he was twenty-one. When he got a chance to come to the United States and work in a packing plant, he did so.

For several years, he worked two jobs. He saved money and he sent money to support his brother and sister in the refugee camp. His dream was to get an education and to get a better job. In his spare time, he worked on his English. He attended ABE classes at the community college and learned to speak well enough that he could function in the local community. His brother and sister are now old enough to provide for themselves and have since emigrated to Europe. At thirty, he felt it was time to return to college.

Alfred quit his job so that he could devote his entire time to his studies. He has no wife or children. He has few possessions. In fact, he said that he could move everything in the trunk of his car. He has no relatives in the state.

His initial scores on the diagnostic ESL tests were: (a) reading 66, (b) writing (grammar) 39, and (c) speaking/listening 43. He also took the standard COMPASS test. His rating on the reading test was 39, writing was 22 and his mathematics score was 39 on the Pre-algebra test. If he were to be compared with a NES, the reading and writing

scores would be very low. The reading score was consistent with someone who has been working to read the newspaper and is ready to learn how to read for academic purposes. His writing skills were marginal; he would have difficulty forming complete sentences. His listening/speaking scores show that he has mastered Basic Interpersonal Communication Skills (BICS), but will have difficulty in understanding lectures (Cummins, 1981). His mathematics scores showed that he needed work in basic computational skills such as multiplication and division (ACT, 2004).

Alfred has had very little preparation in any of the five areas mentioned in Adelman's "tool box" of necessary academic skills (1996). He learned the basic addition and subtraction tables from a local teacher in his village when he was young. He also learned to read and write a little English on an informal basis. He had no computer skills. He had attended local ABE classes in English, which he states helped him with his reading. Before applying for college, he had lived in the United States for four years, working various jobs, which he felt gave him the chance to practice his speaking and listening skills.

He has taken 25 credits of developmental courses. These include 15 credits of ESL reading, writing, and speaking/listening instruction to further his English abilities. He took eight credits of mathematics, including a computerized course focusing on calculation skills, a pre-algebra, and a basic algebra class. He took a two-credit study skills course as well.

Alfred began his course work by primarily focusing on the developmental skills that he would need. His goal was to receive a degree in a computer field. He picked this

goal for two reasons. First, he wanted a skill that would serve him well for making a living in the United States. Second, he wished to have a skill that he could take back to Sudan should the day come when "we can have our country." He eventually settled on a Associate of Science degree in Computer Networking. This degree appealed to him because he could either stop after he completed the course requirements at the community college, or he could continue on at the local university should he so desire.

He graduated and is currently attending the university as he planned. He began taking courses at the community college as a full-time student in the fall of 2000, and completed his program in the spring of 2003. He completed 18 credits in the summer or interim sessions. He received an AS degree in Computer Networking with a final GPA of 2.68. He took a total of 89 credits. This includes the 64 credits for the degree, one extra credit, and the additional 25 credits of developmental courses. His major GPA was 3.78. His major did not require any humanities courses. He needed only one social science course. He failed it the first time and retook it for a C-, giving him a 1.67 GPA in that area. He took a Math for General Education course, failed it, and retook it for a C. Then he took statistics and received a C-, leaving him with a 1.84 GPA in mathematics. His major only required 6 credits in English, and he took the English Composition course twice, ending with a 2.50 GPA in that area.

Alfred wants to return to Sudan as soon as there is peace. He wants to use the skills he learns here to be successful and to return his people to their land. He was not a soldier, but he believes that if he knows enough about computers, he can make a difference in their struggle—especially when after is restored.

Student Brent. Brent is also a Sudanese refugee who is here on green card status. He is 33-year-old male. Unlike Alfred, Brent is married with five children. He must work 40 hours per week in order to support his family. His wife also works part-time. Brent works the night shift from 11:00 p.m. to 7:00 a.m. because this allows him more flexibility with his class schedule. He and his wife rent an apartment. He attends school full time, and he has had no interruptions in his college career.

Brent was 16 years old when he joined the army in Sudan. All of the men in his village joined. There were times of relative peace when he would come home, but for five years, he spent much of his time in military encampments. Occasionally there would be the chance for study, but most educational efforts were devoted to weapons or survival training. When his unit was overrun in a battle, he escaped to a refugee camp. From there, he got a sponsorship from a packing company to come to the Midwest to work. Like many Sudanese expatriates, he sent money home. Eventually, he managed to send for the woman he wished to marry. He sponsored her immigration, they were married, and they soon began having children.

Brent decided to major in "something with computers" because he liked the idea of working with his head rather than with his hands. He does not wish to return to Sudan because he does not wish to fight any more. However, he states he would go there if they "can find some peace." His original major was Computer Network Management, but he really feels like Web Page Design is the best area for him to begin.

His initial scores on the diagnostic ESL tests were reading 44, writing (grammar) 55, and speaking/listening 52. He also took the standard COMPASS test, and his rating

on the reading test was 38, writing 24, and mathematics 24 on the Pre-algebra test. His scores indicated that he was not a good reader and that he needed to acquire CALP in order to become successful academically. His writing scores were a little better—they indicate that he can form sentences in English, but that he will have difficulty with paragraphs. His listening/speaking level allow him to take courses where there are additional non-verbal aids or where the verbal instruction is not the only format, such as art classes or physical education. His mathematics scores showed that he needed work on computational skills like multiplication and division.

Like Alfred, Brent has had very little formal preparation in any of the five areas mentioned in Adelman's "tool box" of necessary academic skills (1996). He learned the basic mathematics tables from a local Arabic school which focused on the Koran. His family is Christian, so he attended that school as little as possible. He received some additional training in the refugee camp, but most of his formal school experience has been in the United States. He had no computer skills. He says that he attended local ABE classes in English, but further questions in the interview reveal that these classes were very irregular. Before applying for college, he had lived in the United States for three years, working various jobs, which he felt gave him the chance to practice his speaking and listening skills.

Brent took 27 credits of developmental courses. Of these, 18 credits were in English improvement courses. Of the 7 credits he took to improve his mathematics skills, he failed all 7. He also took the 2 credit Study Skills course. Because he failed 7 of the credits, he only received 20 credits in the developmental courses. Brent states that

mathematics is his worst subject, and that English is also very difficult. He took the algebra course three times, dropping it twice and failing it once. These courses did not count against his transfer grade point average as they are not transfer credits.

Brent began classes in the fall of 2000 and graduated in the spring of 2003. He finished with a total of 85 credits. Of these, 20 credits were developmental classes that he passed, but his total number of classes in developmental work was 27 credits. His overall GPA was 2.26. His major did not require any humanities. He took two of his computer classes a second time because he failed them the first time. He received a D- in his psychology course, giving him a .67 average for the social science field. He took the one minimum course in mathematics for 3 credits and received a D, for a 1.00 average. His English classes netted him a 1.67 average. He did not take any science classes. His major field included 33 credits for a 3.38 GPA. He dropped 9 credits, and he retook 6 credits for a better grade. He took 8 credits of summer and interim classes.

Mexican Immigrants

The local area has seen a major change in population over the past few years. The population of Hispanics has risen from 292 or .67% of the local population to 3,523 or 8.96% of that same population from 1990 to 2000. At the point in time when I began this study, there were more Hispanic women than men who had graduated from the community college. The number of male Hispanics was beginning to grow, as was the number of female Hispanics who had dependents. However, there were not yet enough students from these two groups who had graduated. For this category, I chose two

twenty-something females who attended at least some high school in the United States, acquired citizenship status, and continued with their post-secondary education.

Both of these women represent the Generation 1.5, as defined by Harklau, Losey & Siegal (1999). They immigrated from Mexico in their teens, although their experiences in coming to the United States were different, and these differences affected their educational experience. They are representative of the in-between generation which grew up in Spanish-speaking households and neighborhoods and was transplanted to an English speaking area where they are a minority.

One advantage that the Spanish-speaking students share that is unavailable to the Nuer speakers is that there is a College Level Examination Program (CLEP) test for Spanish (College Board, 2005). Students can receive up to 16 credits of course work for their proficiency in Spanish, and of these, 8 credits can be used toward their humanities requirements. This means that even though they might need to spend 24 credit hours taking ESL courses, they can balance their program and still graduate in nearly the same time as a NES. While all students can take CLEP exams for a variety of different subject areas, the most common use of CLEP by Hispanic students is to take the Spanish test and receive credit for the language skills that they already possess.

Student Carol. Carol is a 26-year-old woman who is divorced with no children. At age 14, she came to the area as an illegal immigrant, where she married, achieved citizenship, and then divorced after a long separation. She lives with her parents and three brothers. She has a large extended family in the area. She works between 30 and 40 hours per week at three different part-time jobs. She attended school full time,

working evenings and weekends to support herself. She has not allowed her college career to be interrupted at any point.

Carol's father originally came across the border and acquired a work permit. He established himself with a job and a residence in the local community and then began to send for his family. However, because he had only the work permit, he was unable to bring his family in legally. For a time, after Carol's mother moved to the U.S. and got a job working in the same plant as her father, Carol stayed with other relatives in Mexico. Eventually, they sent for her. She came across the border in the trunk of a car, wedged behind several suitcases. The trunk of the car was never opened, but she was a very frightened 14-year-old. She attended high school in the local area for about a year, and then she dropped out at age 16 in order to get married. At 18, she took the Spanish test for her GED and received an equivalency diploma. At 23, her husband left her, and she has no idea where he went. However, because he was a U.S. citizen, she was able to use her marital status as a means of obtaining her own citizenship, which she did at age 24. Then she obtained a divorce.

She states that she has always had a strong desire to complete her education, but that it was too difficult in the public school system. She wanted to go to a church school but was unable to afford it. She struggled with English. She gave up on the school when she realized that what she was learning was different than what the English-speaking students were learning. She was studying English and getting a very light education in mathematics, history, and other subjects. She dropped out when an offer of marriage came along.

Carol decided to major in education because she loves children and wants to have a job that will make it easier to raise a family. She watched her mother and father work while she was in high school. Her mother no longer works, but her mother assists her sister and sisters-in-law in childcare. Although she wants to raise a family, she wants a career rather than to be a full-time mother and wife.

Carol's preparation for post-secondary education was minimal. Her school attendance in Mexico was spotty, and although she attended an American school for a year, she gained no computational skills, no computer skills, and very little background in humanities, science, or social sciences. Her English abilities are reflected in her initial COMPASS-ESL scores—reading 55, writing 42, and speaking/listening 48. The standard COMPASS test scores were reading 62, writing 12, and mathematics for pre-algebra 22. These scores show that she had some reading capabilities, but as yet did not have the CALP necessary to take college courses in which she would be dependent upon reading as one of the primary sources for learning. Her writing skills showed that she would have trouble constructing complete, grammatical sentences. Her listening/speaking scores indicate that she should be in classes which have a variety of presentation formats and that she would not be comfortable in a class which required her to respond orally.

Carol took 23 credits of developmental education. Of these, 17 credits were in English improvement classes, and 6 were mathematics credits. She also used her knowledge of Spanish to CLEP test for the full 16 credits. Of the total 87 credits she received at the community college, 16 were CLEP, and 23 were developmental.

She began her education in the spring of 2001 and finished in the summer of 2003. She earned 48 credits toward her degree. For those, her GPA was 2.65. She had a 2.00 in mathematics and a 2.24 in science. She earned a 2.92 in humanities and 5 additional credit hours from her Spanish that did not enter into the average. She received a 2.89 in English classes and a 2.45 in social sciences. In her major field she earned a 2.61 average. She took 15 credits of classes in summers and interim times. She had no late withdraws from classes and she did not retake any classes.

Student Diana. Diana is a 24-year-old single woman with no children. She works 30-40 hours per week, usually in an afternoon shift. Her father acquired citizenship, and then sponsored her to come to the United States legally. She has citizenship herself. She lives with her parents, two sisters, and one brother in a house. She enrolled in college after a break of four years after high school, which she used to save money for tuition, as her father would not permit her to borrow money for college. She attended school full time and did not allow her college attendance to be interrupted at any point.

Diana came to the United States with her mother under her father's sponsorship when she was 12 years old. She attended a private, Catholic junior high before finishing at the local high school. Her parents encouraged her attendance in school, and they paid for an additional tutor to assist her in mathematics and English on the weekends. When she finished high school, she decided to work first at a fast food restaurant, and then for the last two-years at the bank in order to save money for college.

Diana states that she felt very well prepared for college in mathematics and other subjects. She did not like science, but she took biology and chemistry in high school.

She took three years of mathematics. She decided to major in business administration because she wants to be a supervisor or to manage a business for her family some day.

She took both the COMPASS-ESL and the COMPASS tests. In the COMPASS-ESL her scores were reading 99, writing 78, and speaking/listening 99. These would indicate she is fluent enough in English for most classes but that she would have difficulty in writing. The level of fluency proved more problematic on the standard COMPASS tests where her scores were reading 53, and writing 30. These scores show that the COMPASS/ESL can be a little more discriminating than the standard COMPASS test for NNES. Her reading score of 53 would have placed her in a reading improvement course if she were a NES. However, her COMPASS/ESL reading score of 99 and her speaking/listening score of 99 showed that she would be well suited for courses where the presentation of materials used a mixture of reading and vocal mediums, or where she was given time to use dictionaries and other aids in her reading. Her writing score demonstrated that, for the most part, she could create complete, grammatically correct sentences, but that she might have difficulty in constructing paragraphs and essays. Her mathematics pre-algebra/algebra 85 placed her in regular college level math classes.

Diana took 11 credits in vocabulary and ESL writing improvement classes. She took CLEP tests for 16 credits. This also fulfilled 8 hours of her humanities credit. She took a total of 75 credits. She did not repeat or withdraw from any courses. She completed 64 credit hours which applied to her degree for a GPA of 3.90. In her major, her GPA was 3.96. She earned a GPA of 4.00 in mathematics, 3.56 in English, 3.89 in social sciences, 4.00 in humanities, and 4.00 in science. She did not enroll in any

summer or interim classes. She finished her course work in four semesters, starting in the fall of 2001 and finishing in the spring of 2003.

<u>Single Parent Females</u>

Nationally, more than half of all undergraduates are female, but the within that group of females, 44% are 24-years-old or older. Additionally, nearly 70% of the single parents who are in college are women, and single parent females have a much larger chance of being in the lowest income quartile than single males, single parent males, or single females (NCES, 2002). Single parent females usually meet several of the at-risk criterion just by being in this category. Aside from their chances of being in the lowest income quartile, they have dependents. Dependents create issues such as child care issues, and these women often have limited spousal support. Additionally, pregnancy and childbirth often interfere with a smooth transition from high school to college, so they may have a break in their enrollment history (Hamm, 2002).

<u>Student Ellen</u>. Ellen is a 44-year-old, single mother of four. She is Caucasian, speaks English as her primary language, and has no disabilities or history of mental illness. Her children are seven, eight, twelve, and fourteen. The 8-year-old is autistic. She rents the house where she has been living for the past ten years. She was born and grew up in the local area. She attends school full time. She does not work but lives using Free Application for Federal Student Aid (FAFSA) and other government money.

Ellen states that she grew up on a farm and that no one cared much if you went to school or not because everyone could make a living by working the land. She was unusual because she graduated from high school. She was even more unusual because

she decided to go to college. Part of her decision was due to a boyfriend who was going to college, but when that relationship broke up over the summer, she continued with the college program. She states that she was unprepared for college because she never took any of the mathematics or science classes that the counselors had recommended for her. She struggled in three semesters of college because she had no motivation and no sense of direction. Eventually she dropped out without finishing.

For a while she worked in a retirement center as a certified nursing assistant. Later, after her first marriage, she returned to the center to work. When she married a second time, she quit working at the center and quickly became pregnant again. This husband left after two years. She tried working at the nursing home again, but found that keeping a regular schedule was made more difficult by her son's autism. As she learned to cope with his disability, she enlisted the aid of extended family and government agencies in her decision to regain control over her life.

She returned to classes in the spring of 2003. She is currently finishing her nursing certification program and will graduate in May 2005 with a Licensed Practical Nursing (LPN) certification. Since she restarted in 2003 there have been no breaks in her education, and she has been attending classes full time.

Ellen took the COMPASS test and received scores of reading 89, writing 66, and math/pre-algebra 39. Her reading scores indicated that she had the reading proficiency necessary to understand what she would encounter in most freshman level textbooks. Her writing scores indicated that she was weaker in this skill than in reading, but that she could structure grammatical sentences and coherent paragraphs, so she was advised to

take the freshman composition course. Her math skills indicated she had basic computational skills, but that she had difficulty with concepts at the pre-algebra level. For the most part, this weakness was not an exceptional problem, because the LPN certification does not require a college level math course, but her inability to handle ratios, integers, and basic formulas would have made it more difficult for her to take biology or pharmacology classes. She stated that she had little background in any of the major fields of study such as science, history, or English, and that she felt especially unprepared for mathematics classes.

Ellen has taken 110 credits. Of those, 3 credits are in the developmental area, all in mathematics, including computational skills and pre-algebra. In her first two years of class, Ellen withdrew from 54 credits of instruction. She completed 38 credits in her first trial at college for a GPA of 2.18. Her more recent attempt has earned her 68.5 credits at a GPA of 3.48. Combined, her credits are 106.5 for a cumulative GPA of 3.10. She is currently taking 20.5 credits in order to finish her nursing program, for a grand total of 130 credits. She has a 3.41 in mathematics, a 3.38 in English, a 2.75 in social sciences, a 2.54 in humanities, and a 3.05 in science classes. She has a 3.23 in her field of study. She has taken 26.5 credits in summer and interim classes.

Student Francis. Student Francis is a Caucasian, 34 years old, and is a single parent with three children ages nine, seven, and six. She is currently renting a house. She works part-time, receives government grants, and is attending classes as a full time nursing student.

Francis is the first in her family to attend college. While there was some encouragement from her parents to further her education after high school, she was "just interested in partying and getting on with my life." Immediately upon completion of high school, she got married. She and her husband bought a farm and started a family. When the youngest child was still an infant, her husband committed suicide. There were problems with the insurance, so after two short years she had lost the farm and was broke.

Francis decided to go to college and take part in the surgical technician program. She liked working in the medical field, and it seemed like this might offer her the opportunity to start over. While she was taking the prerequisites, the program was cancelled. She was so discouraged, she dropped out of college for a year, but eventually returned to enroll in the nursing program. So, in the fourth year after her husband's untimely death, she was back in college working for her LPN certification.

Francis took the COMPASS test and her scores were reading 93, writing 83, and math/pre-algebra 39. Her reading and writing scores indicated that she would be able to do well with whatever reading was required and that she could write coherent short essays. Her mathematics score indicated that there would be problems as she needed work in ratios, integers, and formulas. She states that she while she received good grades in high school, she had trouble with advanced subjects involving dense reading. She felt unprepared for the mathematics classes that she would need.

Currently, Francis has completed 75 credits, of which 7 credits are developmental, so that her GPA, based upon 68 credits, is 3.18. She is not required to take mathematics or humanities for her LPN certification. Her GPA for social sciences is 3.33, for English

is 3.50, and for science is 3.67. In her major, she has earned a GPA of 3.03. She has

dropped 7 credits and has received an amnesty for 14 credits which were part of the

surgical technician program that was cancelled. She completed 11.5 credits in the

summer and interims sessions.

Older Single Women

The single female with no children or dependents is a fast-growing demographic

division within the community college system (Hamm, 2004; NCES, 2002). More than

60% of the students over 40 years of age are female. Additionally, females with no

dependents are more likely than males with no dependents to enter the community

college system (NCES, 2002).

Student Gilda. Gilda is a 50-year-old, Caucasian female who was widowed more

than fifteen years ago, and whose only son has graduated from college. She is currently

living in a small house which she purchased on an insurance claim from her husband's

death. Her income is based upon FAFSA grants and rehabilitation grants. She has

completed her Associates of Arts with a psychology emphasis.

Gilda was abused and molested as a child. She is a recovering drug addict and

has suffered through bouts of severe depression and agoraphobia. She tried attending

college after she graduated from high school, but drugs, depression, and an unhappy

marriage interfered with her success. She and her husband divorced in 1984, and she

underwent treatment for drug addiction and other psychological problems. In 1986, her

husband died, and because her son was a minor, she received a social security benefit on

his behalf. After her son turned 18, her funds from social security were cut off, and she

was faced with the prospect of returning to work. She decided to return to college to see if she could complete a degree and get work which might be, in her words, "more satisfying than an hourly wage at Mickey D's."

Her COMPASS scores indicated problems in reading, writing, and mathematics, with scores of 65, 28, and 32 respectively. Her reading score indicated that she could quickly learn to use reading as an academic tool, but that she should be involved in courses which would present materials in different media as well. Her writing scores indicated that she needed work in forming sentences grammatically, and that she would have trouble with making coherent paragraphs. Her math scores indicated that she would need work in pre-algebra concepts such as ratios, integers, and formulas with variables. She states that she always had a "mathematics phobia, but it went so well with my other phobias that I never tried to overcome it." She states that she really cannot remember whether her high school program tried to prepare her for what she would encounter in college because she was too high most of the time.

She earned a total of 96 credits, six of which were transfer credits and nine of which were developmental credits. She took a one credit math refresher course, but because she had taken a vocational math course that satisfied her math requirement, she did not take any more math classes. She had 81 credits apply to her degree, for a total GPA of 3.14. Her GPA for mathematics was 1.00, for English was 2.63, for social sciences 3.33, for the humanities 2.81, and for science 2.00. In her major field, she earned a GPA of 3.58. She dropped 19 credit hours and retook 12 credit hours to improve her grades. She took no courses in the summer or interim. Her first course work

began in the Fall of 1971, and she dropped out in the Fall of 1973. She reentered in the Fall of 1999, and completed her degree in the spring of 2002.

Student Harriet. Harriet is a 50-year-old, Caucasian female who has been married and divorced, but has no children. While attending college, she was living in a small apartment, working 10 to 15 hours per week, and living on FAFSA grants and loans. She has completed her Associate of Arts with an emphasis in accounting.

Harriet had an unhappy childhood, coming from a family which was poverty stricken and which overemphasized physical punishment. She has struggled her entire life with obesity. After a difficult divorce, and a relocation back to Iowa, she went to work tending bar. One day she was struck by the irony of "selling drinks to people when I hate drunks and drinking." She decided that she wanted to change her life. Counselors helped her see that changing her life meant getting a new career, and, in the fall of 2001, she decided to return to college.

Harriet dropped out of school in the eighth grade. Her parents did not see any use in having a child complete her education. She left home as soon as she was able to get a steady job, but she did find time to go in and test so that she could get her GED. She achieved this without any additional study or tutoring. In 1981, while she was still married, she tried to complete a technical course in college in bookkeeping, but was only able to do one semester.

When she took her COMPASS test, her scores were reading 65, writing 28, and mathematics/pre-algebra 32. Her reading skills indicate that she could quickly learn to use reading as an academic tool. Her writing scores were low, and they indicated that she

would have trouble forming a grammatical sentence or a coherent paragraph. Her computational skills were good, but she lacked pre-algebra skills such as working with integers or solving a formula with a variable. She stated that when she began, she was really concerned about her general lack of knowledge and skills.

Harriet has a total of 94 credit hours at the community college. Of these, 16 are transfer credits from the bookkeeping course, 14 credits are developmental, and 64 credits go toward her degree for a total GPA of 3.73. She earned a mathematics GPA of 3.50, an English GPA of 3.67, a social sciences GPA of 3.33, a humanities GPA of 4.00, and a science GPA of 3.67. Within her major of accounting, she has earned a GPA of 3.70. She took 13 credits in summer classes. She did not drop or retake any classes. She completed her degree in Spring 2003. She is currently working on her Bachelor's degree in Accounting.

Males over 40

This group presents some major differences from the females of the same age. First of all there are fewer males than females in community colleges, especially in this age group. Their motivations and obstacles are different than other groups as they tend to be in the higher income quartiles and, if unmarried, they are far less likely to be single parents than women in the same age groups (Hamm, 2004; NCES, 2002). However, in spite of their differences, they still fit the at-risk profile. First of all, because of their age, they are more likely to have a break in their enrollment history. Secondly, while they may be living alone, they may still have family issues to overcome as they may be divorced and paying child care. Employment conflicts with study seem to be a greater

problem with this group than younger men or women, as more men in community colleges have part-time or full-time employment. I chose one who was married with children, and one who had never been married.

Student Ira. Ira is a 44-year-old Caucasian who is married with four children, ages six, seven, eleven, and fourteen. He and his family live on a 30-acre farm about fifteen miles from the community college. He has been married for sixteen years, and has lived on this property for twenty-one years. He works 30 to 40 hours per week, receives government grants, and makes extra income from barter and farm produce.

Ira grew up on a farm. His father had no formal education, as his grandparents kept him out of school to tend animals on the farm. His father could not read or write, but Ira states that he could do large computational problems in his head. His mother finished sixth grade. Ira's early life revolved around farm work and his mother's strictly enforced religious training. He states that he was quick in school, but he had trouble reading. He grew angry with the teachers and his parents because he wanted to learn how to read faster, but they would not teach him. He became rebellious. He was not good at sports, but the rugged farm work made him strong and healthy. He began fighting in school, and he often found himself in the principal's office. He dropped out of school in ninth grade.

Ira ran away from home at age sixteen, and he supported himself with odd jobs and selling drugs. After his marriage, he continued to use drugs until a brush with the local legal system caused him to change his mind about that lifestyle. In the early 1980's he took the test and received a GED. Then he tried attending the local community

college without success because "I wasn't ready for them, and they weren't ready for me." He joined the local Alcoholics and Narcotics Anonymous organizations and "cleaned up my act." He tried various "straight" jobs including truck driving, plumbing, and construction. However, "there is always somebody ready to take advantage of the working man." He decided to return to college so that he could learn a profession which would pay better money and allow him a little relief from the grueling physical regimen of farm work and construction.

He reapplied and entered the community college in the fall of 2000. He took the COMPASS test and received scores of reading 62, writing 91, and mathematics/algebra of 100. His writing score indicated that he was ready for writing college essays and he was told that he could probably CLEP through his first composition course. His mathematics score indicated that he could take courses in the college algebra or pre-calculus level. What was of some concern was the reading score of 62, coupled with a writing score of 91. This discrepancy of scores often indicates a potential reading problem or disorder. He was advised to undergo testing for the disorder, but he refused, citing financial reasons.

Ira's goal was to complete a dual major in computer network management and computer programming. He completed 72 credits by the spring of 2003, but found out that he still did not have enough credits for a degree because he had taken too many courses in the computer area and had not fulfilled the general education requirements. He blamed the advising staff for the problem. He grew angry, because after six semesters, his funding was running out. He dropped out. He saved enough money to return to

classes in the fall of 2004 and completed the requirements for his degree with an emphasis in computer network management. He will begin classes to continue in a Bachelor's program at the local university in the summer of 2005.

He has completed 95 credits. Of these, 12 credits are transfer courses from truck driving and construction classes, seven credits are developmental, and 76 credits are in the degree granting category with a GPA of 2.93. He has received a GPA of 2.00 in mathematics, 2.67 in English, 2.50 in social sciences, 2.89 in humanities, and 2.28 in sciences. In his major field he earned a GPA of 3.17. He has withdrawn from 12 credit hours and he has retaken one three-credit class to improve his grade. He is transferring to the local university to continue his education in the computer science field. He has taken only one credit in summer or interim semesters.

Student Jim. Jim is a 45-year-old, single, Caucasian male and an army veteran. He has never been married, but has been engaged twice. He is currently living in student housing. He does not work, but spends all of his time with classes. He is using veteran's money and FAFSA to continue his education.

Jim "wouldn't 'a never come to college if it hadn't 'a been for my girlfriend who dumped me as soon as we got here." Jim had difficulty in high school with reading and mathematics. He dropped out at the start of eleventh grade and took a job. When he was eighteen, he took a job in a factory and worked there for three years. At twenty-one, he was laid off. An army recruiter encouraged him to enlist and set him up in GED classes so that he would qualify. He served in the military for two-years, was honorably discharged, and returned to the factory where he had originally been laid off. He was

engaged to be married, but the relationship ended unhappily. Jim took the break up hard, and "started drinking way too much." He joined AA and "straightened myself out a bit." However, absenteeism due to emotional stress and drinking had caused him to lose his job at the factory. He began working for minimum wage at a convenience store. He states that he did not really like the work, "especially after I got robbed three times in three months." He met a new girlfriend, they made plans to be married, and she convinced him to move to the Midwest to get a job. He states that they were here "two days, when she left me a note saying she wanted to get back with her old boyfriend." He decided to stay here and get an education.

Because he dropped out, Jim had little academic training or background. He is "not a good reader. And, anyway, it's a lot of work reading stuff anyway." However, his COMPASS scores reveal that there is potential for him. His reading score was 78, writing 87, and mathematics/pre-algebra 47. This indicated that he would be able to read and use freshman level textbooks, and that he would be able to write a coherent essay. A mathematics/pre-algebra score of 47 indicated that he would be able to work with integers and formulas in pre-algebra, but that he would need further development in order to work with coordinate graphing and equations with more than one variable.

Jim has completed a total of 67 credits, of which 8 are transfer credits and 3 are developmental credits. He has not declared a major, but instead wishes to leave open the option of choosing a major when he transfers to the university. GPAs were computed using his midterm grades for the current semester. He has 56 credits for a combined GPA of 2.45. His GPA in mathematics is 2.00, English 2.50, social sciences 2.67,

humanities is 2.00, and science is 2.00. He will need a lab science course for 4 credits and 6 more credits in humanities in order to complete his degree and he plans to take those credits this summer. This will push his total credits to 77. He has dropped 21 credits, and has taken 18 credits in summer and interim classes.

Step 2: Selection of Questions

One of the most difficult parts of doing an interview is determining what to ask. The basis for the interview questions must be the four basic questions of the study. In addition, there must be a few questions which will elicit relevant information about each student's background. Yet the questions themselves needed to be general enough to get the student to explain things in his or her own way. The questions must not bias the answers. In order to do this, I made a list of open-ended questions which would serve as a guideline for eliciting the types of information in which I was interested, but would also encourage students to talk about their own feelings, aspirations, and perceptions of what happens in the LAC. Therefore, I decided on questions which fit into different groups.

Background group questions. There is background data on each student. The college will have a record of the student's grades, attendance, and other information on their academic career. Additionally, the college keeps records on such facts as whether the student qualifies for Pell Grants, immigration status, marital status, and ethnic background. While much of this information might help to classify a student as at-risk, the data in itself is only a guideline for this type of study. It is important to learn how a student's background and current social, economic, and cultural status affect learning and success in academic institutions. Therefore I decided to ask questions which would

prompt students to talk about their family history, their educational experience before they returned to the community college, their current family status, and their current economic status.

A complete list of questions is included in Appendix A. Such questions included but were not limited to:

1. Tell me about your life as you were growing up. Did you live with both of your parents? Did you have brothers and sisters? What was your economic situation? Did you move around a lot?

2. How did your family view education? Did your parents go to college? Were you and your siblings encouraged in school? Were there books and magazines in the home? Did your parents teach you things?

3. Tell me about elementary school. What did you like? Did you have good teachers? How were the other kids? How did your parents interact with the school and the teachers?

4. Tell me about your high school experience. What subjects did you like? What subjects did you hate? How were your teachers? Did you get in trouble? Were you popular? Did you finish high school? How did your family view high school?

5. What happened after you finished high school? Did you go to work, get married, or have a family? What made you decide to come back to school?

6. What is your economic situation now? How are you paying for college? How much do you have to work? Do you have a spouse? Do you have

children? How about your extended family, your relatives, do they help you with problems that you have to overcome in order to complete your education?

Academic questions. These questions centered on the students' goals, their view of their academic progress, and their understanding for how their academic training will be used in the future. Such questions included but were not limited to:

1. When you first came here, what did you want from your education? How has that changed? What influenced the change?

2. What kind of grades did you expect? What subjects did you think were going to be the most difficult? What skills did you find that you already had? What new skills did you have to learn?

3. How did you like the teachers you worked with? Were there some you liked better than others? Why?

At-risk versus resiliency. Both the at-risk and the resiliency factors were discusses and categorized in the literature review. The questions in this section were designed to prompt the student to list those at-risk factors which created obstacles as well as the resiliency factors which were relied upon to overcome those obstacles. It includes social interactions in the classroom, on-campus, and off-campus.

1. Besides academic problems, what kinds of problems did you face as a student?

2. What economic problems did you have to overcome? Did you have to work? Did you have to support a family?

3. What social problems? How did your friends and family view your academic career? Did you make new friends at school? How did you change?

4. What cultural difficulties did you face? What were the language problems you faced? How did your cultural background help you?

5. How did you overcome these problems? What do you think are your strongest characteristics? Did these strengths help you to stay in school? Did your family help you?

6. What kind of activities were you involved in at school? What kinds of organizations do you belong to outside of school?

Learning Assistance Center (LAC) interactions. The final two research questions listed in the first part of this chapter encompassed the interactions that these students had in the LAC and how those interactions affected students' ability to cope with academic and non-academic obstacles. Care had to be taken here because the students tend to exhibit a strong desire to please the interviewer and to give a good impression of the LAC. The interviewer had to reinforce the idea that the purpose of the study is to shed light on how the LAC helps students and how that assistance may be improved. Again, it is necessary to get students to talk freely about their experiences.

1. Tell me about what you did in the LAC. Why did you go there so often?

2. Tell me about your relationships with other students, did the other students in the LAC help you in your classes? Did you make friends there that helped you in other ways?

3. Tell me about your relationship with the LAC staff. How did they help you academically? Did they help you in other ways? If you had to choose one nice thing to say about the LAC, what would it be? If you had to choose one criticism to say about the LAC, what would it be?

4. If you were the director of the LAC, what would you do differently? What problems do you think that the LAC staff and the college administration should focus on?

Summary of interview questions. The purpose of the interview was not to collect specific data. The purpose of the interview was to elicit responses from students in order to get their view of their experience. The research questions revolved around understanding how students perceive their academic experience and how the LAC interactions influence them. A more complete list of interview questions can be found in Appendix A.

Step 3: The Interview Process

Interviews were conducted on campus over the period of a month. They were conducted in a private office so as to be free from distractions and to minimize any trauma that students might have felt from being a part of the study. The interviews were between 30 and 90 minutes in length. Transcripts were made from each interview, and all personal references were deleted. The students were invited to participate in the study on a purely voluntary basis. They were promised no rewards for their participation beyond that of the personal satisfaction of helping the college do a better job with students.

The interviews were conducted in an office at the community college. The door to the office was closed so those inside could not be overheard by anyone in the hallway outside. One window was kept with the shade open in order to comply with college policy regarding students and faculty members in the same room. Students were facing at an angle away from the window, so it would be difficult for anyone to see who was in the office. As these offices are used for a variety of different types of student interviews, the students' privacy was protected. Students were allowed to stop or pause the interview at any time. If they felt any undue stress, they were told that a counselor would be made available to them. There were counselors in adjacent offices.

Step 4: Analysis

The analysis was conducted with the research questions as a guideline. First of all, discovering how each student defines success and how each student determines the goals leading to success was an essential part of the study. Second, I looked for any connections between the at-risk factors and the resiliency factors. Third, I examined each narrative for clues to the differences between the academic and social influences on that success. Fourth, I tallied the LAC interactions in order to uncover how the LAC interactions factor into the larger equation of student success.

First I organized the narratives with the hard data on each student (grades, test scores, and other items. not because I wanted to use this information to make judgments about how that student will do academically, but to try to understand how the educational institution would perceive that student and how the educational environment was configured in which that student had to interact. For example, because of their level of

English fluency, the NNES students were in different classes than the other students. This difference had an effect on their interactions in the LAC. As a preliminary plan, I looked for items within the narratives of the ten students that indicated answers to the questions or at least looked as if such answers might be determined by additional questions in a follow-up interview. Then I analyzed each of the student's background information and narrative to see if anything was said that was unique to his or her own story. Next, I looked for details that set the five pairs of student apart from each other. For example, how were the Sudanese males different from the Mexican females? After this, I examined the narratives to see if there were any similarities or marked differences between individual members of separate groups. For example, were their any similarities among females that were not shared by the males, or were there any other characteristics like major field of study or diagnostic test score that might shed light upon the study. Finally, I looked to see if there are any details which seemed to be shared by a majority of the group.

Step 5: Additional Interviews

I am aware that I am a middle-aged, middle-class, well-educated Caucasian. I was worried that my own cultural bias would cause me to misunderstand or misreport the very nature of the phenomenon under investigation. Therefore, rather than trust in my own concept of the phenomenon, I decided to follow a modified form of the intersubjective approach (Firestone & Dawson, 1988). One version of the intersubjective approach allows the researchers to triangulate subjective opinions with the opinions of the participants themselves. I decided to work with a member check approach that

allowed the participants themselves to inform the conclusions I could reach. In other words, whatever initial conclusions I reach might be biased, so I would refer those conclusions back to people from each group so as to get a second opinion from a different cultural perspective. I did so by asking each person to clarify statements that they made which I may have found confusing. Then I made general statements regarding my conclusions and asked the participants to comment on those conclusions. I was alert to any points which were inconsistent with my own thinking and used open-ended questions to explore those points. My initial purpose in adding this step to my analysis was to make sure that my cultural bias did not unduly affect the conclusions in my study. However, I found it useful in clarifying points that I thought I had understood during the interview and which I found to be confusing after examining the transcripts. I also found that asking students to help interpret my preliminary conclusions proved useful in gaining a more universal insight into the nature of this educational interaction. I was careful to only to give general hypothetical and general statements which did not reveal the source of my conclusions in order not to compromise my other sources (Piantaninda & Garman, 1999).

Step 6: Final Analysis

The final analysis included all the information garnered from the additional interviews. The secondary interviews and student input on the conclusions helped me to expand my own understanding of the anecdotal evidence I have accumulated through years of experience. The narratives added weight and substance to the abstract ideas of mentoring, staff and student interaction, and andragogy. They also helped me evaluate

my own judgment and perception of these interactions. In the final analysis, I found that the interviews themselves were incomplete. I also had to incorporate additional sources of data such as grades and assessment scores as necessary.

## Summary

Like many practitioner researchers, I had strong ideas of what was going on in my LAC, but I was concerned that being involved in the process might make it unwise to trust my instincts in drawing conclusions about what was happening in the center. I also was concerned that my anecdotal knowledge of what was happening was inadequate to the task of training staff in the LAC. It would be much easier if there were a few simple tests that could be administered, followed by a short statistical analysis and conclusions drawn to a numerical level of certainty. However, my experience in the LAC led me to believe that what was happening there was far too complex to lend itself to such an evaluation process.

The literature suggests to me that not enough is known about what happens in the LAC to really measure its effect. We, as educators, do not really understand what is meant by student success, we are shaky in our understanding of how such diverse groups of students learn, and we are very uncertain of our ability to influence that learning process in concrete, reproducible ways. Our own bias may influence how we perceive the interactions between student and institutions, staff, and programs.

I designed this study to inform the field about students, how they view themselves, and how they view their education. Quantitative methods of investigating student learning are not invalid, but they may not reveal important aspects of the educational

experience. They can not tell me how a single mother of three could balance a schedule of babysitters and preschool and still manage to get an education even though she always took the easiest courses she could find in high school and never studied. The tests could not say how a student from a war-torn country with a third-grade education could overcome the linguistic and cultural obstacles to get "C" in Beginning Algebra on the third time through the course. Looking at the test scores gave me no clue about whether this reformed alcoholic and drug user would be able to get a degree and turn his life around.

Tests demonstrate how well a student meets the standards. They do not demonstrate how we assist students in learning to overcome all of the obstacles to learning. Like most practitioners in education, what I truly needed to know was how well I was doing at helping students to reach their goals. When I realized what it was I wanted to know, it made it much easier to design the study. I admit that I had doubts about the value of the study because I was not sure if the study would provide meaningful answers to the questions I had raised. However, I found an excellent reassurance to these doubts in the following quote: "The key to resolving these doubts and bringing the dissertation to fruition lies in remembering that qualitative dissertations in education aim to generate deeper understanding and insights into complex educational phenomena as they occur within particular contexts." (Piantaninda & Garman, 1999, p. 131-132).

CHAPTER 4

INITIAL ANALYSIS

There are two parts to the analysis of the data. The first, as described in this chapter, is the analysis of the data collected on the initial interviews. The second analysis will be in Chapter 5, and uses the data collected in the secondary interviews.

The initial analysis is divided into four sections. The first section is a brief description of the interview process, and the second is a summary description of the interviewees in each category. There are be three parts to the section which focuses on how the interviews addressed the research questions involving student definitions of success, student resilience factors, and how LACs affect both the academic and overall success of the students who use them. The final section is a brief conclusion and a suggestion of questions to ask in the final interview section. The three analysis sections seeks to understand individual cases, compare cases with in groups, compare separate groups with each other, and compare individuals across groups.

<u>The Interview Process</u>

All interviews were conducted in a 12 foot by 12 foot office. The door was closed to prevent interference from outside influences. However, the windows shades were open so that the students could see others walking in the hallways. No one from outside could hear what was going on in the office. The shades were left up so that the student would not feel intimidated by being alone in the room with me and in order to be in compliance with the college policies on conducting interviews. The interviews were

conducted with the interviewer sitting to the side of the interviewee at a table. Interviewees simply spoke into a microphone attached to a tape recorder on the desk.

This pattern was used for several reasons. First, while the student and I may have been in classes together, or we may have spent time in the LAC, I wished to avoid any anxiety which the student might develop from being alone in a room with me. Also, many of these students have been in various forms of therapy, and I wanted to avoid any subliminal messages that I might unknowingly transmit which the student might misconstrue as doctor-to-patient communication. For this reason, I sat to the side and at a slight angle from the student. This eliminated any physical barriers between us, and, I hope, allowed the student to feel that this was an academic endeavor rather than one which seemed more like counseling.

Next, I carefully explained the purpose of the interview to each interviewee. While I did not specifically state my research questions, I explained that the purpose of the interview was to determine how the LAC contributes to the eventual success of students so that we could evaluate and improve it. I explained that the interviews were necessary because it is nearly impossible to determine how well the LAC assists students from standard testing because students use the LAC in so many different ways for so many different things. I explained that I would ask background information about them, and that they were free to tell me whatever they wanted about themselves. I explained that I would be asking information about their views and that it would be appropriate for them to speak about their views on education, learning, family life, employment, and many other general topics because it was necessary to get a complete understanding of

them in order to understand how they were affected by the LAC. I explained to them the process I would use in transcribing and working with the interviews; none of what they told me would be identified in any way with them, and no one would know who I interviewed for the research study. Finally, I told them that they may be asked to return for a follow up interview at a later date, so that they could help me understand the information that I obtained from all of the interviews.

<div align="center">Overview of Analysis</div>

The purpose of this study revolves around these four research questions:

1.  How do at-risk community college students define success, and how does this definition differ from the institutional definition?

2.  How do the student's resilience factors affect the at-risk factors of students in achieving this success?

3.  What does the LAC contribute to the academic abilities of students?

4.  What does the LAC contribute (or fail to contribute) to the overall success of students?

First of all, discovering how each student defined success and how each student determined the goals leading to success was an essential part of the study, particularly in light of the way that the literature review revealed that student definitions could differ from institutional definitions. Second, it was important to try and determine the differences between the academic and social influences on that success. Third, it was be interesting to see the connection between the at-risk factors and the resiliency factors.

Fourth, it was essential to uncover how the LAC interactions factored into the larger equation of student success.

In consideration of these four questions, the study was focused on the participants in several different ways. On its most basic level, the analysis considered each individual's life and educational experience in relation to the questions. Then it compared and contrasted individuals within their paired groups, so that Alfred and Brent would be considered, then Carol and Diana, and so on. After this, dyad characteristics were compared for commonalities and differences, so that the Sudanese males would be contrasted with the over forty males. The final step of the initial analysis involved comparing individuals across groups to see if there were any common or different characteristics that might be illuminating, so that Diana might be compared with Brent or Ira. Not all comparisons yielded useful insight. As might be expected, there were so many differences between individuals like Ira and Carol that few helpful conclusions could be reached.

Each of the individual members of the study were chosen because they were defined as at-risk and because they used the LAC extensively throughout their course of study. Although they each have been paired with another member of the study for comparison, they all have individual characteristics which make any understanding of their success a unique case study in its own right. An analysis of their interviews was conducted in order to provide insight into others who are related to them in a way not connected with the initial pairings of the study.

Each individual was paired with another in order to gain insight into the common characteristics of students within that broad group. While an individual case study of each student is valuable, it is also helpful to understand some common characteristics of the group. For example, knowing how the cultural background of a Sudanese student affects his or her general response to textbook material is valuable to those who will tutor or mentor Sudanese students. Knowing that there are differences between the goals of single parent females and single females who are not parents may affect the way that LAC programs are designed.

Again, although there are similarities between students within their paired groups, there are also characteristics which they may share only with students outside of their group. For example, three of the ten students in this study related problems with drug and alcohol use. Several of them expressed problems with getting LAC assistance that matched their schedules. Many of the students related that they needed more initial help with specific topics, like computer literacy, in their initial semester at the college. These shared characteristics hint at the different ways that students may be grouped in order to better accommodate their learning through the LAC.

Finally, there are some commonalities which stand out in relation to all or a majority of students within this group. One such commonality that is readily apparent from the brief introduction is that most of these students far exceeded the minimum credit requirements for a degree at the community college. For most of these students, the additional work averages to 38% more than the basic requirements for a degree. Other common characteristics among these ten students may lead to insight on how to focus the

resources of the LAC and the community college in more productive ways for both these students and for those who are not using the LAC on a regular basis.

<div align="center">Defining Success</div>

The first question involves determining how students define success and how this definition compares with institutional definitions. Institutional definitions revolve around the standards that the institutions set for students, including GPA, retention rate, and transfer rates. However, as the survey conducted by *Equipped for the Future* (EFF) concluded, the institutional definitions of success did not necessarily match those of students (Stein, 2000). What this survey determined is that although students will often state initially that their definitions of success involve finishing college, getting good grades, transferring to the next level of education, and getting a job, their actual definition of success is often far more complex and has less to do with the educational institution than with other aspects of their lives. EFF determined that student definitions of success can be divided into three different areas: (a) improved ability to interact with family, (b) improved control over work related interactions, and (c) improved ability to participate in the community (Stein, 2000).

Each of the ten participants in this study were chosen because they were a success by the institutional definition. All are graduates or near graduates. All have obtained an overall GPA of at least 2.00 and a GPA within their major field of study that exceeds 2.50. All of them are either transferring to a four year college or are eligible to pursue a higher degree. Thus, they meet the three most common criteria measured by educational institutions: they have completed their respective programs, they have achieved a

standard set by the institution, and they are capable of moving on to the next level of success in their chosen field (Stein, 2000). Yet, in spite of the fact that all of these students are successful by the institutional standards of completion, retention, and transfer to their next challenge, there remains the question of whether or not they have met their own standards for success. Each of these students faced challenges within the community college on the path to obtaining his or her degree, and now, upon completion, they also must determine what the degree means for their success. The question of how students define success remains a pivotal one in determining how an LAC can assist them in obtaining that success.

Individual Definitions of Success

My initial questions for each of these students were concerned with how they defined and coped with both failure and success. However, some of the questions yielded answers which were a bit surprising because they demonstrated how students were quite capable of identifying their successes outside of the norms set by the institution.

I asked Brent about how he felt when he was forced to retake a class because he failed it.

> Of course I want the good grade. I will keep working until I get it. I had such a hard time with that algebra. I had to take it three times. You know that stuff is so difficult. The first time I didn't understand even the second chapter. Then when I came back and I got a tutor it was better. Then on the second time, I did okay until that crazy midterm test. I had a hard time with that. But then when I took it the third time, you helped me to understand it. I got through everything but those crazy word problems. Those are too difficult for me, and they don't matter anyway. What is important is that even though I failed that algebra three times, when I took the college level mathematics, I got a D and I could pass it. (Interview Transcript)

While the grades were important to him, Brent had the maturity to understand that he did not need to pass each individual course in order to be successful. He realized that he only needed to pass the college level mathematics course in order to meet the standards set by the institution. He also recognized that it was not necessary for him to understand all of the vagaries of word problems in algebra in order to get enough mathematics to meet the standard for his degree. By the institutional standard, he failed three times to achieve success, and in the final course, even though he achieved the minimal standard, his grade was below average. Yet this is one area where his definition of success enabled him to persevere even when others might have quit. He did not view a failing grade as a failure. For him, each iteration of the class was better and he learned more. He met the institutional standard for success—passing the mathematics course, but he did so only because it was necessary in order to obtain the degree. While he needed to be cognizant of the institution's criteria for success in order to obtain the degree, his persistence was dependent upon his own definition of success which was completing the course.

The students who had difficulty with mathematics courses often found themselves in a situation where the institution was setting standards that would define them as failures. Alfred, Carol, Ellen, Gilda, and Jim all had low GPAs in mathematics. Each of them found a way to achieve the minimal standard necessary to obtain their degree. Alfred's experience was similar to Brent's; he simply retook the classes where he had poor grades until he could get to the class he needed to meet the standard. Jim took the

required course for a C, which met the requirement, and in this case his definition coincided with the institutional one.

Carol received a B- for a grade in basic college mathematics course, but she remains concerned for the future because she must take the Praxis Exam (Educational Testing Service [ETS], 2005), which is a qualification examination for a teaching license, and she feels that she does not yet have the knowledge and skill to meet that standard. In this case, her definition of success exceeds the institutional definition. She stated that she would come back to the LAC and review before she had to take her qualification examination. She said that she really wished the college "had a course that would get her ready for her test." Also, she did not feel like the qualification test was fair because "I can teach little kids how to do their math without being good in geometry and algebra. I don't want to teach math anyway. I think I can be a really good teacher without being good at math." Her definition of success was based upon her ability to perform in a profession after she graduated. She was giving that definition a higher precedence than definition provided by the institutional.

Ellen was in the nursing program, and at that time there was no requirement for a mathematics course. However, Ellen was afraid that she would not be good enough to get through her program. She took a refresher course and then she took the basic college course as well. In spite of the fact that she got a B+ in this course, she remains concerned. "I don't know if I'm going to be able to do the math on the board examination [for nursing]. I'll probably come back to the center to review my math first." Ellen believes that the institutional standards are not sufficient to enable her to meet her definition of

success which revolves around the state nursing examinations. It may well be that her stated belief is a reflection of an unrealistic appraisal of her own abilities, but it is worth noting that she does not put much faith in the institutional definition of success at mathematics.

Gilda's reaction was more direct:

> I hate math. I got through a technical math class a long time ago, and they let me count that as meeting the requirement. No way am I going to take a college math class now. I took a little refresher class so that I could get through the biology and stuff that I needed to meet the gen ed [general education] requirements. I caught a break, and I'm gonna run with it. They don't need to know that I suck at math. (Interview Transcript)

Gilda's words demonstrate an understanding of the workings of the educational institution. Even though she believes that her math skills may be below even the most minimal standards of the institution, she gives her own definition precedence over the institutional definition. She took a refresher course so that she would do better in her other classes, not because she needed it in order to meet the mathematics requirement for the college.

Sometimes, the student's perception of institutional standards is predicated upon what they observe from others. Carol saw others who were achieving the standards, and she knew that it was necessary for her to demonstrate the same level of skill or proficiency. However, because of language difficulties, she was unable to manage it with the apparent ease that she felt she observed in other students. Carol said,

> It makes me angry when I read something five or six times and I still don't understand it. My English is so terrible sometimes. I never really know if what I am reading is the thing that is going to be on the test or if it is just an important story that they are telling me to help me understand some idea in the book. And you know what else makes me mad? Sometimes I know that everyone else

understands it, and they know that it's going to be important, but I missed it. (Interview Transcript)

For Carol, this is particularly frustrating when she was studying child psychology and elementary education which are fields within her major. She found herself unable to recognize which items of study were critical and which were not. Even when she did make that identification, she often found herself unable to incorporate the knowledge on her own.

> The stuff that I really couldn't understand I brought to the learning center. You guys explained it to me. I know I needed to learn it, but I just couldn't get it by myself. I mean, I had to get it. Otherwise, how could I finish and get my degree? Even now I'm worried because I have to take that Praxis Exam. I know that's going to be tough...I worry that I'm never going to be able to read this stuff fast enough, you know? This stuff is hard and everybody is just so much faster than me. (Interview Transcript)

In this case, she was not really focused on the institutional definitions of success. If she had, she would have realized that with the help of the LAC and her own hard work, she was meeting the standards that the institution had set for her. She understood the institutional definition of success, but she was adding on the extra dimension of competing with other students in her classes, as well as by what she believed would be required on a qualification test that she would not be required to take for another year. However, her perception of success motivated her to pursue assistance and to work longer hours than her peers, which may be one of the resilience factors contributing to her success.

For Ira, difficulty in meeting the standards was more than just demonstrating specific proficiencies. He wanted a double emphasis for his AA degree. He wanted to complete the AS program for Computer Networking, which has the same number of

credits as the AA, but he also wanted to do the extra work necessary for an AA degree in computer programming, which included more mathematics, science, and humanities in the core components. While the grant money would have covered the program had he completed it in three years, there are limits to how many semesters a student can remain a full time student and still receive benefits. Because he had to support his family, Ira wanted to limit his classes to 12 credit hours per semester. While this allowed him to be a full time student, it did not allow him to accumulate enough credits to obtain his desired degree within the three year limits on his grant money. Furthermore, when he went to an advisor at the four-year university where he wished to transfer, he found out that not all of his credits would transfer within his major, and that even though he had a total of 88 college level credits, he would lose 18 of them when he transferred, because he would be carrying too many elective credits. He would still need 50 credits in order to receive his four-year degree. Ira said,

> You know, I was so goddamn mad after I found out that my funds would run out that I just wanted to kill my advisor. Oh, I said that on tape, didn't I? Well, I didn't mean that I actually wanted to kill her, but I was really mad at her. I mean, she's supposed to know what's required, right? I mean, I thought I would have enough time to get a dual degree. She didn't tell me that the money would run out. Otherwise I would never have done it this way. I'd have just gone for the straight degree so I could transfer, you know? I mean how rank is that? I finished a whole extra 20 credits and I ain't gonna get nothing for it. I had to come here another whole semester just to get the degree, and I had to pay for it myself. What really steamed me was that I had to go to the Learning Center to find it out. I mean, when I asked the lady to help me figure out what I should do about my first year at the university, she helped me go through the checklist. That's how I found out. (Interview Transcript)

At first glance, it may seem as if Ira is the victim of some poor advising.

However, the level of influence of an advisor on this situation is unclear. First, the

community college does not offer a double major, and Ira may have picked up that idea from somewhere other than the campus advising staff. Secondly, Ira's manner can be somewhat abrupt, and by his own admission, he would "fill out my schedule form and go look for someone to sign it." In this case, at least some of his problems may have been that he had an inadequate understanding of the institutional requirement for success and that he used that inadequate understanding as the basis for making academic course decisions.

These excerpts lend insight into how students perceive the relationship between the degree that they want to obtain, and the things that they are studying, or between the institutional standards for success and their own definitions of success. In the first instance, Brent understood what was and what was not important to the attainment of the degree. He knew that algebra was a developmental class and was not a part of the coursework required to obtain the degree. He knew that he could fail the course several times and it would not affect his degree or his GPA. Furthermore, he could also discriminate between those items or skills which were integral to meeting the standards for the degree from those which were not. Hence, he decided not to worry about the word problems because he knew that he could obtain his degree without word problems. All he needed was enough skill in algebra to get him through the general mathematics course with a D, and he could still graduate. Additionally, he knows that he will not have to use "crazy word problems" when he gets a job as a web designer.

Carol, on the other hand, demonstrates a different problem. She is unable to determine which skills and what information is essential to obtain the degree. This is in

part due to her confusion of what is required by the institution to become a teacher and what her experience with children and in classrooms tells her are necessary teacher qualifications. She has been working as a teacher's aide for four years, and she knows what goes on in a classroom. "I know I can teach what they need to know. I already do it a lot." She also knows that she has to pass the Praxis Exam, but she does not know what will be on that test. She is convinced that the problem is with her understanding of English rather than her understanding of the requirements for the class itself. Additionally, she believes that the courses that she is taking will be inadequate to the task of helping her pass the Praxis examination. Also, she believes that her definition of success—being able to handle a classroom—is being inadequately addressed. Interestingly, the fact that she believes that the courses are not adequate preparation for the Praxis Exam may be a driving motivation for her to do extra preparation outside of her classes.

Ira exemplifies another complication. His problem is not with the relationship between individual pedagogical items and the eventual goal, but is instead concerned with the relationship between the overall curriculum and the degree he seeks. Ira can determine which items should be studied. He states,

> When I first came here, I was afraid maybe I wouldn't have as much background as the younger kids that are just coming in out of high school and it might make working in computers more difficult. But I figured out right away that that wasn't gonna be a problem. (Interview Transcript)

Instead, he was forced to quit school, return to the work force and save money because he did not understand the mechanics of how to obtain a degree.

The degree remains a main focus for all students. Sometimes students understand very well what is required to obtain it, and sometimes not. In the case of Brent, he could not understand why everyone was worried when he did not pass the algebra class. He understood something that they did not. He knew that the class was only there to get him to a point where he could take the real classes—the ones that counted for his degree. Carol, on the other hand, could not distinguish between what was important for her degree and what was superfluous. Therefore, she spent too much time and energy working on things which were extraneous and never really understanding the true relationship between what she was studying and what she would be required to reproduce. Unlike Brent, who simply dismissed everything that he deemed unimportant, she unduly stressed herself over trivia and missed the critical. Ira quickly grasped the relative value of the skills and information in his classes and could readily proficiently apply that skill and knowledge toward the standards required for his degree. Unfortunately, he was unable to grasp the mechanics of how such degrees are granted and he did not realize his mistake until it was too late. Gilda decided that some things were not important for her definition of success, and simply did whatever was necessary to satisfy the institutional definition of success.

Many students experience conflicts between what they perceive as success and the institutional definition of success. Additionally, many students believe that the institution is inadequately preparing them for what they perceive as success. Either the class work is inadequate, or the curriculum is inadequate. Some students believe that

some of the institutional criteria for success are unimportant, and therefore they feel

justified in finding ways to work around those requirements.

<u>Paired Definitions of Success</u>

There were some similarities between the way that different pairs of students

reacted to their degree. This seems to be a natural conclusion stemming from the concept

that a shared cultural background or shared life experiences can result in common views

about the importance of education. There were some important differences between how

the different groups viewed their success.

<u>Sudanese success</u>. At first I was puzzled by the reaction of the two Sudanese

students to some of my questions. For the American students, retaking classes is often a

demoralizing process, particularly when the student puts forth enormous effort in study

and time. Yet when I asked the Sudanese students how they felt about repeating a class,

their reactions were very similar with each other, but were very different from American

students. Alfred simply smiled broadly and stated,

> "Yeah, I really had to work on that one before I got it."
> "But didn't it make you feel frustrated that you had to take that same class
> three times before you got a C?"
> "I didn't want a C."
> "But there wasn't any frustration?"
> "No, I got a C." (Interview Transcript)

In spite of my years of working with students from different cultures I missed the

point because of my own cultural bias. For me, it would have been humbling to take the

same course twice. It would have been absolutely humiliating to take it three times and

still only get a C. Yet in this case, I had to ask the question three or four times and then

think about his confusing answer for awhile before I understood what was happening. He

felt no sense of shame for having taken the class three times. He did not equate the first two unsuccessful attempts with failure. He was totally focused on the success of earning a C. Brent presented a similar demeanor when he was questioned about retaking courses. Both of them did not relate unsuccessful attempts to failure. They viewed the F grades as a means to achieving the eventual passing grade that they needed.

Other questions that proved interesting were the ones which centered around going to ABE classes and getting their GED. Neither of them had a high school diploma when they came to the United States. They could have taken many of the classes at the Continuing Education Center for free. Those classes would have given them the same level of education that the ESL, mathematics, and basic computer classes that the credit classes at the community college would give them. Another advantage to the ABE classes are the flexibility that they have. Many American students who take ABE and GED prep classes do so because they can arrange their study schedule to match their work schedule. Yet both Alfred and Brent were firm in their desire to take the developmental classes and work their way up to college level courses.

As Brent put it, "I want to be in college. I don't want to be in the beginner school." Both of them were motivated by the social status of being a college student. Brent said, "My wife can tell everyone that I am getting my degree. There are other Sudan who are coming here, too. But I will have my degree." The EFF survey did not discover this motivation. While it noted that many students were interested in furthering their education so that they could be more involved in their community, the survey did not list status as a major factor in working toward the degree.

They both had an interest in obtaining the degree to enable them to take a stronger role in the workplace and in the community. For these Sudanese students, their role in the community was not limited to getting a better job with a company in the United States. As Alfred stated,

> I want to be ready when we go back to Sudan. We will need to put computers in my village. We will need to know how to do these things. My village does not have much education. When we go back, I will be ready. (Interview Transcript)

Brent also said one other thing that I have replayed in my mind. "When you teach me, I can teach my kids. Then we can teach my village." This is a slightly different twist on the EFF survey, which noted that students desire to assist their children in bettering their education and to participate in their community. This statement by Brent seems to take things one step further in stating that he and his children will use what they learned and how they learned it to improve the position of all of those in their village.

Taken together, I was struck by how the answers to these two questions seemed to indicate that the two men were very unconcerned about how Americans judge their success. Both of them were focused on how their degree would affect their status within the village or the fate of their village or the local Sudanese community. They were much less concerned with how Americans viewed their success or failure.

Mexican success. While their goals were somewhat different from each other, the two Mexican women were often similar in their views on success. Unlike young American women of similar age, they both were quite happy to live at home. Having their own apartment held less appeal for them than their American counterparts. As

Diana put it, "I don't care about that, I'm not married." Carol said, "I have to save my

money. My parents like me to be at home, and it works out well for everyone."

These strong family ties shape their view of success. Carol says,

> I want to work in education because I love children. But you know it's also very good for a woman who is going to have a family. When you are a teacher, you get all of the same days off that your children do. You get good medical benefits and you get finished just after the children do. It's a perfect job for a woman who wants to have children. (Interview Transcript)

Individual success is based upon success of the entire family not just on the well-

being of a single individual. Diana says,

> My family is saving money to buy a grocery store. We want to own our own business. My father knows how to buy the things that we will need, but he needs someone that can do business in America. That's why I am studying this way. I will have my degree and then I can run Papa's business. That will also be good for me when I have a family. I can take care of all of the bookkeeping and work the flexible hours for a business when I have children. I can't do that if I work at the bank. (Interview Transcript)

There is another aspect to their view of success. There is a mixture of

frustration over how much more difficult it is for them to obtain success when

compared to their NES peers and a desire to see that the next generation does not

have to cope with some of those same obstacles. Carol says,

> It used to make me mad when I was in school and I didn't know what the teacher was talking about. It still does, even now when I'm in college. Americans had it easy because they already knew everything, and I had to learn it all. It's hard having to do it all in English. I don't want my kids or my cousins' kids to have to do that. I want them to understand what the Anglos know. I want them to know how to use computers and how to read books and how to get ahead. I'm gonna teach them so that they know." (Interview Transcript)

The EFF survey showed that the non-traditional students wanted to use education

to affect their relationships with their families (Bingman & Stein, 2001; Stein, 2000). In

part, these two women are consistent with that. They both define success as a being able

to take better care of their families. In this case, they want jobs that allow them the

flexibility to care for a family while they work. However, there is more here than just the

desire to provide a good environment for children. Diana is interested in creating a way

for her extended family to better their lives. In her case, she is defining success as

creating a legacy. In Carol's case, her success is in part defined by her ability to pass on

skills to her extended family that she feels they are not getting in school, or because they

are having difficulty working past the stumbling block of language. Diana says,

> It's hard when you have to learn English. I studied really hard in high
> school. Everybody said I was really smart, but I know that I wasn't smart like the
> really smart Anglos. I couldn't get to the university. I knew that I would have to
> go to the community college. I could read really well, but my writing wasn't
> good. I made lots of grammar mistakes. It made me a little mad, but I was happy
> when I found out that they would let me count my Spanish to get my degree.
> Wow, I got 16 credits for it. That made up for the English classes I had to take
> that didn't count.
> "Now I'm in the university. You know, it's hard, but I feel like it's hard
> for everybody. I don't care if it's hard anymore. I'm here." (Interview
> Transcript)

These two selections indicate another aspect peculiar to this pair, consistent with

the 1.5 generation material (Harklau, Losey, & Siegal, 1999). The 1.5 generation faces a

confusing but highly competitive environment where the student is often shunted into

ESL classes which the student views as degrading, but which the student also knows are

often necessary. Once placed in these classes, it is often difficult to get out into

mainstream classes. Carol said,

> I just quit, because I didn't want to go to a high school like that anymore.
> I mean, the teachers were just there to baby-sit us until we got old enough to
> graduate. Graduation was a joke. My cousin graduated and he can't read in

English or in Spanish. It made me mad, so I quit and got married. (Interview Transcript)

Both young women express resentment at being forced into a competition where they are put at an unfair disadvantage due to their linguistic skills. This competition shows itself to be a factor in how they view their success within their community. Neither of these young women wants to be behind the Anglos. The community college allows them to even up the score. In Carol's case, she can use her education to make it possible for others who share her background to go further.

Single mothers. The interviews with these women brought out sentiments more consistent with the EFF survey (Stein, 2000). Both expressed a strong desire to use their educational experience as a way to demonstrate obtainable goals and a work ethic to their children.

Ellen says,

> I take my tests home and put them up on the refrigerator next to the tests and papers from my kids. We have a common study night. I want them to know that if I can do it, they can, too. (Interview Transcript)

Francis states,

> Sometimes when I pick up my kids, I bring them out here so that they can see what it's like. I want them to know that college is just a place to learn and that learning is serious business. When I bring them into the library, it's always quiet. The kids know that in college, studying is serious business. I show them my classrooms and I introduce them to my teacher. I want them to know that college is a real place so that they'll be ready when it's time for them to go. (Interview Transcript)

Both of these women are understandably focused on their families. When asked about community activities, they admit that since they came to college, they pay more attention to what is going on in the news. Ellen states, "I never used to vote because I

didn't know what was going on. Now I do." Francis says, "My cousin is in Iraq. I have learned how to follow what's going on in the news."

Of course, they are both very focused on their job training. "I wanted the surgical tech job so bad that I could taste it, but now I realize that the nursing job is a good one for me to have, too. I'm okay with it now," said Francis. Ellen states, "The job is what is going to make it better for us. I mean, how can I get us out of the rut we're in if I can't find a decent job?"

The job means a better family life. Understandably, both women are very focused on improving their situation with their family. For them success in education is defined in two ways—it makes them a better parent, and it makes them a better provider.

Older single women. These women came to education for different reasons than the other groups. While the other men and women expressed an interest in obtaining a better job as one of the primary reasons for attending college, these women turned to college classes at over forty years of age for somewhat different reasons. While they both would like to get good jobs, the type of employment was not really a motivator.

Gilda says,

> I was depressed and suicidal. I was ready to kill myself. I did not want to leave the house. My son was gone. I was alone. I like being alone. I quit answering my phone. I paid all my bills by mail. I even quit going out in the front yard. I realized that if I didn't do something, I would get so bad that they would have to put me away. I finally quit canceling appointments with my counselor and went out to find out how I could do something to get my life back. I decided it was either suicide or school. I almost chose suicide. (Interview Transcript)

Harriet says,

> I couldn't stand it anymore. I grew up with all of this alcohol around me. I don't drink, but the only job I could think of to do was to tend bar. I mean really, here I was a person who was really dead set against alcoholics, and not only is it my job, but I'm spending a lot of my free time in there, too, because it was the only place I knew to meet anybody. I just had to quit it. Besides, I was getting too heavy. I've always had a weight problem, but being in the bar all the time was really getting hard on my health. One day I decided, Hey, I can get a job in a bar anytime. I think I'll go back to school. So I did. I just signed up. I had no idea what I was doing. I'm not even real sure that I knew what I wanted. I just knew that I wanted something different. (Interview Transcript)

While Gilda's story about having to choose between suicide and school was told with a certain level of irony, the rest of her interview bears out the central tenet that she was desperate to change her life. She obtained her AA in psychology, followed it up with a BA in the same field, and has now applied for a master's program at the local university. She says, "I'll do anything to get out of working for a living." However, although there might be a ironic grain of truth in that statement, a larger truth is that she is struggling to find answers for herself. She says, "I have to study psychology. I'm too crazy to study anything else." Again, her irony hides a deeper truth. She is studying psychology in order to find out how to cope with the immensity of her inner demons.

> I'm an addict. I was abused as a child, I was abused as an adult, and I even tortured myself. Hell, I don't even remember half of my life, and the other half isn't really worth remembering. What else am I gonna do with myself besides study psychology? Does anybody think I could sell real estate? (Interview Transcript)

Both of these women returned to college to find something worth doing in their lives. As Harriet said, "I took a class in music appreciation. Now I find myself listening to classical music. I know the difference between a piano concerto and an aria. I have a poster of Mozart up next to my Pink Floyd poster."

The EFF focused on family, work, and community, but these two women expressed an interest in obtaining an education for self-enlightenment. They want to know how to find meaning in their lives, and they are using education as the means to achieve that goal. The EFF survey questioned 1,500 adults in adult education programs from 34 states. Personal enlightenment was not mentioned in their responses (Bingman & Stein, 2001; Stein, 2000;

Men over 40. It may have been a mistake to put these two together in a group. Other than their gender and their age, they do not seem to have much in common. Ira is an outspoken husband and father of four who wants a better job. Jim is a quiet, unassuming bachelor who hopes to get a better job and maybe attract a wife. Ira knows what he wants, and he seems sure that he knows how to get it. However, his confidence is sometimes misplaced as he has very little experience outside of his own social sphere. Jim has no real idea what he wants, he just knows that what he has done so far has not been successful.

These men do have three things in common. They have both experienced addiction. They have both been laid off from their jobs. They have both tried to get ahead but have been hampered by having a GED as their highest educational attainment. Ira says,

> I'm in workman's prison. I mean really. If you don't have an education, you got no way out. They can just push you into doing something you don't want to do. They can make you work on a job that's not safe, drive a truck that shouldn't be on the road. In the end they don't pay you any money. You do the work. It's you with your head in somebody's toilet or your ass hung out over the edge of a roof. But it's the guy who owns the company who makes the money. I got to get into something else. (Interview Transcript)

There are, of course, truck drivers and plumbers who make a very good living. Ira's lack of success to date may be predicated on personality factors as well as upon his past employment history and his problems with addiction. Yet he makes an excellent point. In order to break free of his current situation, he needs to do something different.

Jim says,

> I worked for the factory for ten years. All I ever did was chipping and grinding. It's a dirty job. You just stand there and run that grinder all day trying to make the metal smooth where they made the welds. Then when you finish one they give you another one. I never missed a day. I worked for ten years and was never sick a day. I took my two weeks vacation, and I worked. Then one day I was laid off. I didn't know what to do. I took unemployment, but that always runs out. Besides, it ain't much money. Not like when you got a real job, you know? So I took a job at the [convenience store]. The hours were crappy. I got held up three times. I wanted to do something different. When I met my girlfriend and she said we should come here, I figured that was a good idea. When she dumped me, I was stuck. But then the guy at the unemployment office said maybe I should try the community college. So here I am. Man, I just want to do something better, you know? (Interview Transcript)

Both of these men are focused on the community college as a way of improving their jobs and thereby improving their economic situation. They are not interested in self-improvement for its own sake, they are not interested in being able to take a larger role in community involvement. Ira, who has children, is interested in setting a good example, but unlike the single mother, he does not share his education with his children. "I want the kids to know that college is good because it will help me improve our lives."

### Matching Definitions of Success

There are some similarities among the different groups. For example, the Sudanese and the Mexican pairs are both interested in what their education can do for their community. They feel a closer kinship to their community than do the others. In

turn, the community seems to support them. They share their success with others in their community.

Brent says, "I try to take classes with other guys from Sudan. That way we can talk about it if we don't understand something. We can decide how important it is." Diana says,

> My cousin and I are both taking the same kind of classes. If we can, we get the same teacher. Then we can study together. We can split up some of the work. We can check each other's homework. It makes it much better. (Interview Transcript)

Both of these pairs form study groups very easily. The shared interaction of a group is an integral part of their culture and it is a useful tool. Alfred says, "My village needs to have many people who are educated. That is how we will be strong some day." Carol says, "I like to talk about what I am doing with the other women who are doing the same thing. We can all talk in Spanish, which makes it easier. It helps me to understand what we are doing and why." For these two pairs, success seems to be related to group activity, both because they work well in groups, and because they need the groups to help them measure the level of their own success. Again, this did not come out in the EFF survey (Bingman & Stein, 2001; Stein, 2000), and the need for these two NNES groups to have validation within their extended family and ethnic group seems to be a factor which differentiates them from the other two groups. While the other six wanted their immediate families—children, spouses, and parents—to acknowledge their accomplishments, they did not mention how the extended family, neighborhoods, or church groups fit into this acknowledgement process.

Those who have children are much more oriented toward a definition of success that involves employment. Brent, Ellen, Francis, and Ira all have children and are all focused on gaining success through their jobs. Additionally, Carol, who has been married and who wants children is also working toward an education which will giver her the right type of employment to support a family. For those who do not have children, Alfred, Diana, Gilda, Harriet, and Jim, employment is shifted to a secondary goal behind other things.

## Common Characteristics

Finding common characteristics among such a diverse group of people is not easy. However, if there is one aspect of success that seems common to all of them it is the approval of certain instructors. "I learned so much from him." "She is such a good teacher." "I invited him to my graduation party." "I still go and see him once a month." All of these sentiments are repeated over and over in different ways by all of the participants in this study. Instructor approval is a major motivator, but it is more than that. It is a way that students can identify their own success. It helps them rate themselves by a personal standard. As Ira said, "His class is hard, but he's really fair. I got an A in there, but I worked my butt off for it. You know you earned it when he gives it to you."

## Analysis of Resilience Factors

In my earlier discussion of resilience, I grouped the resilience factors into three different broad categories—attitudinal factors, learning abilities/academic skills, and network support. The working hypothesis was that I might be able to match up at-risk

factors with resilience factors in such a way as to provide insight into how students overcome those factors which research has shown to be such a deterrent to their academic success.

I provide a breakdown of four three broad categories here in outline form for convenience:

I. Attitudinal Factors: Emotional dispositions and personality traits which affect a student's academic success

    a. temperament: a person's day-to-day internal, emotional climate.

    b. self-esteem: internal emotional climate

    c. optimism: the ability to see the advantage in all events

    d. motivation: the impetus that each person has toward achieving a goal

    e. self-determination: each person has both the right and the ability to pursue such a goal

    f. discernment: the ability to cope with positive and negative feedback

    g. focus: maintaining the goal and not getting side-tracked by other events

    h. responsibility acceptance level: honest appraisal of what things each individual can affect, how they can be affected, and agreeing to work within those boundaries

    i. endurance: the ability to keep going even when mentally, physically, or spiritually tired

II. Learning Abilities: aptitudes and capabilities for acquiring, retaining, and using knowledge

    a. domain knowledge is knowledge that encompasses declarative, procedural, and metacognitive knowledge within a certain area or scope

    b. memory affects the ability to retain knowledge, skills, and concepts

    c. cognitive ability: the ability to constructively organize memory and ideas

    d. creativity: the ability to engender original ideas, rearrange knowledge, and find gaps in knowledge

    e. motor skills: eye-hand-body coordination

III. Academic skills: Skills specific to academic areas

    a. mathematics: computational, algebra, some geometry, (Often listed as Pre-algebra, Algebra I, Geometry, and Algebra II in high school curricula)

    b. reading: vocabulary, comprehension, referring

    c. writing: usage and rhetorical skills

    d. cultural: history, literature, politics, religion, philosophy,

    e. technology: scientific reasoning, media, computer skills, social sciences

IV. Network Support Factors: Systems for financial, psychological, social and other support relevant to achieving academic goals

    a. family support networks, including spousal support, parental support, and support from other relatives

    b. community support networks: neighborhood, church, etc

    c. institutional support: provided by the community college

## Attitudinal Factors

The nine attitudinal factors that I listed earlier are not concepts that I would cast

in stone. They are simply working definitions that I use to evaluate the emotional resilience of these participants. In some ways, these factors may be related to culture, and to the cultural way that students work within the collegiate system. There are definite cultural trends which affect populations of students in different academic situations (Astin, 2001; Boylan, 2001; Grimes, 1997). However, relying too heavily upon cultural characteristics can be dangerous in research because it can lead to an inadvertent stereotyping process that obscures the particular characteristics of the individual.

Alfred says,

> You know some Sudanese guys they get very angry. They want to fight. They like to drink, they get in trouble here. I don't like that. I don't want a roommate. I like to live alone because then I don't worry about other people and if they want to fight. That fighting is not good. You can't study if you fight. (Interview Transcript)

I found myself smiling at the simplicity of this last statement when I first listened to the tape. "You can't study if you fight."

Yet like many things that the Sudanese say, the simplicity of such a statement in English belies Alfred's deeper understanding of the world that he cannot easily express without his own language. Brent says, "You got to get away from the mad guys. They gonna go to jail. You gotta think quiet inside. If you gonna make it, you gotta be quiet inside." Both men are acknowledging the struggle with violence, alcohol abuse, and other problems which adjustment to an alien culture can cause. The personal experiences of these two men in their escape from a war-torn environment to a refugee camp and finally to a home in rural Iowa would certainly be enough to cause many to flirt with

negative behaviors. When asked, both men talk about their Christian faith as their means

of maintaining their perspective.

I believe that they are talking about gaining emotional control. In observing them,

I notice that neither of these two men seems to get upset or angry. It is hard to discern

whether this is a case of direct, conscious control or if it is a part of a cultural reaction to

a situation. When asked about how college professors and teachers are treated in their

home country, they relate that teachers are always treated with great respect. It may be

that displays of anger go against strong cultural restraints in this situation but that anger is

much more easily expressed after leaving the campus. This bears further investigation.

However, I discovered resonances of anger in other students' words as well. Ira's

words reflect this anger.

> When I was drinking and doing drugs, I'd get really mad. I'd beat up guys just for the hell of it. Sometimes I'd get beat up, but I didn't care, you know? When I quit drinking, I thought that the anger would go away. It didn't. I had to learn what to do with it. Sometimes I'd just get so mad. Now, I got a better idea who I'm mad at. I know it's the guys who run the companies I worked for. They get you in a bind. You can't do better, and you can't go nowhere else. Now, I still get mad, but I think about how I don't wanna go back to work for those assholes again. I wanna be my own man. (Interview Transcript)

For the men, this anger seems to be a pivotal problem. Jim states,

> I was so mad at my girlfriend. I mean, how could she just use me like that? I came more than a thousand miles for her. And once we got here, she just dropped me, and I had no place to go. If I would have had a job or something, that would have made a difference. Where I was before, I had a job. I didn't like getting robbed, but I liked the job okay. She just made me mad. I decided that, man, I'd show her. That's what made me decide to go to school. I'm not sure what I'm going to do here, but I want to get a degree. Then I'm going to mail her a copy of it. Just to let her know that she blew it, you know? (Interview Transcript)

Most would consider anger a negative emotion, but both Jim and Ira seemed able to turn their anger to their advantage. They both use their anger as a motivational tool. This may be a place where both the institutional understanding of motivation, and the EFF survey have missed the mark (Stein, 2000). Ira obviously wants to better his working situation, which is a tangential conclusion of the EFF, but I think this goes a little deeper than just wanting to be respected by his peers. As he said, "I'm in working man's prison." He wants to change his place within the system, not just get a better job or have a bigger voice in the company where he works. He wants to control his life, and perhaps to some extent the political and economic system which he views as the larger cause for his frustration.

Jim, on the other hand, does not really care about the job, but wants respect from someone who wronged him. While this may not be the most altruistic motivation for returning to college, it has been strong enough for him to adjust his temperament and go to school. Asked if he would have gone to school if he had not come to the Midwest, Jim states, "Nah, I would've stayed there. I was starting to look for another job cause I didn't wanna get robbed no more. I was looking in the paper for a job."

For all of these men, temperament and motivation seem to be linked, but in very different ways. For the Sudanese, the emotion must be checked against the motivation to succeed or the strength of it may lead to failure. For Ira, and even to some extent for Jim, anger is the source of the motivation to succeed.

Temperament seems to be different for the six females in the study. All six of them expressed some aspect of fear. For the Mexican women, the reason for the fear was both readily discernable and understandable. Carol:

> I have such terrible English. I know that they can all do it better than me. I read slow, I write slow. Even the mathematics gives me problems because they write the problems in English. Every time I take a test, I worry that I'm missing something important that is there in the English that I don't understand. (Interview Transcript)

Mixed with this fear is frustration and anger that she is unable to overcome the linguistic obstacles so that she can compete with the NES in her classes.

What happened to you? What made you want to go to school even though you were afraid? Diana: "My family made me think about it. I couldn't let them down." Carol: "I want to have children. I need to be able to make a life for them."

Interestingly, fear was a factor for the other women as well. The single parent women, Ellen and Francis expressed it differently. Ellen: "You know, I been out of school for so long. I mean, it's been more than twenty years. I forgot so much, and they all know how to do computers now." Francis:

> I never learned how to use a computer, and I hate mathematics. But I was more worried about how everybody in college would know stuff that I didn't know. I mean I don't have time to read much. I was also really worried about how good I could study. I mean, I took one look at those books and I almost gave up. (Interview Transcript)

For both of these women, fear of their own inadequacies was a definite factor in their decision to come to college. Both of them stated that they were nearly too afraid to come out and get started. They overcome their fear in stages. Ellen said,

> I drove by the college three or four times before I finally came in. Then the first time, I went into the cafeteria, bought a cup of coffee, and left. I had to

come in three or four times before I got the courage to ask somebody how to get started. Isn't that funny? I mean, I just didn't know what to do, and I was too scared to ask. Then I asked this woman about how to get started in classes and they took me right to this nice woman. That woman said they had lots of people like me, who were coming back to school. They showed me around, and they set me up with my COMPASS test and they gave me some brochures and stuff. They introduced me to the people I needed to see. I guess that made it a little easier. I thought I was gonna hafta make a whole bunch of decisions right away, but I didn't. first, I had to test, and then I could look over some brochures and I could think about it. They took it easy and they didn't go to fast. (Interview Transcript)

Her fears were overcome in stages, and her involvement in the process was gradually increased. However, both women had to make the first step. They had to overcome their fears enough to come out to the college in the first place.

How did they overcome these fears? Francis: "I had my kids to think about." Francis: "How could I expect my kids to do good in school if I couldn't do good in college?" Their love for their children and a desire to positively affect their children's lives became a strong enough motivation to allow them to adjust their temperament. They had both had an experience which made them understand that they had to change their lives. Knowles, (1984) noticed that many adult learners can point to a single experience which shifted their attitude and made them want to return to college. Undergoing a difficult divorce, or having a spouse commit suicide would certainly qualify as a traumatic experience, and both of them stated that their love for their children gave them both the initial courage to begin as well as the courage to persevere. One interesting note is that Ellen continued to be anxious about coming to school through each new experience.

It's funny, but first I was afraid to go in. Then I was afraid to go back. Then I was afraid to take the COMPASS—although I had a right to be afraid there. I really screwed that one up. Then I got my textbooks, and I was worried

that I wouldn't be smart enough to read them. Then I was afraid that the classes would all be full of young kids and they would think it was funny that I was there, too. (Interview Transcript)

What she did not realize as she told the stories of her first days in class, was how quickly she lost her fear. Also, she consistently states that the staff and faculty did much to calm her fears. They "made me feel more at home."

For Gilda and Harriet, fear was also a factor, but in a different way. Gilda:

It started out that I just didn't like to leave town. Then I didn't want to leave the neighborhood. After a while I wouldn't leave the yard, and I even got to the point where I wouldn't go into the front yard. I mean really. I guess eventually I'd just have to lock myself in the bathroom with the dogs and sleep in the tub. I was afraid to go anywhere. My son finally had to drive me over to the counselor's office, and they almost locked me up. Shit, I was a mess. (Interview Transcript)

For Gilda, it was "…it was either suicide or school. I almost chose suicide."

Harriet was also afraid.

You know, most of my life, people have been telling me that I wasn't worth much. I'm not just fat, I'm obese. I'm a drop-out. I never had nothing. I knew that I was going to have trouble in school because I didn't know nothing. I never been anywhere and I never did nothing. All of those other kids were going to be so much better than me. I was really worried. (Interview Transcript)

Both of these women were afraid of school, but, it turns out that both of them were even more afraid of their lives without school. Gilda:

I didn't want to be like that, you know? I mean, I just didn't even have the energy to kill myself. It was so hard being clean and sober. I just went into my house and I didn't want to come out. but I finally decided that hiding behind the drugs or hiding in my house was all the same bull shit. I needed to do the school thing. (Interview Transcript)

And Harriet: "I needed to do something with my life. I'm fifty and the best thing I'd ever done was to be a part-time bartender." Their temperament shifted

somewhat. It was not that they became less afraid. Ironically, both of them decided to return to college because they were more afraid of staying home than they were of anything they might encounter in classes.

Emotional stability and temperament seems to be one of the most important of the resilience factors within the attitudinal category. The Sudanese came from unstable backgrounds, but seemed to have a true depth of emotional strength and stability. As Brent said, "Everything is much better here." Perhaps, unlike their NES counterparts, their expectations about an academic environment were different. They may have viewed the college as a truly safe place.

Many of the participants had very low self-esteem. Even some of them, like Ira, who espoused great confidence in their own abilities showed low self-esteem: "I knew I could do the stuff they wanted me to do, I just didn't know if I could do it their way." Their low opinion of themselves had two opposite but balancing effects. It nearly prevented them from attending classes in the first place. However, it made them take responsibility for low skills and seek help from the different networks that were available to them.

Increased self-esteem, optimism, self-determination, discernment, focus, and responsibility seem to be attributes and characteristics that became more positive as their college experience progressed. All ten participants stated in different ways, that while they were unsure of themselves at first, they became more relaxed and more at ease as things progressed.

As they became more successful, their self-esteem progressed.

Ellen: "After a while I got so that I knew that I could do it. I could figure out which things I needed to study and how to study."

Carol: "I used to worry about making the presentations because of my English. The English classes helped that."

Harriet: "I made new friends, and these friends weren't at the bar. They made me feel great. I liked coming here."

With success and an understanding of what was to come, their optimism increased. Harriet: "I knew it was going to take a while, but after I was here for a semester and I actually got good grades, I knew that I could make it." Alfred: "You know I'm not good with that science. I don't like it either. I decide it doesn't matter. I don't need it for my program anyway." Ellen: "I watched the younger kids and I realized I could beat them. They knew more than me, but I work harder than they do. They don't care. I do."

Students learn to take criticism and setbacks in stride. Brent: "It doesn't matter, you fail. You can pass the next time." Gilda: "I had a teacher that I really didn't like who gave me an unfair grade. It kind of scared me and made me mad. I dropped the class. I thought about dropping out, but I decided that I would go to another class and get a second opinion. I aced it." Ira: "I knew that it didn't really matter when I failed that class. I had done the other stuff, so I knew I could do this one, too. I just had to retake it." For some, such discernment was not easy to come by. Jim said, "You know, some of these instructors really don't like me. I'm not sure why, but it made their classes really hard."

Self-determination is still difficult for some students to gain. The NES seemed to grasp that the college is there to serve their needs even though they may have been nervous about the experience. Ira: "They should work harder at getting all of the classes that we need." However, the Sudanese students had a different understanding of the academic situation. Alfred: "I don't talk much in class. It is the teacher's class. I have to learn what they want. That's my responsibility." Brent: "Lot of time I don't know what is going on. I just watch. I ask my friends after class. I come and ask the Learning Center. I go back again. I wait. The teacher will tell it to me." The Mexican women were less passive than the Sudanese men, but not as proprietary as the NES students. Diana stated that she often went home angry because the teachers did not do what she considered an adequate job of explaining things to her, but she would not go to the instructor if she had a problem in a class. First, she would try a friend, and then she would try the LAC. Carol feared that she was the only one who had questions because her English was not adequate, so she spent most of her time in the LAC. Whenever she had a question, she would first ask the LAC staff, and if they did not know, she would get the LAC staff to contact the instructor. She would contact the instructor only if she were desperate and feared she could not pass a test or an assignment without the instructor's help.

The NES students viewed the college as the provider of a service. For them, it was the responsibility of the college to provide the education in such a way that the student could learn. If the student worked hard but did not benefit, the student had the right to demand better performance on the part of the college. Ira: "That teacher ain't no

good. He don't really care about people. They should get rid of him." For Ira, if

education is not properly dispensed to those who are paying for the service, then it is the

problem of the dispensing agent.

The Sudanese view the college differently. If there is a problem in the

dispensation of knowledge, then it is the problem of the student, the recipient, not the

dispensing agent. Brent: "She really tried to teach me, but that mathematics is so

difficult. I just couldn't do it. I had to try three times." Alfred: "I got a problem, I come

here [LAC] because they can help me here. I don't want to bother that teacher all the

time. He is very busy."

Focus and responsibility seem to be traits that these successful non-traditional

students share. In fact, they often dismiss the efforts of traditional students because the

younger students lack the ability to work hard and maintain focus.

Ellen:

> You know, I was really worried about it when I didn't know how to do
> stuff. I thought since all of the younger kids know how to use computers and all
> of that, I would be way behind. But it didn't take me long to figure out that they
> ain't serious. They screw around too much. They don't do their homework.
> They don't study. Sometimes it makes me mad. I'll see the teacher working so
> hard and none of them cares. (Interview Transcript)

Diana:

> Anglos don't work like me. They never went to Mexico. They don't
> watch their father work in a packing plant, cutting up that meat all day. That's no
> job for a good man like my father. I'm gonna get good grades and I'm going to
> change it. I study every night. Even when I don't have homework, I study for my
> English. I want to be good at business. (Interview Transcript)

Endurance is something that each of them brings in a different way.

Alfred:

I walked all night in the desert for days. I waited in the camp. I worked in the packing plant. Now I finally have my school. How can I miss even one day? If my car is broken, I will walk. (Interview Transcript)

Ellen:

I get up at 5:30. I have to take a shower and get the kids' stuff ready for school—you know, their lunches and stuff. I wake them up, give them breakfast, clean up the dishes and get them dressed. I take them to school and then I come here. Mom picks them up and keeps them until four when I get finished. I take them home, fix them some supper, and then we all study. If they get all of their study done I let them watch a little TV. The everybody's in bed by nine so I can finish what I have to study." [She laughs.] "My house is dirty and the laundry ain't touched until Saturday, but the kids don't care and there ain't no reason to worry about it as long as I got everything done. (Interview Transcript)

Ira:

I try to get all of my classes on Mondays, Wednesdays, and Fridays. That way I can work the farm and do my cash jobs. We always need money. I got to make it. I'm lucky cause my wife takes care of most of the house stuff. I don't know how some of these single people do it. You got to work your ass off to make it. (Interview Transcript)

The interviews demonstrate several points. Temperament is a controllable factor in the attitude category. Many students start out with problems in temperament, but as they gain control, they also increase their chances of success. Self-esteem, optimism, and discernment all increase with experience within the college experience. Self-determination may be affected by culture. Many of the non-traditional students understand their risk factors and quickly realize that their superior focus, ability to accept responsibility, and endurance will be a definite advantage in competing with the traditional students in the same classes.

Learning Abilities and Academic Skills

While it may be useful to distinguish between learning abilities and academic

skills in designing curriculum, it is often more difficult to separate them in a practical

way. Learning abilities are not directly measured by the diagnostic assessments used by

the college such as COMPASS (ACT, 2004). Indeed, increasing students' ability to learn

or capacity for learning is often an indirect result of a focus on academic skills (Gourgey,

1994). The factors affecting learning ability, knowledge base, mnemonic ability or

memory, cognition, creativity, and motor skills can all be increased, to be sure, but

developmental course programs often focus directly on academic skills. This is because

it is usually easier to design and implement a curriculum based upon the specific skill sets

of reading, writing, oral communication, mathematics, language aptitude, academic

reasoning. However, although Adelman's toolbox (1996) lists classes which focus on

academic skills, such as mathematics and history, learning theories also demonstrate that

the more universal skills are also important in postsecondary educational success

(Gourgey, 1994; Higbee & Dwinell, 1997).

All subjects were tested using the basic COMPASS framework for Reading,

Writing, and Mathematics, and each entered their program with a definite deficiency in

one or more academic skills area. (ACT, 2004). This demonstrates another reason why it

is important to distinguish between learning abilities and academic skills—tests for

academic skills are readily available and easily administered. Measuring learning ability

is far more difficult (Gourgey, 1994), and because of the nature of the interaction in the

LAC, it may be that learning ability is more accurately evaluated on a case by case basis (Casazza & Silverman, 1996).

The COMPASS testing assists the college administration in determining which developmental classes are appropriate for the student. These participants did not seem surprised. Ellen: "Jeez, I knew I was weak in mathematics. That's part of why I wanted nursing—you don't have to worry much about mathematics." Ira: "I did great in the mathematics. I knew the reading was going to get me. I had a lot of problems in high school over the reading." Alfred: "Of course they find out I need English. I come from Sudan, so I got to have more English." Diana:

> I thought I was better in writing. I didn't want to take any more English. Then when I had to write summaries for my psychology class I realized that I still needed some work. I did great on the reading and the mathematics though, so I didn't need any help there. (Interview Transcript)

The participants also recognized other Academic Skills that they lacked. All ten of them expressed concerns about coming to classes with no background in computers. Three of the ten were using computer systems in some form as their major field of study. Gilda said, "I knew college was going to be about computers and I knew I was in trouble because I didn't know nothing about them." Indeed, they also recognized that this set them apart from the other traditional students. Ellen says, "They're like my kids. If I have a problem with the computer at home, I ask my kids. They grew up with this stuff. I got to learn it from scratch."

The ten students seem concerned with learning the academic skills for other classes, and they recognized that such the college classes in their programs would be very difficult without the basic background knowledge and academic skill sets available in

developmental classes. Ellen: "I skipped out of all that science stuff in high school. I never took biology or chemistry or anything. When I took them here, it was hard." Carol: "We were in the ESL, and they never gave us any biology stuff. It was so difficult."

In terms of Academic Skills, the testing seems to have some advantages. It confirms the level for the student in mathematics, reading, writing, or ESL, and it allows the college to properly place the student in classes appropriate to those skills. Unfortunately, testing in technology, oral communication skills, or historical and cultural knowledge present much more complex problems. The students themselves identified skill deficiencies that are not tested in admissions.

COMPASS and COMPASS/ESL do not test study skills. What many of these students lack is not the ability to learn, but the skills to learn in an academic environment (Pascarella, Smart, & Ethington, 1986; Pierson, 1993; Thorne & Fleenor, 1993). The COMPASS tests assess mathematics, reading, and writing skills. What tests like COMPASS and others cannot assess are the students' knowledge about learning and about how to learn from college classes (Gunning, 2002). Many of these students missed the opportunity to learn academic skills such as time management or how to use a dictionary. Harriet:

> I never learned what I needed to know. I dropped out in eighth grade. I know how to read, but most of what I was reading when I started out didn't mean much. They kept talking about stuff I never heard of before. (Interview Transcript)

Ellen: "I didn't know how to study. I would read it and read it and read it then I would fail the test." Diana: "Sometimes I have no clue what they are talking about.

How do I know from the Civil War? Is it important to me to know so I can run my

father's business?"

Gilda sums up the frustration that students feel over studying in some academic

areas.

> You know, you can take a mathematics class and still not learn
> mathematics. I came here knowing how to add and divide and all that. I hate
> word problems. I'm never gonna care how to figure out how many yards of
> carpet I need. I know it's important, but I just don't get it. I can get by without it.
> For everything I need I can punch a calculator or I can ask somebody. But I
> learned how to find stuff on the Internet. I can get all kinds of info on the
> computer. That's more important. (Interview Transcript)

Alfred concurs:

> I learned the mathematics. I got the computer. But how am I gonna learn
> to do good speeches or write good papers? Even when I got good grammar I
> don't got good papers. That outline just kills me. I know what I know. How am
> I going to do introduction and conclusion? I got a lot of help. I passed the course,
> but I still don't know it. (Interview Transcript)

One conclusion that can be drawn from the interviews in this area is that students

do need developmental classes to provide some of the basic skills framework that go into

Adelman's toolbox (1996). However, these skills need to be reinforced outside the

classroom format (Galbraith, 1998a). Moreover, classroom instruction is often less

effective at expanding students' learning abilities (Galbraith, 1998b). The second

complaint from these students expressed some level of frustration at not having the

memory skills to pass a test, or the cognitive ability to write an outline, or the creativity

required to make an interesting presentation. In short, they wanted to expand those

abilities so that they could apply them in different areas. LACs may be a place for

students to gain competence in these areas (Galbraith, 1998b; Higbee & Dwinell, 1998). .

## Network Systems

Although I lack statistical proof, anecdotal experience tells me that there are few

loners in the world. Years of experience has also shown me that few, if any, loners

habituate the LAC. None of the ten participants were such loners. However, they

provided some insight into how much their successful completion of a postsecondary

education was dependent upon networking.

I divided the support networks into three different categories. Family support

includes immediate and extended family. Community support includes both formal and

informal organizations in the neighborhood and local community. Institutional support is

support that is sponsored by the community college. Of course, some of these support

groups overlap. The community college is connected to the state workforce development

center. Most extended families belong to the same church or church groups. This

interconnectivity between the extended family and the cultural or ethnic community is

one of the features which often appeals to students because of its ready availablity. In

fact, some of the students developed interconnected networks spanning all of these areas.

The family to neighborhood connection is very strong in the Mexican group.

Both Carol and Diana live at home, and they both are active members in their church.

Carol works as a teacher's aid doing translation work. Both women belong to a local

Latino Neighborhood Association.

The Sudanese have a different sort of connection. Although they are very family

oriented, their culture usually separates men and women socially (Brezwick, 2004). This

may be why so many men and so few women attend the college. The men assist each other in getting to and from classes, and they often study together.

For both of these groups, it was important to get one or two of them started on the road to success. Once there were one or two students successfully established in college programs, others lost their fear and came forward. Alfred: "Our cousins and my other friends all wanted to come. Once they see me graduate, then they all came and took the test so they could start." Diana:

> My father was so proud. Many fathers don't want their daughters to go to college because they think it will spoil them from being good wives. Now more are coming because my father showed them that I am not spoiled and that they will be okay here. (Interview Transcript)

For Ellen and Francis, it is sometimes the simplest things which will stop them cold. Francis: "My kid got the chicken pox. You can't take them to the daycare if they got chicken pox. My mom was in for surgery. It was hell. I thought I was going to have to drop out." Francis shows that if the network system breaks down, then the education can be blocked. A sick child and a sick mother might mean too much stress on a precisely scheduled life. As Francis was in the nursing program, she could not drop out without waiting an entire term to requalify and start again.

Ellen states, "I got to get a new car. It keeps breaking down. I hate to be late. I need new tires. I was lucky, my cousin found some that were really cheap. I wish he could find me a cheap car." Without transportation, Ellen faces nearly insurmountable obstacles in her quest to finish college. Networking allows her to manage those problems.

Gilda and Harriet both relate how their psychological problems interfere with their education, but that the counseling they receive in the local community has made a

great deal of difference. Gilda says, "It's the AA. Without them, I don't think I could make it." Harriet says, "I have to see my counselor. She helps me a lot. My next thing is to try to get a hold on this weight thing. I've gotten over most of my childhood. I'm ready, I think."

Ira depends on his wife. "She does it for me, man. How else could I get through it all? She never lost faith. She takes care of everything at home. Man, even though I get really discouraged sometimes, she does it for me."

Jim relies on the college. "I live in the dorm. If something is wrong, I walk across the parking lot, you know? If I got a problem, I can see the counselor here. It makes it easy."

Networking makes it possible for all of these students to stay in school and it made it possible for them to continue in their education. Whether it was family, friends, or local community, all of them have said that they could not have completed their education alone.

## LAC Contributions

The final two research questions are more directly involved with how the LAC contributes to the student experience in the community college. One question addresses the role that the LAC specifically plays in enhancing the academic capabilities, while the second question addresses how the LAC impacts the overall student experience. It was my initial hypothesis that these two questions would be very tightly interwoven, and this was borne out by the interviews. Therefore, I will initially address points three and four of the analysis at the same time, and then offer some conclusions about them separately.

Some of these students spent as many as twenty hours per week in the LAC. Most spent many more hours in the LAC during peak time periods like midterm and finals than at the beginning of the semester. To put this in perspective, a student spending 12 hours per week in class would be expected to spend 24 hours per week in study. For most of the students, this means that they were spending 25 to 50% of their study time in the LAC. Of course, the numbers concerning their study times are rough estimates. Students are asked to sign in when they study in the LAC, but such records are often inaccurate, and the student is allowed to use the center for e-mail, general research, and a variety of other tasks. Many also eat their lunch while they read or work together on projects. However, while the hours are flexible and the total study times are rough estimates, the students were chosen because they have knowledge and experience using the LAC.

One other item that bears noticing is that these students all have far more than the requisite 64 credits necessary to achieve a degree. They average many more credits due to transfer credits, testing credit, and developmental credits. This means that most of these students spent five or six semesters attaining their degree. Additionally, many of them spent summer and interim semester times in classes. This additional time in semesters is also reflected in their total time in the LAC.

Academic Effect of the LAC

As was previously stated, the LAC is not in the business of teaching developmental courses. This does not mean that the LAC is not involved in the academic skills required to pass these courses. The LAC provides drop in assistance, study group

organization, additional learning aids, and tutoring as part of its services. The focus of these forms of assistance is two-fold. First, the LAC will reinforce and enhance the academic skills of all students in concordance with developmental, vocational, and degree-seeking curriculum. Second, it seeks to expand and enhance the academic abilities of all students. This means that the LAC seeks to reinforce the skills in all courses, but it also seeks to expand on the abilities of students—no matter what they are attempting to accomplish.

Ellen says,

> The LAC helped me with every level of mathematics. I'm still terrible. I don't really know why, but I hate mathematics. They were great. They were in there every day. They drilled me. Especially in those darn fractions. They let me practice on the computer." Carol says, "I used them for the algebra a lot. I got so I could work the formulas okay, but I always had trouble with the word problems. I didn't know the English well enough. If it is a formula, I could figure it out in Spanish. But if it's a word problem, what am I gonna do? I had to figure out how to do those problems, you know? They were so patient. They went in for example after example, so that I could get the idea of the way the words were working. You know I would read a problem about ice cream scoops and ounces and pounds and it wouldn't make any sense. It was so hard. Why do you have to do it in ounces and pounds anyway? It made me hate mathematics. (Interview Transcript)

The LAC supported these two women in providing them with skills instruction. Ellen mentioned being drilled in fractions. This is part of the mathematical skill set that is a requirement for so many of the mathematics and science curriculum (Cohen & Brawer, 2003). The word problems that Carol mentions are in a different area, however. Word problems require skill in application of principles. They require that a student apply procedural and metacognitive knowledge. The difference is more readily apparent when Ellen and Carol explain how the teaching was done.

Ellen:

>When I was doing the fractions, she sat right beside me. She made me write out the procedure on a separate card. Then she had me practice. Each time I had to follow the steps on the card. I kept going until I could get it right. Then she turned over the card and gave me another problem. As soon as I would forget what I was doing, she would turn the card back over again. She did the same when I worked it on the computer. It was a good thing they paid her by the hour. Probably they should have paid her by the problem. She'd be rich. (Interview Transcript)

This is typical of the skills enhancement training that is done in the LAC. It

involves supervised repetition in a variety of media. Some students respond quickly to

material presented in this manner. Others, like Ellen, require a lot of work. However, as

Ellen states later in the interview,

>You know, I used that recipe card stuff later on other things. It helps a lot with nursing because we have so many procedures that you have to do in the perfect order. That card thing is pretty smart. (Interview Transcript)

She not only learned the skill, but she learned how to learn similar skills.

Carol says,

>We used up so much scratch paper. He made me draw up the problems. We would do the same problem over and over again with different numbers until I could get how it was supposed to be done. You know the ones I hate the most are the ones where you have two solutions and two percentages. You got to mix them together so that you get one solution with a certain percentage. You remember that one? Well, I do. I did it maybe 1, 000 times. If that one comes on the PRAXIS I'll be ready. I learned how to do it though. (Interview Transcript)

Jim says,

>I had a lot of trouble with that stupid psychology class. I got a C-, but I thought I was gonna fail it. I had a F at midterm. I went into the Learning Center. The lady made me outline chapters. I thought she was nuts. After the first time, I didn't want to go back. I went to the instructor and I was going to drop, but he convinced me to go back and try her again. She kept after me on the outlining thing. The thing is, I got a B on the next test. After that, I started using the outlining thing all the time. I started getting more B's. I thought how come they

never had me do that outline stuff before? I mean if I'd've known it was so good, I'd've kept on doing it. When I went back in there for help with my composition paper, she started on about the outline again. I listened this time. I mean, cripes, she was right before, wasn't she? So I used it. I made a outline of my own ideas for the composition. I got a B. The teacher told me I would've got a A except for my grammar. Hell, I don't guess an outline'll help much with grammar. (Interview Transcript)

For the Sudanese, this skill-building and ability-expanding framework was less

successful. Brent says,

> I know you guys want me to memorize the multiply tables, but I can't do it. I just gonna use the calculator. I got the website major, so I don't need the mathematics so much. I don't wanna study mathematics. (Interview Transcript)

Alfred:

> I still got the problems with the mathematics. I don't know what to do. Good thing my major don't need no more, but I got the problems now when I am at the university. They think I know the mathematics. I will have to come back to the LAC and study it again. (Interview Transcript)

In some ways, Brent may have been right. He probably does not need to be able

to multiply and divide with paper and pencil in order to be able to create a web site.

However, this shows that Brent and Alfred have not really understood that mathematics is

more than just a series of acquired skills. Alfred was beginning to understand that the

skills in mathematics would be useful in his classes, but neither of them were to a level

that they understood that mathematics is also a series of concepts that could help them

view their field of study in a different way.

Overall Success and the LAC

This is one area where care must be taken when drawing conclusions as there are

so many factors that affect success both within and outside of the students' academic

lives. It is one thing to demonstrate with interviews and test scores that a student is

learning academic skills or expanding upon their learning abilities. It is quite another to demonstrate that the LAC has had any form of lasting affect on their overall success in life. Even more tenuous is the idea that there may be enough commonalities to form some sort of conclusions about how to foster such an effect. Yet some of these tenuous conclusions may lead to more fruitful inquiries in the future if some understanding of how the LAC impacts overall academic success as well as success in other areas of the students' lives.

Sudanese. The Sudanese are an example of how the academic assistance, networking, and other aspects come together in the LAC. Brent says,

> They just help me a lot. I can come in here with my tax forms and they help me with my FAFSA. I need the FAFSA so I can stay in college. But who can read that form? If I go to a lawyer, they can help? No. If I go to the financial aid office, they give me the form. They don't help. Here in the LAC they help. (Interview Transcript)

Alfred says,

> If I can't figure out my class schedule I come here. I talk to my advisor, but I also come here. College is so expensive, maybe somebody will make a mistake and I will have to pay a lot of money. My friend had to pay because he got screwed up on his schedule, but I came here every time, and I never had to pay extra because they know how to help me here. (Interview Transcript)

For the Sudanese, there are two important points here. The first is that they do not understand the FAFSA forms. Although the government has gone to great trouble to make these forms easy to fill out, the instructions are right on the form, and there is an 800 number for anyone to call (FAFSA, 2005), the forms are still extremely difficult for these students. First of all, for NNES students, the specific and sometimes technical language of these forms is very difficult to understand. Secondly, manipulating the

computer so that the correct answers are put in the proper boxes is also difficult for someone with a low level of technological skill. Third, the people at the 800 number do not speak Nuer, and the telephone is a daunting instrument for those who must use a second language to communicate. Also, who will they trust? They must give financial information about their job and their lives to people they do not know. This creates all sorts of difficulties.

Brent says,

> Now I know how to do this form on-line. Still, I want them to check it, you know? I do it for my friend, and we print them off. I bring in 10 of them forms. The man checks them at the LAC. He found out I make one mistake. I don't feel that is bad, one mistake from all of them ten forms. But I don't want that mistake because then my friend will have trouble. I don't want trouble like that for my friend. I want them to check it at the LAC. (Interview Transcript)

The future of the Sudanese group is more assured because the LAC checked their forms. Without FAFSA, these students probably would not be able to attend. This is not an academic skill that they are learning, but it involves being able to survive in a new society and to function as a citizen in that society. The fact that Brent wants to have each form checked means that he is not yet sure of himself. Yet it is obvious that he has learned to take care of the forms himself and that he is teaching others to do the same. The behavior modeled by the LAC staff is not just teaching students to be better students. In this case, it is teaching citizens to be self-reliant and to lead others. This kind of interaction can have a ripple effect throughout a community.

Mexican. The Mexican women did not ask to have their forms filled out. Carol says, "The lady at the LAC said that they have a Spanish version and we took home the tape so that all of my cousins can do it next year. We made a copy of the tape." This is a

slightly different take on the same story. Carol says, "I always look for the Spanish version now. The lady told me that they have one for almost everything in the government."

But there is another aspect to the affect of the LAC on this group. Says Diana,

> You know I got mad a couple of times about the high school. A lot of kids quit because they know that the school is a joke if you get in the ESL class. That's why they don't want to do ESL out here. They see the ESL in the high school, and they know that the high school doesn't make them work. They have to work if they want to graduate from school in Mexico. Then the come out here, they want to be in the class with the Anglos, but they can't. They just can't do it. It's too hard, you know? The professors talk really fast, and you got to read all this stuff, and the tests are hard multiple choice and essay. So they give up because they can't do the class, and they think that the ESL is a joke. Everybody says, how can I learn English in three hours a week? But you can't learn it in three hours a week. You got to do more. You got to come to that LAC. That's where I worked on my writing. That class made lots of homework, not just three hours a week. I brought in all my homework there. I was always worried about if I was doing it right. They helped me to know it was right. I knew that it wasn't a joke. (Interview Transcript)

There are a lot of messages here. First, Diana complains about the ESL program at the high school. It is her opinion that they make the classes easy so that the students will stay in school. She says they should make it hard so that they will believe that it is worthwhile. The LAC provided her a place to make sure that she was on the right track. On the surface it sounds as if she is simply using the LAC to help with her homework, but there is an underlying message. She says that the class generated lots of homework. If it had been just three hours a week, then it would not be a valid class. The other college classes made lots of homework. Coming to the LAC helped her to validate the legitimacy of the course work she was doing in LAC. She needed to know that what she was doing was important and that "it wasn't a joke."

Carol is not quite so strident, but she says the same thing in a slightly different way when she discusses her theory of education and her future as a teacher.

> I want to teach the kids like they do at the LAC. In the school, they spend a lot of time trying to get the kids to do basic things, but they don't seem very successful. The kids don't pay attention really good. It's because they need more Hispanic teachers. When the Anglo woman speaks Spanish and English together it is okay, but the kids don't do enough. She gets them to speak English, but they need to learn the other things, too. I want to do it different when I teach. I am working at the church now, you know. I want to practice being a teacher, so I do it for free and people send their kids after church on Sundays and on Saturday morning. That's how the parents know it will be good. If it is good, we make them work when the Anglo kids are outside playing. (Interview Transcript)

Single parent females. Both Ellen and Francis had something to say about how the LAC affected their lives. As Ellen said, "I learned how to teach stuff to my kids." Both of them described using the learning and teaching techniques that they had encountered in the LAC with their kids at home. Ellen: "I use the cards all the time. It was the only way I got through that medical terminology course. Jeez there was so much stuff to memorize. I got a ton of those three by five cards. I make the kids use them."

I thought that this was an excellent example of using the concept of mentoring to change the way someone looked at life. I almost cut her off with another question when she got a misty look in her eyes and she said,

> You know, nobody ever taught me how to memorize. I used to think it was amazing that people could remember stuff like the Pledge of Allegiance. I never could memorize it. Then one day, one of the guys in the LAC was just messing around, you know? Anyway, he started quoting Shakespeare. He quoted that whole long speech from MacBeth, and tomorrow and tomorrow and tomorrow, you know the one? It was great. I never heard anything like it. So I asked him how he did it. He showed me how it had a rhythm, just like a song. He said a lot of great words had a rhythm. How come nobody never said anything like that to me before? Anyway, he taught me one. You know, it's from the Merchant of Venice. "Let me play the fool, with mirth and laughter let old wrinkles come. And rather my liver should heat with wine than my heart grow

cold with melancholy groans." It's just four lines, but I did it. And when I said it to my kids, they wanted to know what it meant. I was a little shaky on that. But it was great! I mean here I was Little Miss Nobody who almost didn't get through high school and I was quoting Shakespeare to my kids. I been memorizing stuff every week since. I mean I always try to find something like that. (Interview Transcript)

I can think of nothing to say that would improve upon her conclusions about how the LAC affected more than just their academic skills by showing her how she could use education to enrich her life.

Older single women. Two comments from this group struck me as particularly appropriate. Harriet said,

> When I got through the second level of Accounting, then the lady at the LAC asked me to come in and tutor for the ones in the first level. You know, it was the first time anybody ever paid me to think. (Interview Transcript)

This comment is echoed in many other statements from these students. One common thread is that they have all worked for a living. They are all used to having their labors evaluated. Yet they have never been valued for what is in their minds. That is a new experience for them and it empowers them. It changes their outlook on life.

Gilda's story is a little bit different.

> After I was in classes for a while I had a relapse. I skipped classes one day. The next day I couldn't get going. I just couldn't get up. I got out of bed. I took a shower. I let the dogs out. I stayed in my bathrobe. I stayed in my bathrobe for a week. I did all my homework. I just couldn't get out of the house. Then I got a call from the director of the LAC. He said that no one had seen me for a week. I should call him. I couldn't call him. The next day he called again. I couldn't call back. The next day he called again but I didn't answer. About an hour later, the cops come to the door. They want to know if I'm dead. Since I'm not dead, I better call the director of the LAC. I do. He says he's happy I'm not dead, but he's got a plant that's dying and it needs water. I better come and water it. What can I say? I go and water the plant. Now if he calls, I call him back and I go and water the plant. Shit, I don't even go to school there anymore and I still

water the damn plant. I love it. That plant is keeping me alive. (Interview Transcript)

Males over 40. Jim has a story that shows how the LACs mentoring affected him.

> I was having trouble, you know? That one history professor, he's really hard. I shouldn't't've taken that class. I mean, what was I thinking? I dropped it. But when I went and talked to the LAC guy, he said that I had to be careful so I didn't go below my hours for financial aid. He had already helped me get out of a mathematics class that was way too hard for me. My reading score isn't high, but I got a pretty good writing score. I told the guy about the trouble I was having. He said, I shouldn't drop the class too soon. Even though I got a F at midterm, I could maybe still turn it around, and I had a couple more weeks. He went and talked to the history guy and when he came back, he showed me what I needed to do so I could pass the course. It was a lot of work, and I didn't know about it, but he said I could always drop later, so I gave it a shot. Then he said maybe I had a reading problem. He said that my writing score was higher than my reading score and that that didn't happen much. He set me up with the rehab guy to get tested. They found out I'm dyslexic. But, before I even went to get tested, the guy showed me some tricks. He used a piece of plastic to cover a slit in a piece of cardboard. That way you can only look at one or two words at a time. You know it works. I can read much better. Funny how a little piece of cardboard can make you a better student. I got to say that I pulled a D- in that class. I had to take the course again in order to do my grade better, but I don't mind. I didn't lose my financial aid, and I did good in the class the next time. Plus, I got my little piece of shit cardboard. (Interview Transcript)

A piece of cardboard meant that Jim stayed in college. It also means that he has

discovered a means to overcome a disability. He's learned not to give up, and that even

when he failed, he could turn failure into success.

Ira's story is a little different.

> I told you I used to get a little bit crazy. I mean I can fight if I want to. I get started and I don't care what happens. I gotta watch my temper all the time. Anyway, I was in this class with this guy. He's just a kid, you know? Stupid. I mean the kid doesn't know nothing, right? How can he? He ain't been anywhere. So we are having this debate in this class about gay rights. I ain't gay you understand, but I got nothing against 'em. Anyway, there's all this stuff in the news about how they should have equal rights and be able to get married. I figure what the hell. If one of 'em wants to marry another one, it's okay with me. I mean, I'm already married, and I got to tell you marriage is a lot of work, right?

It's gotta be twice as much work if you marry another guy. And who knows how two women'll get along. I can't figure women out at all, I just ask my wife and she tells me, you know? I mean I really got no clue. So anyway, I say that it seems okay for them to get married and the other guy gets mad and he starts in on how it goes against God's law and all of that. And he starts getting mad at me. So after class, he comes on as a hard ass, and starts calling me like a homo lover and all of that kind of shit. Well, I'm ready to blast him, you know? Who the hell does he think he is? People are starting to get worried, and the guy who's the director comes up. Stupid guy stands right between us. I mean, if you're gonna get in the middle of a fight, that's the perfect place for it.

Anyway he asks me if this argument is worth $2,000 bucks. I say, like huh? I don't get it. He says that if we get kicked out of school we got to pay the money back. He says maybe instead of losing the two grand we'd like to try to win $25. I'm not sure what he's saying, but the other guy isn't looking like he wants to fight anymore. He says that he wants us to write an essay and that he'll put up a $25 dollar prize and the dean of the college will be the judge. He says that if we do it we got a chance to win the money. He says that if we don't, he'll write us up one of those conduct reports, and he'll turn that into the dean and it'll get us kicked out of school. Well, I can't get kicked out, you know? I mean, I can't afford the money, my wife would have to kill me to collect the insurance...you get the idea. So I says how long an essay? He says five pages. The kid says that's too long. The director says it works out to about 400 bucks a page. The kid still hesitates, but I get what the guy is doing so I play along. I tell the kid I ain't too chicken to write an essay and they'll have it in three days, and I leave. I write an essay, and so does the kid. But get this, the reason the kid is so upset is cause his dad and his mom just got a divorce and his mom left because she's gay and she wants to be with another woman. I mean, wow. I thought it was just politics, but for this kid, it's personal, you know? Anyway, I win the 25 bucks. I bought pizza in the LAC and invited the kid. How about that? (Interview Transcript)

I can think of no way to improve on such eloquence. "How about that?"

## Summary of Conclusions

Essentially, this study indicates four major points. The first is that community college students have their own way of defining success which often differs substantively from the definitions held by the educational institutions they attend. Second, although many students have a variety of at-risk factors which would indicate a very high risk of failure, some students develop strategies to use resources of resiliency to overcome

obstacles and become successful. Third, the LAC has a very definite impact on improving the academic skills and learning abilities of students. Fourth, the LAC, through example, intervention, and socialization, often assists students in becoming more socially skilled and intellectually fulfilled as well as successful in their lives outside of the college.

Defining Success.

There are some definitions of success that are confirmed by these interviews. First of all, institutional definitions of success do hold sway with this group of students. Their motivation for attending college leads them to define success in traditional terms. They want the degree, they want to transfer to the university, they want a job, so they need the grades and the diploma. While this seems to be simple and obvious, I think it needs to be restated here. Students know that they have to meet the standards of the college in order to be viewed as successful. These students are concerned about grades. They know that the system uses grades in order to tell them how well they are doing against a basic standard. These students also know the limitations of grades. However, they do use grades to evaluate their own successes. They also are concerned with getting the credits they need to graduate. They want the diploma. They share the institutional definitions of success in some areas because they know that having diplomas and grades are a way to prove that they have achieved the standards set out by the institution. They use these definitions even when they find ways to circumvent the system or when they receive a grade that is higher than they feel they deserve.

That is not to say that students do not have other definitions of success. The ability to teach one's children and to better one's family is important to some groups. The single parents, the married men, and the young woman who was planning a family all agreed on the importance of this way to measure success. Better work and being better at work were also important to those groups who were supporting a family. While there was some interest in advancing community interests, only the Sudanese and Mexican groups gave any real thought to involvement in the community as a definition of success. The Sudanese group was really interested in using their education to change their personal status quo in society as well as make political changes in their local and international situation. Thus, while the EFF survey (Stein, 2000) has value, for these groups, it may be less efficacious.

For many, a rise in social status is a primary method for defining success. For the Sudanese, it means that even being a college student is important. For the Mexicans, even though they might have stated it differently, it meant that the second generation could become professionals and raise the status of the family. For the single mothers, it meant being able to provide a better life for their children. For both the males, a raise in status meant that they would have more control over their destiny. They would find a release from Ira's "working man's prison." For the older women, social status seemed less important.

Coupled with all of these major successes were related successes which were also important. Changes in economic status were defined as being better able to provide for children, parents, and others in the family. The ability to assist other family members

who were in a similar situation, as with the Sudanese and Mexican immigrants, was also a part of their definition of success.

One thing that came out in several unexpected ways was that success could be defined as personal enlightenment. For Ira, that meant learning another way to mediate a problem that did not involve physical violence. For Jim, it meant learning that a little piece of cardboard might hold the key to a whole library of learning. For Harriet and for Gilda, success means controlling fear and striving to do something that is outside of the box. It is not rooted in finding a better job. For Harriet it meant having a poster of Mozart on the wall. For Gilda, it meant having someone who cared enough to go the extra mile to make sure she was still alive.

Somehow the romantic in me likes Ellen's definition of success the best. "But it was great! I mean here I was Little Miss Nobody who almost didn't get through high school and I was quoting Shakespeare to my kids. I been memorizing stuff every week since. I mean I always try to find something like that."

Resilience

For these participants, temperament was an extremely important point. Anger provided a major motivation for the two males over forty. This was somewhat surprising. On the other hand, fear was an anti-motivational force for many in the group. In this instance, fear nearly caused some to drop out before they started. They were afraid of a new situation, they were afraid of not having the talent or skills to meet their educational goals. Some were afraid that their deficiencies in skills might make it impossible to

compete with younger, traditional students. The negative emotions were counter-balanced by resilience factors, such as family love or community support.

All were affected by small successes at first. Success increased self-esteem, optimism, and motivation. Success also became a way to temper any overreaction to negative criticism or setbacks.

While for many, fear is an anti-motivational factor, there were other attitudinal factors which proved to mitigate the negative experiences and at-risk factors in the lives of these participants. Most of them had a well-developed sense of responsibility and a tight focus on their goals. These two qualities also helped them overcome some of the other at-risk factors such as language skills, outside work load, family care responsibilities, and emotional issues. In addition, each of these students displayed a level of endurance which far exceeded the norm. In order to accomplish their goals they took a much higher number of classes than they needed in order to receive their degree or certificate—to the point where some of them took three years to obtain a two-year degree. Many of them took additional classes in the summer, took developmental classes, and retook classes that they failed in order to meet their definition of success.

When I first began this study, I considered the possibility that there might be some one-on-one correspondence between specific at-risk factors and specific attributes of resiliency. Yet I could find no evidence that such a correspondence was operating in more than one dyad or across differing dyad groups. Instead it became clear that each student would use whatever combination of resiliency factors best suited him or her in overcoming an obstacle. Sometime it would be a combination of networking and

endurance, such as when children were sick. Sometimes it would be improving an academic skill and employing perseverance. While there may be a correspondence, either my subject group was too small or my investigation was not deep enough to substantiate either its existence or its absence.

Success is directly related to academic skills and learning abilities. Traditional definitions of at-risk focus on the skills and abilities that students lack. However, what this study has revealed is that such a focus may be incomplete. A focus on the lack of skills turns the curriculum toward a pedagogy which will provide those skills. Yet this type of pedagogy does not address many of the needs of the at risk student (Galbraith, 1998a; Johnson, 1997; McGrath & Townsend, 1997). Additional focus on increasing the resilience will help the student overcome the non-academic barriers which impede achievement, such as low self-esteem, poor social skills, lack of economic resources, or unfamiliarity with the systems in academic institutions. While skills are often best taught in a classroom setting, the interviews clearly show that the process of modeling is one which impressed the students and increased their ability to succeed. Modeling behavior, advising on academic matters, and providing encouragement and direction are all mentoring activities (Daloz, 1999). It may even be counterproductive to expect students to grasp how to use traditional academic skills if those skills are being taught in a classroom using traditional academic methods (Galbraith, 1998b). Learning how to learn, learning how to think, and learning how to interact with others are all mentor-driven activities that may be better suited for an LAC than a classroom.

Network systems are another factor which is important in the LAC. For some, the networking may have meant the difference between success and failure. Moreover, because of its individualized focus on each student, the LAC seems a better nexus for such networking than the traditional classroom. Networking requires coordination in order to be successful (Grimes, 1997; Higbee & Dwinell, 1998). For many of these students, the LAC was already a place where they could interact on a personal basis with the educational institution. It would seem a natural extension for the LAC to assist the student in connecting to community resources.

The LACs role in the success of these students had many faces and many levels. For the Sudanese, it provided a place where many of the bewildering aspects of cultural adaptation could be explained and where the students could gather in groups to work on problems in familiar ways. The Sudanese grew up in a cultural environment which promoted group solutions to problems, and the confusing individualism of American academic settings was often offset by the LAC. For the Mexican women, it assisted in demonstrating ways in which women could prove their value and worth in new ways without sacrificing the traditional focus on family and children that was an integral part of their upbringing. For the single mothers and single women, it provided a place that was a mental and emotional sanctuary. In the LAC, they were not competing against younger students, and they could try new things in a place where it was safe to fail. For the males, it provided practical solutions to practical problems like which classes to take and how to make education work in their future careers. It also provided them with behavioral instruction in the form of modeling and mentoring. One group which

interested me most profoundly was the older women, who were, in effect, pursuing an education for enlightenment. They simply wanted to better their lives.

To summarize the analysis, institutional definitions of success are far more limited than student definitions of success, and institutions which are aware of these broader definitions may be better placed to assist students in achieving that success. Different attributes of resilience are integral in the process of students overcoming at-risk obstacles, and the relationship between resilience and at-risk factors is extremely complex. LAC's have a definite affect on students' ability to acquire academic skills within a developmental program. Finally, LAC's have a positive and lasting affect on the overall success of student both inside and outside of the community college.

There are some aspects to these conclusions which bear further study. Specifically, how could the LAC do a better job of increasing resiliency? Another question involves the use of the LAC as a practice lab for the academic skills that are taught in the developmental education classes. All of the students came to the LAC for help with their homework assignments. It would be useful to understand how that interaction affected the abilities and skills of the students.

CHAPTER 5

SECONDARY ANALYSIS

There were two purposes in the secondary analysis portion of my project. The first involves checking my conclusions about my observations with the participants themselves. I wanted to be able to show them my conclusions and elicit a response from them on the validity of my comments. As I stated before, I am fifty, White, and male. I was a traditional student, and my personal background has been much different than the participants that I have interviewed. I wanted to make sure that I was not jumping to any invalid conclusions based upon my own cultural bias.

Secondly, I have done interviews before. It seems as if one is never really done. Sometimes an interview will wind down of its own accord, and sometimes it has to be shut it off because of time constraints. However, it always seems as if there are questions I should have asked that I missed, and for once, I wanted the chance to go back and ask them the second time.

Now all of this may seem a bit redundant in some respects. After all, I had ten participants with more than seventeen total hours of tape to transcribe. But I did not want to run the risk of jumping to conclusions based on a single pass. I wanted to have the chance to go back and find out if I actually had it right. I wanted to ask their opinions about my conclusions so that I could be more reassured that my own cultural bias was not affecting prejudicing my conclusions. This seemed to fit with the paradigm set by Guba and Lincoln (1988) which states that naturalistic inquiry should allow for reexamining

and reconstructing the perception and interpretation of events (Guba & Lincoln, 1982; Lincoln & Guba, 1989).

## Initial Study Design

As I stated in Chapter 3, I decided to follow a modified form of the intersubjective approach (Firestone & Dawson, 1988). One version of the intersubjective approach allows the researchers to mingle their subjective opinions on their data across different sites and situations. The subjects themselves were shown the data, allowed to venture opinions and conclusions about the data, and then their conclusions and opinions were used as further data informing the study. I decided to work with a member check approach that allowed the subjects themselves to inform the conclusions I could reach. In addition to using students to help interpret the data from other students, I hoped to gain insight into some areas about the nature of this educational interaction that I had missed in the first pass. Using students to interpret students and asking follow-up questions both seemed viable methods of gaining insight and validating my conclusions in context (Guba & Lincoln, 1982; Lincoln & Guba, 1989; Piantaninda & Garman, 1999).

## Secondary Study Design

The design for the second portion of this study mirrored the initial interviews and evaluation. All ten students were contacted, and all agreed to sit again for a short interview. While the questions were open ended, the expected time frames for the interviews were shorter. Before the interviews, I gave each student a short numbered list of preliminary conclusions that I had reached from the initial analysis. Then I asked the students to comment on the conclusions. After this, I chose questions from a list which I

had made while I was transcribing the interviews and completing Chapter 4. The complete list of conclusions is in Appendix B. The conclusions are grouped into four different categories: (a) how students define success, (b) major problems faced by students when they start college, and (c) conclusions they came to about their college experiences.

## Numerical List of Initial Conclusions

During the interview, I simply handed the participants a copy of the list with these items. The complete list of the initial conclusions is available in Appendix B. I asked them to read through the list and then comment. I prepared a short list of prompt questions which matched the conclusions. These questions included:

1. How do you rate the different definitions of success in your own life?

2. Which of those definitions suits you best?

3. Which suits you least?

4. Did you agree with the college's testing and assessment of you? Do you think you were put in the right courses?

5. Were emotional issues important to you?

6. Do you feel differently now than when you started? How are you different?

7. Which things on the list of learned items do you think applies to you?

8. Which do not?

Of course, these questions were only prompts. In the initial interviews, I found it very easy to get this group to talk. In fact, it was often more difficult to keep them on topic. Here the purpose of the interviews was not really to elicit new information,

although I knew that I would accept and work with it if it was appropriate to the topic. What seemed more important was that I allow them the chance to comment on these conclusions. I wanted to see if my view of them matched their view of themselves.

Clarifications on Initial Data

There were some aspects of the interviews which needed clarification. There were also some answers which seemed to engender further inquiry. Guba and Lincoln (1982) state that there are often aspects of naturalistic inquiry that are not readily apparent and which require additional inquiry and analysis. Accordingly, as I worked my way through the interviews and initial analysis, I found certain questions and conclusions kept coming up in my mind.

One conclusion that I came to was that the LAC was a central point of contact for these students. It was often the first place that they would come if they had a problem, regardless of whether or not the problem was of an academic nature. As even non-academic problems often have a negative impact on academic performance, I thought it important to expand the questions relating to the LAC staff and its relationship to the student in ways that are not directly reflective of academic work. The questions involve three major areas—LAC assistance in career, LAC assistance in family relationships, and LAC emotional support.

For many students, fear seemed to be a major issue in their lives—especially in the beginning of their academic career. I wanted to develop a set of questions about that fear. What were they most afraid of, and how could the LAC help?

Another aspect of the encounters involved how the relationship with the LAC staff changed as the student progressed toward their academic goals. I got a hint of this in the initial interviews. For some, the relationship evolved along the lines of mentoring. For some it diminished to memory. For others, the relationship changed to one of friendship on different levels not associated with the college.

Finally, there were a couple of points that I did not understand at all and I thought needed clarification. When the Sudanese student said he needed to be "quiet" in order to learn, what did he mean? When Ira and Harriet said that there were just some people you could not work with, what did they mean? When Jim said that he needed to study the stuff that nobody was teaching, what did he mean?

I developed a prompt list for these concepts:

1. How did the LAC help you outside of your classes?

2. What do you think they could do to improve their help?

3. Did the LAC actually help you with your career?

4. Did the LAC actually help you with your family life?

5. Did the LAC help you with your personal/emotional life?

6. How would you characterize your relationship with the people in the LAC?

7. Has your relationship changed much since you started here?

8. How has it changed?

9. Do you see LAC staff outside of the college?

10. If you were the director of the LAC, what would you do differently?

Again, it must be remembered that these were only prompts, and, as I had come to expect with this group of participants, the actual interviews took on a life of their own and went in unexpected directions. After I completed the questions on the concepts above, I asked more specific questions to particular students for clarification of their statements.

## Analysis

The students read the conclusions with apparent interest. They responded to the questions in different ways, but there were some common characteristics. There were also some interesting differences.

## Defining Success

All of them stated that they believed that the traditional forms of measuring success were very important. All six of the Americans stated that they received much higher grades than they thought they would when they started. Statements like "I never thought I could do this" and "My old man would really be surprised, right now" summed up a commonality of experience for all of them. The GPA was very important for these people as it seemed to validate the effort that they had put into college. Harriet said,

> Grades don't really matter in the long run. I mean, you don't really get hired because of your grades, and ten years from now, who's gonna care, right? But when you work your ass off and you get a B- and you think you should have gotten better it really hurts. On the other hand, when you work hard and you get a good grade from a tough teacher, you feel like you really did something. In the end, grades don't matter, but they do matter at the same time. (Interview Transcript)

It seems as though she were using the grades as an outside scale to validate her own effort and performance. Most of the students expressed the idea that they had

internalized the educational experience themselves. They understood that the grades had

a limited importance outside of the educational institution. However, the grades allowed

them to compare their performances on an external scale. Considering the level and type

of experiences they had with educational institutions, their need for validation in this

environment is certainly understandable. Gilda received a special cord and stole with her

graduation for academic honors.

> I hung it above my desk with the diploma. It's been a year now, since I got it, but I still like to look at it and if I'm doing something that seems really tough, I touch it and remember that I'm a good student. I can get good grades. (Interview Transcript)

The Sudanese students both made statements indicating that they thought that

grades were important, but that they really needed to get the next degree. The actual

letter grades and GPA seemed not to really matter. What seemed important was the

status of the degree. "I got my degree. I got my picture from my graduation." "I am a

university student now." These statements seem to validate their feeling of status. This

seemed to corroborate statements from their first interviews. In these interviews their

grades were important, but only as a measure of progress. They would make statements

like "I passed that one" or "I did that one three times because it was hard." They seemed

more interested in status markers as students: "When I was first semester" "When I was

a sophomore."

This brings up the possibility that the grades, the graduation, and the other

traditional ways to define success are merely a means to demonstrate achievement to the

people in the lives of the students who define success for them. Ira mentioned his "old

man" whom he could never seem to please. Jim mentioned showing up his ex-girl friend

again. The Mexican women told stories about how their families had staged big parties for them.

These traditional ways to measure success are also rites of passage that demonstrate a change in status. Graduation was important for many of the participants because their families were involved in the ceremonies. Validating their accomplishment in a traditional way changed their status in the community, in their family, and indirectly, on the job. Ira got a better job. He says, "I have to wear a tie, now. It's in an auto shop. I mean I'm selling tires, but I had to graduate in order to get it." Francis says, "My kids are all planning on what they want to do for their graduation parties. My daughters even had a pretend graduation with their Barbies." The traditional methods that institutions have of evaluating success—GPA, retention, graduation, transfer, and employment—all have an importance to these students because they use it to validate their own success. Diana said, "I wanted A's. I worked for A's. I got A's. My mother and father were very proud. I will do it again at the university. I showed I can do it."

Defining Problem Areas

The list of problem areas yielded some interesting responses—especially when coupled with the question on their initial assessment. All of them admitted to being very underprepared when they entered college except for Diana. She stated that she probably could have managed without the two ESL courses she took. She "would have done much better on that grammar test if they had let her out of the ESL classes in high school." Jim told about how surprised he had been when the teacher had told him that he should use a piece of paper as a reading guide. "It was so simple. I mean, after I had that stupid little

piece of cardboard, I could read much faster, and I could even write down stuff about what I was reading." He said that he would not have needed the course "if someone had just given him that piece of cardboard a little earlier—maybe even in high school." He wanted to know why they "didn't just give everybody a little kit with stuff like that cardboard in it and then leave 'em study."

These two responses illuminate one of the problems with traditional classroom methods in teaching developmental material. In Diana's case, she had a high level of intelligence in conjunction with a strong work ethic. Not only did these traits enable her to overcome the linguistic obstacles she encountered, but they left her impatient with the pace of instruction that she needed. She was quick to recognize the difference between her high school and her college ESL classes:

> They never made me write in high school. Here they make you write a lot...and if your grammar isn't good, they correct you. I got lots of red ink on my papers. Sometimes I got mad when I thought about how I never got red ink in high school. They should have told me. I needed that red ink. (Interview Transcript)

Diana is less clear on the last pronouncement than she sounds. She says that the high school teachers made her write, and that they corrected her grammar. However, her perception of that correction was that it was too soft to make an impression. I found it very difficult to sort out which comments reflected a change in maturity level which would be very natural over the years since she had finished high school, or if those comments reflected a general frustration with the difficulty of learning everything in a second language, or if she was just demonstrating the impatience and directness that earmarked her character. Perhaps it was a combination of all three aspects.

In Jim's case, although he probably benefited from the instruction in the reading classes, using the simple reading guide changed the focus and methods of his study to such an extent that it overshadowed everything else. Further questions revealed that even though he learned about this tool in the reading class, he did not try it until the idea was reinforced by a staff person in the LAC. Had the staff person not reinforced the idea for the reading guide, Jim may have dismissed it as unimportant. Yet it was instrumental in his success, "It made all the difference, man. I mean I would read stuff and know what I read afterwards. It was great." This demonstrates one of the basic problems with classroom methodologies. They leave out the mentoring experience. The mentoring experience allows the student-teacher interaction to directly impact on that students' needs and it allows the mentor to purposely structure the learning to the particular situation. This can greatly multiply the impact on the student's learning (Bean, 1985; Bean, 1992; Daloz, 1999).

However, other than these two responses, there were many similarities and all of the participants seemed to concur. First of all, they knew they were going to "get hit with a lot of mathematics stuff," as Ellen put it. The Sudanese and Carol both praised the extra help they received in ESL. As Carol put it, "Even after the reading classes, I still have trouble with the textbooks sometimes. It's good to have people here at the LAC." As Alfred said, "Those textbooks are very hard. The English is too much."

What is also noteworthy is that some of the students wished that there was a way to evaluate other skills. The list prompted them to say things like, "I really didn't know anything about computers." "I had to type with two fingers." Also, "How come they

didn't test me in science. I really needed that for the nursing. God, anatomy was so hard."

One other factor that comes out is that all of them initially put themselves in the hands of the college and hoped for the best. Their faith was not always well-placed.

Ira: "I still can't get over that woman telling me I could get a double major like that and then screwing me up so bad. I mean really. How lame is that?"

Carol: "I hate it when they send you a letter. You always think something is wrong. You hear about how people lose their financial aid. It's terrible."

Ellen: "How would I know what to do? I never went to college before. I trusted them. I was mad when my aid got cut off, but the guy in the LAC helped me get it back."

Gilda: "I wish I had known how to use everything. The LAC got me going when I needed library work or anything. I was so dumb about it, and I was so afraid of everything."

Nine of the ten people in the study stated emphatically that they should be more initial involvement on the part of staff. "They assume you know, and you don't know." "The younger kids know because they all talk about it with each other. But I don't eat lunch here. I just start class, finish class, study, and go home. It took a while to learn where everything was."

Ira, succinct as always,

I don't need a damn course in how to use the library, but I need to learn how to use the library. I could figure out how to get my degree if somebody just showed me how to get my degree, you know? I don't need them to do it for me, but I need them to tell me what to do and make it clear. I ain't stupid. I can figure it out, but there's stuff that you don't know that can blindside you. If you don't know what questions to ask, then you don't ask the right questions. (Interview Transcript)

All of the women except Diana reiterated what they had previously said about fear being a major problem. Additionally, all of the students were afraid that they would not be able to compete with traditional students. The lack of experience and the lack of skills nearly prevented some of them from completing their first semester. All of them stated uncategorically that the LAC made the difference for them. Francis states,

> Who else is gonna care? I mean, when stuff happened the guy from the LAC went with me to financial aid to straighten it out. I'll never forget that. How would I have bought groceries the next month if the guy hadn't've done that? (Interview Transcript)

Changes in College

While I was working on the section where students talked about changes that happened to them while they were in the college section, some interesting answers popped up. Of the ten participants, Jim was the only one who changed his career goal, and "I still don't know for sure what I want." Gilda developed a career goal while she was in classes. "I liked psychology. I figured I'd study psychology because I wanted to know how screwed up I am. I didn't really figure on coming out of this a counselor, but it seemed like a natural way to go." All of the others finished with the same career goal with which they began.

All of them said that they learned that they had real strengths. Some of them said that they had weak points, but that the weak points, like mathematics or reading problems, were not the deterrent that they had initially imagined. They also learned that their strengths could help them over come their weaknesses. Brent says: "I had a hard time with that mathematics. But if they give me a mathematics problem, I can do it on the Excel sheet."

All of the American students said that they did better than the traditional students because they had a sense of responsibility, focus, and were not afraid of hard work. They derided younger students who skipped classes, came to class unprepared, or did less than their best. They challenged and confronted students who were disruptive. Harriet says:

> I'm paying good money for this. I don't have time for them to screw around in the back of the class during a lab. If they don't want to be there, then they should leave. I got mad at them in biology class. I told them off. They made fun of me and said I was just an old fat lady, but I stuck to my guns. I told that big guy if he wanted a piece of me he should come and get it, otherwise he should get the hell out. I felt bad later, because, you know, he dropped. I mean I didn't want him to drop out, but I didn't want him taking up my time either. I had to have that class. (Interview Transcript)

Gilda states:

> You know, at first all I wanted to do was take the basic classes. But after a while, I figured out that all of the dingdongs take the low classes. They want the gen. ed. stuff so they can credit without much work. Hell, I started taking the higher level classes and it was a lot easier. I mean sure, there was more work, but everybody was doing the work. We didn't have to wait on the dingdongs, you know? (Interview Transcript)

Ellen and Francis both stated that the nursing program had provided them with opportunities to meet new friends. Francis:

> There's some of them, that are young, and we don't have nothing in common. But you know, there's a bunch of them like me. They're single, they got kids. They're just trying to figure out a way to make a better living. (Interview Transcript)

Common ground also meant additional networking. Ellen:

> You know when we had that study group in the LAC, I met two other women. Now we all share the same daycare woman. It makes some things easier. Whoever is off can pick them up. Also, me and one other woman car pool next semester so I don't have to drive them to school every day. That'll be like heaven. (Interview Transcript)

For Harriet, the relationships have really changed, and something more happened as well.

> You know my friend and I went to a concert down in Des Moines. They were doing Mendelssohn. I actually recognized two of the pieces. The lady in the LAC was the one that got me started. I never would have thought about the music like that. Anyway, last week we got into this club that supports the symphonies in the state. It's great. Because we're students we get discounts. (Interview Transcript)

For Harriet, a new interest and a new friendship have been sponsored by the LAC.

One of the Sudanese had a different experience. Brent:

> I used to know a couple of Americans because we worked at the casino together. But you know I don't like that casino much. Too much gamble is not good for people. But here, when I took the web page class, I met some guy who works with the web pages. Then you know, you had me teach the Front Page to the other guy. These two guys they work with another guy. The guys all get together, and they make this company for design of web pages. They like me. They like my web design. They gave me some work and I made a little money. Now my other Sudan friends and me we go to meet these guys. Sometimes we eat together. You know it's important to eat together when you get friends. Maybe we will make a big company. (Interview Transcript)

The LAC provided Brent with a temporary tutor position that allowed him to expand and get into the local society. As an outsider, an African who has language problems, the process of crossing the cultural barriers to make friends with a local, Caucasian, English-speaking resident must have been a monumental undertaking. The LAC provided a framework for this to happen.

Diana expressed very little interest in dealing with Anglos. Carol, on the other hand, stated that it was the LAC who helped her get in touch with local teachers and get her assistant job. One of the LAC staff had a contact at the university who, in turn, had a friend who was teaching in the local high school. Carol seemed perfect for the position and was encouraged to apply. With the recommendation of the LAC personnel, she got

the position. Now she had "Anglo friends who are teachers. This is good for me. I need to learn from them."

## The Role of the LAC

In some ways, many questions on the role of the LAC have already been answered. The LAC provided a nexus for these students to make contacts and friends. Not all of them did so, of course. Jim still seems to be a lonely man, and when asked about friends he is undeniably vague. However, most of the students readily admit that the LAC was instrumental in changing their lives and in making their transition through academia a smoother and richer experience.

As previous passages point out, the LAC provided emotional support for many of these students. It helped them to overcome the natural fears that they had when they enrolled. More than this, the LAC also assisted them in expanding their learning abilities and improving their academic skills. It made them better students academically. In addition, the LAC provided students with the opportunity to socialize in a controlled environment.

For many, this was a completely new experience. For those who had problems with drug addiction and alcoholism, this meant that they would be meeting with people who were not substance abusers in a place where alcohol and drugs were not permitted. Additionally, they were there for a purpose that was outside of the normal social interactions associated with alcohol and drugs.

For others, like the Sudanese and the Mexicans, this was an opportunity for them to get to know someone outside their normal safe community. It also meant that people

outside their community would be meeting with them. Prior to this, both of the Sudanese

had met Americans only through work or through shopping. There was little or no real

social interaction. For Carol, it meant that new professional opportunities would come

about. For her, most of her social connections were made through family and church.

Divorce is a touchy subject for young, Catholic, Mexican women with large families.

There was, understandably, some reluctance and a great deal of caution involved in

venturing into new social connections. The LAC provide a safe place to begin.

For Gilda, the LAC provided her "reality check." She said:

> You know, every since they sent the cops around to check on me, I've
> been stopping by once every two weeks, even though I've graduated from the
> university now. I'm not sure why. These guys are my mountain. You know
> what the story says. If you live by a mountain, you expect to see the mountain
> every day on your way home. These guys are my mountain. I need to see them to
> know that I'm really on my way home. (Interview Transcript)

So how does the relationship change? Do these people still relate to the LAC

staff? Actually, most of them still visit at least on occasion. Even Diana says,

> I like Mrs. [blank name] and I just stop by to see her. She always has
> good advice for me. I'm at the university now. That's real college. My papa
> doesn't understand what I am doing. Nobody in my family knows about college
> stuff. I need her advice. She used to be my teacher. Now she comes to see me,
> too. I invited her for my niece's christening. She came. She also came to my
> cousin's wedding. She's a good woman. (Interview Transcript)

Diana almost seems surprised that this woman would understand why

christenings and weddings were important in a predominantly Catholic, Hispanic family.

Ira wants people to come to the tire company, even offering discounts. At first, it

seems as though he's after a sale, but:

> I want the guys to see the people from the school. If they see the people
> from the school, then they will understand why I'm the manager. I know I can

change tires. They need to know that I graduated from college. I'm not just a working stiff anymore. (Interview Transcript)

The mentoring relationship begins with a focus on academic skills and learning. It may also include aspects of academic life such as advising, assisting the student in navigating the institutional system, and showing students where to find additional assistance. As the relationship progresses, it is less focused on individual academic skills. Students begin to see more success, and they are less afraid of the new experiences they encounter. The mentor begins to prepare them for these new experiences, and eventually the student begins to enjoy them and thrive. Now the relationship changes. Sometimes the student becomes a teacher for other students, sometimes the student gets new employment, or sometimes the student has other opportunities. The mentor shows the student the door to the opportunity, and then the student enters. The type of guidance has changed. The student returns to the mentor for advice and counsel, but the student is no longer supervised. As the student progresses to a point past the academic institution, new relationships are often forged. The mentor is still honored, but advice is seldom sought and usually given sparingly. The mentor's task is now to simply provide a public acknowledgement of the success of the student.

<div align="center">Additional Questions</div>

There were three points that I did not really understand when I did the transcripts of the first tapes. I asked each of the students to clarify their meaning.

First of all, there was a point in Jim's transcript when he said, "I gotta study the stuff that nobody's teaching." When he said it, it was in the context of studying to get better grades, and I thought I understood it during the interview. But when I transcribed

the tapes, I found that I was less sure about the meaning. He was talking about studying in the dormitory.

> I spend a lot of time studying when the younger guys are just messing around. Also I read the newspaper and junk like that. Those guys read Sports Illustrated. They do email and stuff, but I study a lot. You got to study to get good grades. But you got to study other stuff, too. I watch those guys. They don't really know about study. I gotta study the stuff that nobody's teaching. Not just the homework, but the other stuff, too. (Interview Transcript)

When I did the transcript, I thought I had missed something. I played it back several times. The more I played it, the less I understood it. So I asked him. He had trouble remembering it, so I played it back. Then he said he was thinking about how one of the guys was so hung over.

> Man I been through AA. You know what happens when you go to AA? You go to AA cause you hit bottom. If you don't hit bottom you don't quit drinking. I been at the bottom. My friend said sometimes you gotta study the stuff at the bottom. You gotta go lower than anyone else in order to get rid of the booze. I studied him. I know what a hangover is like. I had a lot of them. You know, nobody wants to study that stuff, and it ain't something you can learn from nobody else. You gotta teach it to yourself. You understand? You can't teach it to nobody. You gotta study it for yourself. Nobody can teach it to you. You gotta study what nobody's teaching. (Interview Transcript)

In many ways, this is the job of the mentor. No one can really teach you how to learn. A mentor puts the student in the right place. A mentor gives the student the right tools. A mentor lets the student study. I probably would not have chosen such an illustration for the mentor relationship. However, for Jim, I believe it was perfect. It was hard for me to see the learning experience through his eyes, but I caught on. I had thought that Jim's major motivation was anger at the ex-girlfriend who dumped him in the Midwest, far from a life that he was used to. Jim showed me his true motivation. He was coming up from the bottom. No one can show him where the bottom is. He already

knows. Success for Jim is not showing his ex-girlfriend that he can complete college.

Success is finding a life and a success that comes after he has touched bottom.

Harriet said that "there are just some people that you can't work with." She was

talking about her biology partner. She said:

> I liked her, you know. But she's always just interested in men. I mean, I can understand that. I'm not gay or nothing, but I think that there's other stuff that's important, too. I just wanted to be done with the work. I don't like biology. But my lab partner never showed up. I came in twice a week and took the measurements on the plants, and she never showed up. After midterm I told the instructor that I didn't want to be her partner anymore cause she never showed up. The teacher said okay. About two weeks before the end of the semester, she shows up. She wants all the notes. She says that all she missed was the measurements of the plants and that I should just give them to her. I told her no. I told her that she wasn't my partner anymore. I had already talked to the instructor and I had sent her e-mail. She got really mad. She said I couldn't just dump her. But I didn't give in.
> Anyway, she got really mad. She started calling me at home, late at night and she would swear at me. She yelled 'fat pig' and 'cow' and 'sow' clear across the parking lot. I mean it hurt my feelings. I was mad, but I didn't know what to do. I went into the LAC. I guess I was pretty shook up cause the lady took one look at me, pulled me into an office, made me sit down and drink some water. I told her what happened. She got some paperwork and filled out a complaint. I signed it. It went to the dean. I was kinda scared cause I didn't know what kind of trouble there would be. The dean called me in, then the dean called her in. The dean told her that she was on probation. If I brought in another complaint, then she could be suspended. She was making a record. If anything happened, like if my windows got busted out or anything, the dean would take the record to the police. I guess the dean really scared the girl. She never called me or anything again. Ever. (Interview Transcript)

The LAC was a first contact point here. It meant that someone was protected.

Given her habit of avoiding trouble, Harriet probably would have dropped out of school.

In this case, the LAC intervention made the difference for a student.

Ira said the same thing essentially. "You can't reason with some people." I thought he was talking about another student, but when I transcribed the tape, there was definitely some doubt. I asked him about it. He answered in his typical blunt fashion.

> Hell, I was talking about the damn history professor. I never did really understand the guy. I mean I guess he's really smart and all. But if he's that smart, why is he teaching history in a community college? Why ain't he at some university?" At this point, Ira realizes that he's talking to somebody who works at a community college. "I don't mean it like that. I mean some of you guys really are smart. But this guy's getting ready to retire. If this is the best he can do…well, hell, you know what I mean. But he's just like he knows everything. Anyway, he started talking about Jimmy Hoffa. Well, I know about him. My uncle worked for him. I met Hoffa when I was a kid. My uncle told me about him. Then my uncle got killed in some kinda fight in a bar. Anyway, this professor tells everybody that the labor unions don't really know about Jimmy Hoffa. I had to agree. My uncle said he was a stand-up guy, but that they all took a lot of Mafia money. Well anyway, the hour was over, and the next day, the instructor didn't talk about Hoffa no more, so I thought it'd be a good idea to write my paper about it. I put in stuff that I thought nobody would know. I mean, my uncle told me, and I got some of my uncle's letter, and I got Hoffa's autographed picture with my uncle from Chicago Teamsters meeting, you know? Hell, I thought the instructor would think this was really cool. I mean, how many people can write a paper about a famous person that they met and that their family actually knew? I mean it wasn't George Bush or anybody, but Hoffa was pretty famous, right? Anyway, I worked real hard on the paper. I had the lady at the LAC help me do the grammar cause I always have trouble with that shit. Then, I get the grade back, and the guy gives me a D+. I said, must be some mistake, and I went to talk to him about it. He said my research was shoddy and I didn't know what I was taking about and that I couldn't use personal or anecdotal evidence. Hell, Jimmy Hoffa ain't no anecdote, you know? He was a real guy and so was my uncle. I was mad, but I needed the class. I talked to the LAC guy and he said I'd be a hurting pup if I dropped another class, so I stuck it out. I got a C. I ain't happy about the C. I deserved better, but what are you gonna do? (Interview Transcript)

Such eloquence deserves comment. The LAC helped Ira realize that some situations cannot be resolved. They must simply be accepted. Ira focuses on getting the best grade that he could for the class, and he learned from the experience.

Finally, there is the comment that Brent made about being "Quiet" in class. Brent said, "It's not my class. It's the teacher's class. I got to listen. If I don't listen, I will miss it. I got to be quiet inside." I understood this to mean that he didn't want to disturb the teacher when I first transcribed this, but there was something else in it that made me want to keep asking. I said, "Tell me how you learned to be quiet this way."

He smiled. He liked telling me stories, and I could see that the memory of his father was important to him.

> When I was a boy, my father took me to watch the cows. We had good cows. My father was rich. My father said I had to watch for the snake. He said to be careful, because the snake would scare the cow. I tried to watch for the snake. When I thought I saw the snake, I would go to look, but the snake would be gone. I could never find that snake."
>
> "I'm sorry, I still don't understand."
>
> "My father came and he said to me, 'Why you didn't do something about the snake?' I didn't know what he talk about. Then he show me. I am not quiet. I watch for the snake, and the cow watch me. The snake watch the cow. If I move, then the cow is afraid and the cow move. Then the snake see the cow and the snake go away. My father show me that I must be quiet. I must watch the cow to see the snake. When the cow is quiet, then the snake will come. The snake likes the mouse, and the mouse likes the bug that likes the cow. So I watch the cow. Pretty soon the cow stop. Then I see the mouse. Then I see the snake. But if I look for the snake, I can't see the snake." (Interview Transcript)

I had to think about this for a long time. Different cultures learn on different time scales. The lesson of the snake had been very profound for the young Brent. Later, when I asked Alfred, he said he had had a similar experience. Sudanese seldom volunteer. They will answer if they are asked a direct question, but this story told me that they always looked for the indirect lesson. It also told me that the indirect lesson was the one that they valued more than the direct one. Most Western-style teaching is direct. Yet here was a learner who was focused on the indirect.

# CHAPTER 6

## CONCLUSIONS AND RECOMMENDATIONS

LACs are relatively new concepts, and I believe that studies like this will help us improve the way that they will operate in the future. There are two sets of conclusion in this study. One set is derived from the first analysis, and the second set is derived from going back and clarifying the answers again. I really believe that I could have gone back and asked questions several more times before I would really come out with answers that were both satisfactorily understood and comprehensive. However, I believe that the conclusions from the first two sets of questions are valid.

I also believe that the first two studies provide me with two important lists of recommendations for the future. The first is a list of recommendations for LAC operations. The second is a list of recommendations for further study.

### Conclusions Concerning the Definition of Success

First, this study indicates that the traditional definitions that educational institutions hold of success hold true for students as well. While it may be true that institutions have different uses for their definitions, that does not mean that individual students cannot value those definitions as well. In fact, most students value their diploma, their GPA, and their ability to transfer to the next level. However, they see these items in a different light than the institutions.

The EFF survey (Stein, 2000) that I have so often mentioned in the literature review has led to a broader understanding of student definitions of success, but I think it is dangerous to rely too heavily on the survey data alone. All of the students I

interviewed wanted the diploma and a high GPA. However, it would be naïve to decide that the diploma or the GPA was an end in itself. This is why I believe that a mixture of influences define success.

Students are very concerned about GPA. First of all, GPA is a standard which can block them from achieving their goals. A GPA of less than 2.00 can mean that the institution will not issue a diploma. A GPA of less than 2.5 within a major field of study may mean that the student will not be allowed into a program either within the community college or as a transfer student.

On another level, GPA allows the student to evaluate his or her own progress. Most of the students interviewed were surprised at their ability to get good grades. Those who had poor grades in high school expected the same in college, and when their grades were higher than expected, they were encouraged to work harder and do even better. They were also able to apply the principles and skills that they gained from the LAC and from other institutional resources to further increase their GPA. Most of them were surprised that even though the courses increased in difficulty, their grades continued to go up.

The EFF survey data did reveal some facets of student definitions of success that were appropriate to this group. The EFF survey found that students define success in terms of family, work place, and community. While these were not the only ways to define success, they did play an important role. The diploma, the graduation ceremony, award letters, scholarships, and other forms of recognition from the institution were all critical factors in this definition.

Students want their immediate families, their extended families, and their friends to be in on the recognition. For many of these students, there has been no previous recognition, even though they had achieved some success with things like getting their GED. For those who did not graduate from high school, any public recognition is doubly important. Additionally, family members are often tightly involved in the education process. Diana wanted to impress her parents. Ira wanted to impress his wife. Ellen wanted to impress her children. Recognition before family members is vitally important.

Students also want to use the diploma to improve their professional lives. For many of them, a pivotal event has turned them to the educational process. In these interviews, such events were often traumatic. Ellen's husband committed suicide. Jim's girlfriend abandoned him. For others, the event was less traumatic because it was predicated on a slowly building discontent. Ira worked at different jobs until he finally decided he had to get out of the "working man's prison." Lois struggled to cope with being a single mother to a large family, a son who is autistic, and a mother who was critically ill. These students wanted to improve their lives. They wanted better jobs. They defined success in terms of economic challenges that directly affected them and their families.

The EFF survey (Stein, 2000) also stated that students defined success and were motivated by a desire to better their community. I did not find that to be validated here. While students were not opposed to bettering their community, and many had expressed an increased interest in the broader social and political issues of their community, this interest was not particularly relevant to their definition of success, nor was it expressed as

motivation in their academic career. The relationship between community and student definitions of success that I discovered took an unexpected form. The Sudanese students were very focused on becoming college students and of attaining the diploma because it gave them status within their own community. Further, they displayed a desire to take the knowledge back to their homeland to make their home a better place. At first glance, this might seem indicate that these two students were being motivated by a desire to affect a national goal, but the interviews also indicated that the national goal was a very real part of the local ethnic community. The Sudanese in the local community were very focused on the events in Sudan. Therefore it may be very difficult to sort out whether the motivation is due to direct social pressure form the local community or due to a larger sense of national community and duty.

Gilda and Harriet espoused one other definition of success that was not listed in any of the literature that I could find. Both of these women were in college to better themselves, but they were also there to find some sort of enlightenment. While they were not adverse to finding employment, employment and family recognition were only minor factors in their decision to attend college. While Gilda decided to attend because she was suicidal and thought that college might be a good way for her to cope with her problems, she did find herself on a quest for self-improvement. She studied psychology so that she could "figure out why I'm so screwed up." Harriet found herself enjoying and exploring avenues of culture that she had not dreamed of before starting school. Both of them were on a path to self-enlightenment.

Resilience Factors

Resilience does seem to be a way to explain why some students remain in college despite the high number of at-risk factors some of them must overcome. Murray's (2003) risk factor schema was originally designed to describe the ability of some to survive traumatic events. While it might be stretching diction to define college as a traumatic event, it is certainly stressful. The resilience factors impact many of the risk factors directly. One of the most powerful at-risk emotions is fear. Most of the students described a fear of some sort in conjunction with their initial college experience. They were afraid that they were underprepared. They were afraid that their English skills were not going to be good enough. They were afraid that they would not be able to compete with younger, better-prepared students.

The resilience factors which best counteracted these at-risk factors were motivation, focus, responsibility, and endurance. In the previous paragraphs, defining success also touched upon the concept of motivation. Most of these students were in classes because they had lived through a life-changing event. For the Sudanese, what could be more intense than living through a devastating war? Carol survived a divorce in an ethnic community that has strong prohibitions against such actions. Diane's animosity to the ESL program demonstrated a deep frustration with the high school and her experience there, but watching her father work in the packing plant also solidified her desire to make a better life for her entire family. Each of these people told a similar story. As Jim put it, "You gotta hit bottom."

While these experiences engendered a high level of motivation, the motivation was only strong enough to overcome their initial fear of the educational experience which had been so negative in their past lives. Each of them came with focus, a sense of responsibility, and a high level of endurance. Each of them acknowledged that it was these qualities which allowed them to persevere to a degree, and to even surpass the level of accomplishment attained by their more traditional student counterparts.

With success, each of them became more optimistic, more able to cope with setbacks, criticism, and negative emotion. With success, there also was an increase in their focus, their sense of responsibility, and their endurance. In short, success breeds success, because it increases the reserve of qualities that ensure success.

However, one must not leap to the conclusion that motivation, focus, responsibility, and endurance are enough to overcome the other at-risk factors that such students face. All of these students came to the college with severe deficiencies in both skills and abilities. Additionally, because that curriculum often mirrors the curriculum that was unsuccessful for these students in their elementary and secondary educational experiences, there should be no expectation that developmental education alone will counteract these deficiencies. However, all of them completed developmental courses which were designed to increase their skills and abilities, and all reported that the courses had an affect on their success.

Furthermore, there are other non-academic obstacles that plague these groups. Their work schedules, their family responsibilities, mental health factors, and a variety of other factors put them at additional risk of failure. What has worked surprisingly well is

the system of networks which these students have developed. The network of family, community, and educational institution support has been critical in their success. Some, like Ellen, are only "one check away from the street." Some are often unable to study effectively because of a crushing weariness brought on by brutal working schedules. Some are unable to study because they have been awake all night with a sick child or relative. Some are struggling with alcoholism, abusive relationships, depression, and other psychological problems. What saved these students was their ability to use the complex system of support networks that are available.

The Role of the LAC in Student Academic Success

The LAC provided the academic support that is needed for the student to progress, including help with homework, tutoring, and assistance in using academic resources. For these students, the LAC was successful in doing so. Students used the LAC to increase their skills and to enhance their abilities. The tutors, instructors, and staff in the LAC took on a mentoring role which differed from the role of an instructor in a regular classroom. At times these people drilled, at times they demonstrated, at times they pointed the way, at times they sat and observed while students practiced, and at times they inspired students with a brief glimpse into the wonders that have attracted so many to the world of academia.

The Role of the LAC in the Overall Success of Students

Another role of the LAC is to assist students in learning the social skills that are essential in becoming successful. For the NES students, this meant assisting them in acquiring the CALP necessary to become successful students, but it also meant

explaining, demonstrating, and mediating the cultural conflicts that would naturally arise from the interactions between NES and NNES stakeholders in the system. For these students it meant teaching them how to ask questions of other students and their instructors, how to interact within small groups, and what to expect within the academic system. This was also true for the NNES students in many ways. For those who had been raised in isolated environments, had associated with substance abusers, or who had been isolated due to other psychological and sociological factors, it was essential that they learn how to communicate with others in unfamiliar settings. They needed to learn to accept the presence and opinions of others who were different from themselves. They needed to learn how to assert themselves without intimidating others or without being intimidated themselves. They needed social mentoring, and the LAC provided it.

Also, the LAC provided assistance for students in meeting and overcoming the non-academic obstacles in their lives. Several of the students stated that the staff from the LAC provided them with parenting tips which helped them overcome day care and other sorts of obstacles. They stated that they sought advice on how to cope with transportation problems, work issues, and conflicts with local and state organizations. The LAC assisted many students in acquiring scholarships, grants, and loans. The LAC helped them navigate through the different interactions with the groups and organizations within their local community.

What is obvious from these interviews is that the mentoring role in the LAC is both vital and complex. Time and again, the students would say that they had a problem and that they took it to the LAC where the staff at the LAC helped them resolve it.

Sometimes this was an academic problem, sometimes it was a problem with other students or professors, and sometimes it was a problem outside the normal purview of a college. Regardless of the source of the problem, the students all felt that there was a place which could give them a solid, safe basis from which to begin to solve the problem.

Thus, the LAC is a factor not only in the academic success, but in the eventual overall success of the student. Academically, it teaches students how to study and assists them in overcoming the problems they have in learning. However, the social aspects of LAC interactions are also vitally important. As Harriet stated it,

> I would never have graduated if the center hadn't been there to keep me going. I'm okay about studying. I need help on some stuff now and again, but what I really need sometimes is a swift kick in the butt to get me going. They really helped in that department. They never forgot about me. (Interview Transcripts)

### Recommendations for LAC's

First of all, I believe that the recommendations for LAC operations must take into account the many roles that the centers and their staff must play in accomplishing their mission. The first role of the center is, of course, academic. In addition to being better able to identify the basic skills necessary to academic success, more needs to be understood about how students learn the basic skills that they need to accomplish their academic goals. For students who come with only the barest minimum of skills, it may be that longer periods of time should be built into the educational process. None of these students completed their program with the minimum 64 credits. Most of them worked summers and extra semesters to finish. For the institution, it may seem obvious that if a student starts with deficiencies, it will take the student longer to finish. However, it is not

always obvious to the student. Because it takes additional time, greater care must be taken to advise this at-risk student. Unlike students who have good academic preparation and who must simply choose a series of courses that meet their goals, the underprepared student must be placed in classes that match his or her level of ability in order to ensure the acquisition of skills and abilities essential success in postsecondary classes. If such a student is placed too high, the institution risks failing the student because he or she does not have the requisite skills and knowledge to be successful. If the student is placed too low, the institution risks retention problems because the student may believe that the institution is not teaching the student the requisite skills for success. Further complications include the time limits (U.S. Department of Education, 2005) that are placed on many forms of student funding may inhibit the institution's ability to provide comprehensive developmental education. The educational institution may find itself in the peculiar position of pressing a student to succeed ahead of his or her best schedule because of limited funds or time restrictions on funding.

Additionally, while many LAC staff are trained as instructors, it is obvious from these interviews that much of their time, and many of their interactions, fall into the counseling mode. This is supported by other studies (Casazza & Silverman, 1996; Christie & Dinham, 1991; DuBois, 2001; Laanan, 2001; McGrath & Spear, 1991; Ogunyemi, 2001). Additionally, mentoring skills are an integral part of the academic development of adults in this kind of setting (Daloz, 1999). LAC staff should be trained accordingly.

This study also provides some confirmation of Tinto's (1993) hypothesis concerning social interaction and retention. In this case the LAC may well be providing the social interaction that is directly affecting the retention. In this study, there was strong evidence that LACs provide students with the some of the necessary social skills needed to be successful in their academic careers and in other endeavors. Additional studies which observe and monitor interactions with LAC staff may expand the current knowledge of the field in this area.

<div align="center">Recommendations for Further Research</div>

One recommendation for further study might entail the relationships between the networking systems in an educational institution and the relationship of those systems to larger systems within a community. The at-risk factor for these groups are more than just academic. If the LAC is to mitigate some of the non-academic risk factors, then there will need to be a coordinated effort to make such systems work efficiently.

Finally, I think that more individual interview studies should be done on other LACs across the country. While so many community colleges employ developmental education and establish such centers, it is important that we develop a coherent and comprehensive system for evaluating them. Without such a system, we are too often engaging in hit or miss ad-hoc solutions. Such evaluation systems will help us train staff who are well-suited to the wide variety of tasks that such positions entail.

I interviewed ten students who succeeded. Their success stories provide us with clues about what works in LACs and in developmental education. Yet there is still much to be learn. This study focused on success stories, by many of students with so many at-

risk factors fail. Perhaps the same methods can be applied to those who do not succeed so that more can be learned about how to improve the way that LAC's affect student outcomes. Additionally, this study was purposefully selective in its participants. The nature of the study provides insights into how a few students were affected by the LAC and by their college experience. Additional studies should be done which focus on each of these different groups and other groups as well. Different social, ethnic, and economic groups of people react differently to the same educational experience. Inherent in the very nature of teaching is the need to accommodate a diverse population. Perhaps the LAC, because of its unique position in the community college structure, is best suited to assist the educational institutions in accommodating them. If so, it behooves us as educators to train staff and develop programs that will improve the LAC ability to address its mission. It also seems appropriate that those of us in the field of adult education look to the LAC as an excellent laboratory for learning more about adult learning.

<div align="center">Final Comments</div>

In many ways, my own words are inadequate when compared to the richness of these narratives. I marvel at the power of their experiences.

I work with students every day. Like many practitioners, I can go back in my career and point to different students that seem to stand out for me. Also, like many practitioners, I will occasionally point to a student and say, "Wow, he's really made some changes." or "She's really come a long way since she first got here." However, it was only when I actually went through and transcribed these interviews that I began to see the

cumulative affect of an LAC on the lives of students. What we often view as quite mundane will sometimes take on the mantle of an extraordinary, life-changing experience for these students.

The true magnitude of these changes will never be apparent from simple retention statistics or transfer numbers. There are so many in our field who must work at finding numbers to maintain the accountability requirements that society and government mandate, but who could do better to communicate the success of such programs than the students themselves? We need to find more ways to actually hear the words of the students that we touch. Because of the words of these ten students, I find that I am constantly more vigilant about each word I say and about each thing that I do, for I have learned that even a moment of fun—like reciting a few lines from Shakespeare—can have a dramatic effect on a student's life.

These LAC's work. We may be able to discover ways to make them work better in the future, but we must never lose sight of the basic fact that these centers change lives and directly affect the success of students in both their academic careers and in their everyday lives. The mentoring relationships fostered in an LAC prove to students that an academic viewpoint is not only viable, but that it is one that they can acquire for themselves. The students in this study demonstrate that with the right support, seemingly overpowering obstacles can be overcome to achieve success.

REFERENCES

Adelman, C. (1996). *Answers in the toolbox: Academic intensity, attendance patterns, and bachelor's degree attainment.* (Report No. PLLI-1999-8021). Washington, DC: U.S. Dept. of Education, Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED431363)

Alfred, R., Ewell, P., Hudgins, J. & McClenney, K. (1999). *Core indicators of effectiveness for community colleges.* Washington, DC: Community College Press.

American College Test [ACT], (2004) *COMPASS/ESL: A comprehensive computerized placement and diagnostic assessment and support system, reference manual.* Internet version, http://www.act.org/compass/

Amey, M. J., & Long, P.N. (1998). Developmental course work and early placement: Success strategies for underprepared community college students. *Community College Journal of Research and Practice, 22*(1), 3-10.

Anderson, C. A., Bowman, M. J., & Tinto, V. (1972). *Where colleges are and who attends: Effects of accessibility on college attendance.* New York: McGraw-Hill.

Ashar, H., & Skenes, R. (1993). Can Tinto's student departure model be applied to nontraditional students? *Adult Education Quarterly, 43*(2), 90-100.

Astin, A. W. (2001). *What matters in college? Four critical years revisited.* San Francisco: Jossey-Bass Publishing.

Baldwin, J. (1995). Literacy skills of adults and potential college skills. *American Council of Education Research Briefs, 6*(4).

Baumgartner, L. M., Lee, M. Y., Birden S., & Flowers, D. (2003). *Adult Learning Theory: A Primer. Information Series.* (ERIC Document Reproduction Service No. ED482337)

Bean, J. P. (1985). Interaction effects based on class level in an exploratory model of student attrition. *Research in Higher Education, 12*, 35-64.

Bean, R. (1992, March 7). *Creating a comprehensive workplace TESOL & literacy service.* Paper presented at the TESOL '92 Convention, Vancouver, British Columbia.

Bean, R. (1994) Integrating communication and skills training. *Open Letter, 6*(1) 17-30.

Beder, H. (1991). *Adult literacy: Issues for policy and practice.* Malabar, FL: Krieger Publishing Co.

Beder, H., & Medina, P. (2001, December). *Classroom dynamics in adult education.* (National Center for the Study of Adult Education Report No. 18). Washington, DC: US Department of Education.

Bezwick, S. (2004). *Sudan's blood memory: The legacy of war, ethnicity, and slavery in early South Sudan.* Rochester, NY: Rochester Press.

Bingman, B., & Stein, S. (2001). *Results that matter: An approach to program quality using equipped for the future.* Washington, DC: National Center for the Study of Adult Learning and Literacy. (ERIC Document Reproduction Service No. ED458397)

Bonham, L. A., & Luckie, J. A. (1993). Taking a break in schooling: Why community colleges stop out. *Community College Journal of Research and Practice, 17*(3), 257-270.

Boylan, H. R. (1981). Program evaluation: Issues, needs, and realities. In C. Walvekar (ed.), *Assessment of learning assistance services* (pp. 3-17). San Francisco: Jossey-Bass.

Boylan, H. R. (1999). Exploring alternatives to remediation. *Journal of Developmental Education, 22*(3), 2-10.

Boylan, H. R. (2001). Developmental students: Why are they here and who are they? In V. L. Farmer and W. A. Barham (Eds.), *Selected models of developmental education programs in higher education* (pp. 5-22). New York: University Press of America.

Boylan, H. R., Bliss, L. B., & Bonham, B. S. (1992). The impact of developmental programs. *Research in Developmental Education, 10*(2), 1-4.

Boylan, H. R., Bliss, L. B., & Bonham, B. S. (1994). Characteristic components of developmental programs. *Journal of Developmental Education 11*(1), 1-4.

Boylan, H. R., Bliss, L. B., & Bonham, B. S. (1997). Program components and their relationship to student performance. *Journal of Developmental Education, 20*(3), 2-8.

Braley, R. T., & Ogden, W. (1997). When failing indicates higher graduation potential. *College Student Journal, 31*(2), 243-250.

Brawer, F. B. (1995). *Policies and programs that affect transfer.* Los Angeles: Center for the Study of Community Colleges. (ERIC Document Reproduction Service No. ED385336).

Braxton, J. M. Sullivan, A. V., & Johnson, R. M., Jr. (1997). Appraising Tinto's theory of college student departure. In J. C. Smart (Ed.) *Higher education: Handbook of theory and research: Vol. 4.* New York: Agathon.

Bray, D. (1987). Assessment and placement of developmental and high-risk students. *New Direction for Community Colleges, 57,* 33-48.

Bray, D. (2001). A comprehensive assessment learning model: The CAL approach. In V. L. Farmer and W. A. Barham (Eds.), *Selected models of developmental education programs in higher education* (pp.303-340). New York: University Press of America.

Bruning, R. H., Gregory, J. S., Norby, M. M. & Ronning, R. R. (2004). *Cognitive psychology and instruction* (4th Ed.). Upper Saddle River, NJ: Pearson Education, Ltd.

Burgess, L. A., & Samuels, C. (1999). Impact of full-time versus part-time instructor status on college student retention and academic performance in sequential courses. *Community College Journal of Research and Practice, 23*(5), 487-498.

Butterworth, B. (1999). *What counts: How every brain is hardwired for mathematics.* New York: Simon & Shuster.

Carbone, G. J. (1987). Academic support services for developmental and high-risk students in community colleges. *New Directions for Community Colleges, 57,* 23-31.

Casazza, M. E., & Silverman, S. L. (1996). *Learning assistance and developmental education: A guide for effective practice.* San Francisco: Jossey-Bass Publishers.

Chaves, C. A. (2003). Student involvement in the community college setting. *ERIC Digest for Community Colleges.* (ERIC Document Reproduction Service No. ED477911)

Christie, N. G., & Dinham, S. M. (1991). Institutional and external influences on social integration in the freshman year. *Journal of Higher Education, 62*(2), 412-435.

Claxton, G. (1999). *The challenge of lifelong learning.* New York: Bloomsbury

Clowes, D. A. (1981). Evaluation methodologies for learning assistance programs. In C. Walvekar (ed.), *Assessment of learning assistance services* (pp. 17-32). San Francisco: Jossey-Bass.

Clowes, D. A. (2001). Program evaluation for remedial, compensatory, and developmental education: Definitional problems and design decisions. In V. L. Farmer and W. A. Barham (Eds.), *Selected models of developmental education programs in higher education* (pp.341-358). New York: University Press of America.

Cohen, A. M. (1975). *College responses to community demands.* San Francisco: Jossey-Bass Publishers.

Cohen, A. M. & Brawer, F. B. (1987). *The collegiate function of community colleges: Fostering higher learning through the curriculum and student transfer.* San Francisco: Jossey-Bass Publishers.

Cohen, A. M. & Brawer, F. B. (2003). *The American community college* (4th ed.). San Francisco: Jossey-Bass Publishers.

The College Board, (2005). *About CLEP®.* Retrieved March 15, 2005, from http://www.collegeboard.com/student/testing/clep/about.html

Collins, A. (1990). Reformulating testing to measure learning and thinking. In N. Frederiksen, R. Glaser, A. Lesgold & M. G. Shafto (Eds.), (75-88). *Diagnostic monitoring of skill and knowledge acquisition.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Community College Survey of Student Engagement (CCSSE). (2004). *The 2003 Benchmarks of Effective Educational Practice.* Retrieved September 22, 2004, from http://wwww.ccsse.org

Cress, B. H. (2003). Persistence of underprepared community college students related to learning assistance center use. *Proquest Information and Learning Company.* (UMI No. 3080870)

Cross, K. P. (1981). *Adults as learners.* San Francisco: Jossey-Bass.

Cross, W., Jr. (1971). Discovering the Black referent: The psychology of Black liberation. In J. Dixon and B. Foster (Eds.), *Beyond Black or White.* Boston: Little, Brown.

Cummins, J. (1981). *Bilingualism and minority-language children.* Ontario: Ontario Institute for Studies in Education.

Cummins, J., & Sayers, D. (1995). *Brave new schools: Challenging cultural illiteracy through global learning networks*. New York: St. Martins Press.

Cummins, J., & Swain, M. (1986). *Bilingualism in education: Aspects of theory, research and practice*. New York: Longman.

Daloz, L. A. (1999). *Mentor: Guiding the journey of adult learners* (2nd ed.). San Francisco: Jossey Bass, Inc.

Dick, W., & Carey, L. (1996). *The systematic design of instruction* (4th ed.). New York: HarperCollins.

Donahan, D. A. (2003, October). The correlation between attendance, grades and the nontraditional student. *Business Education Form, 58*(1), 45-47.

Driscoll, M. P. (2005). *Psychology of learning for instruction* (3rd ed.). Boston: Pearson.

DuBois, N. (2001). A developmental information processing model: Metacognition and self-regulated learning. In V. L. Farmer and W. A. Barham (Eds.), *Selected models of developmental education programs in higher education* (pp.25-62). New York: University Press of America.

Educational Testing Service [ETS], (2005). *The Praxis series: Advancing professional excellence*. Retrieved March 25, 2005, from http://www.ets.org/praxis/

Elkins, S. A., Braxton, J. M & James, G. W. (2000). Tinto's separation stage and its affect on first-semester college freshman persistence. *Research in Higher Education, 41*(2), 251-68.

Ewell, P. T. (1994). The assessment movement: Implications for teaching and learning. In T. O'Banion (Ed.), *Teaching and learning in the community college*. (73-96). Washington, DC: Community College Press.

FAFSA, (2005) *Free application for federal student aid*. U.S. Department of Education. Retrieved January 26, 2005, from http://www.fafsa.ed.gov/

Fagbeyiro, G. O. (2001). Learner characteristics and computer feedback strategies: A model for developmental studies. In V. L. Farmer and W. A. Barham (Eds.), *Selected models of developmental education programs in higher education* (pp.265-299). New York: University Press of America.

Farmer, V. L., & Barham, W. A. (2001). An integrated developmental education model: A comprehensive approach. In V. L. Farmer and W. A. Barham (Eds.), *Selected*

*models of developmental education programs in higher education* (pp.451-470). New York: University Press of America.

Fields, A. M. (2004) Iowa's community college transfer students: comparison of graduation rates with non-transfer students at the Iowa regent universities. To be submitted to the Community College journal of Research and Practice.

Firestone, W. A., & Dawson, J. A. (1988). Approaches to qualitative data analysis: Intuitive, procedural, and intersubjective. In D. M. Feterman (Ed.), *Qualitative approaches to evaluation in education.* New York: Praeger

Fowler, A. E., & Scarborogh, H. S. (1993, September). *Should reading-disabled adults be distinguished from other adults seeking literacy instruction?* (National Center for the Study of Adult Education Report No. 93-7). Washington, DC: US Department of Education.

Gaff, J. G., & Ratcliff, J. L. (1997). *Handbook of the undergraduate curriculum: A comprehensive guide to purposes, structures, practices, and change.* San Francisco: Jossey Bass.

Galbraith, M. W. (Ed.). (1998a). *Adult learning methods: A guide for effective instruction* (2nd ed.). Malabar, FL: Krieger Publishing.

Galbraith, M.W. (1998b). Becoming an effective teacher of adults. In M. W. Galbraith (Ed.) *Adult learning methods: A guide for effective instruction* (2nd ed., pp. 3-19). Malabar, FL: Krieger Publishing.

Gardner, H. (1983). *Frames of Mind: The theory of multiple intelligences, tenth anniversary edition.* New York: HarperCollins.

Gollnick, D. M. & Chinn, P. C. (1990). *Multicultural education in a pluralistic society* (3rd ed.). Columbus, OH: Merrill Publishing.

Gordon, V. N. (1992). *Handbook of academic advising.* Westport, CT: Greenwood Press.

Gourgey, A. F. (1994). Metacognition in basic skills instruction. In H. J. Hartman (Ed.), *Metacognition in learning and instruction: Theory, research and practice.* (17-32). Dordrecht, The Netherlands: Kluwer Academic Publishers.

Griffin, M., & Connor, A. (1994). *Democracy's open door: The community college in America's future.* Portsmouth, NH: Boynton/Cook Publishers.

Grimes, S. K. (1997). Underprepared community college students: Characteristics, persistence, and academic success. *Community College Journal of Research and Practice, 21*(1), 47-56.

Guba, E. G., & Lincoln, Y. S. (1982). Epistemological and Methodological Bases of Naturalistic Inquiry. *Educational Communication and Technology: A Journal of Theory, Research, and Development, 30*(4), 233-52.

Gunning, T. G. (2002). *Assessing and correcting reading and writing difficulties* (2nd ed.). Boston: Allyn & Bacon.

Hagedorn, L., Maxwell, W. Chen, A. Cypers, S., & Moon, H. S. (2002, November 21). *A community college model of student immigration, language, GPA, and course completion.* Paper presented at the Annual Meeting of the Association for the Study of Higher Education. (ERIC Document Reproduction Service No. ED471578)

Halpin, R. L. (1990). An application of the Tinto model to the analysis of freshman persistence in a community college. *Community College Review, 17*(4), 22-32.

Hamm, R. E. (2004). Going to college: Not what it used to be. In K. Boswel & C. D. Wilson (Eds.) *Keeping America's promise: a report on the future of the community college.* (pp. 29-31). Retrieved August 18, 2004, from http://www.communitycollegepolicy.org

Harklau, L., Losey, K. M. & Siegal, M. (1999). *Generation 1.5 meets college composition: Issues in the teaching of writing to U.S. educated learners of ESL.* Mahwah, NJ: L. Erlbaum Associates.

Harris, B. W. (1998). Looking inward: Building a culture for student success. *Community College Journal of Research and Practice, 22,* 401-418.

Hergenhahn, B. R., & Olson, M. H. (1997). *An introduction to theories of learning* (5th ed.). Upper Saddle River, NJ: Prentice Hall.

Higbee, J. L., & Dwinell, P. L. (1997). Do developmental education programs really enhance retention? A commentary. NADE Monograph. Retrieved July 7, 2004, from http://www.nade.net/h2d__1997_monograph.htm

Higbee, J. L., & Dwinell, P. L. (1998). *Developmental education: Preparing successful college students.* Columbia, SC: University of South Carolina.

Hodges, J. L. (1999). The effects of first-generation status upon the first year college success patterns of students attending an urban multi-campus community college.

(Doctoral Dissertation, Wayne State University, 1999) ERIC Documentation Reproduction Service No. ED474344)

Hoffman, K., Llagas, C. & Snyder, T. D. (2003, September). *Status and trends in the education of Blacks*. (NCES 2003-034). National Center for Education Statistics, U.S. Department of Education.

Horne, L., Peter, K., & Rooney, K. (2002, July). *Profile of undergraduates in U.S. postsecondary institutions: 1999-2000.* (NCES 2002-168). Jessup, MD: U.S. Department of Education.

Howell, C. L. (2001). Facilitating responsibility for learning in adult community college students. *ERIC Digest.* (ERIC Document Reproduction Service No. ED451841)

Hudson River Center for Program Development [HRCPD]. (2001) *Guide for managers of adult programs.* Glenmont, NY: New York State Education Department. (ERIC Document Reproduction Service No. ED473419)

Integrated Postsecondary Educational Data System [IPEDS]. (2004). Glossary. Retrieved January 9, 2005, from http://nces.ed.gov/ipeds/glossary/index

Iowa Department of Education. (2003, January). *Iowa community colleges fiscal year 2002 year-end report summary.* Retrieved August 21, 2004, from http://www.state.ia.us/educate/ccwp/cc/reports/yer02.html

Johnson, B., & Christensen, L. (2004). *Educational research: Quantitative, qualitative, and mixed approaches* (2nd ed.). Boston: Allyn and Bacon.

Johnson, J. L. (1997, May). Commuter college students: What factors determine who will persist and who still drop out? *College Student Journal, 31*(3), 323-332.

Jordan, D. R. (1998). *Attention deficit disorder: ADHD and ADD syndromes* (3rd ed.). Austin, TX: Pro-ed Publishers.

Kegan, R. (1994). *In over our heads: The mental demands of modern life.* Cambridge, MA: Harvard University Press.

Kerka, S. (1986). *Deterrents to participation in adult education.* Washington, DC: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED275889)

Kim, B. S. K, Brenner, B. R., Lang, C.T. H., & Assay, P.A. (2003). A quantitative study of adaptation experiences of 1.5 generation Asian Americans. *Cultural Diversity & Ethnic Minority Psychology, 9*(2), 156-170.

Knott, E. S. (1991). Working with culturally diverse learners. *Journal of Developmental Education, 15,* 14-18.

Knowles, M. S. (1990). *The adult learner: A neglected species* (4th ed.). Houston: Gulf Publishing.

Kronick, R. F., & Hargis, C. H. (1998). *Dropouts: Who drops out and why—and the recommended action* (2nd ed.). Springfield, IL: Charles C. Thomas, Publishers.

Laanan, F. S. (2001). Accountability in community colleges: Looking toward the 21st century. In B. K. Townsend & S. B. Twombly (Eds.), *Community Colleges: Policy in the Future Context* (pp. 57-76). Westport, CT: Ablex Publishing.

Larsen-Freeman, D., & Long, M. H. (1991). *An introduction to second language acquisition research.* London: Longman House.

Levin, J. S. (2001). The buffered and the buffeted institution: Globalization and the community college. In B. K. Townsend & S. B. Twombly (Eds.), *Community Colleges: Policy in the Future Context* (pp. 77-100). Westport, CT: Ablex Publishing.

Levin, M., & Levin, J. (1991). A critical examination of academic retention programs for at-risk minority college students. *Journal of College Student Development, 32,* 323-324.

Lincoln, Y. S., & Guba, E. G. (1989) Ethics: The failure of positivist science. *Review of Higher Education, 12*(3), 221-40.

Liu, R. (2002, June 2-5). *A methodological critique of Tinto's retention theory.* Paper presented at The International Forum for Research, Toronto, Ontario. (ERIC Document Reproduction Service No. ED 473109)

Long, H. B. (1998). Understanding adult learners. In M. W. Galbraith (Ed.) *Adult learning methods: A guide for effective instruction* (2nd ed., pp. 21-35). Malabar, FL: Krieger Publishing.

Lutzker, M. (1995). *Multiculturalism in the college curriculum: A handbook of strategies and resources for faculty.* Westport, CT: Greenwood Press.

MacDonald, R. B., & O'Hear, M.F. (1996). A critical review of research in developmental education: Part II. *Journal of Developmental Education, 19*(3), 8-14.

Maxwell, M. (1997). What are the functions of a learning assistance center. (ERIC Document Reproduction Service No. ED413031)

Mayer, R. E. (2001). Cognitive, metacognitive, and motivational aspects of problem solving. In H. J. Hartman (Ed.), _Metacognition in learning and instruction: Theory, research and practice_. (87-102). Dordrecht, The Netherlands: Kluwer Academic Publishers.

McGrath, D., & Spear, M. B. (1991). _The academic crisis of the community college_. New York: State University of New York Press.

McGrath, D., & Townsend, B.K. (1997). Strengthening preparedness of at-risk students. In J. G. Gaff and J. L. Ratcliff (Eds.), _Handbook of the undergraduate curriculum: A comprehensive guide to purposes, structures, practices, and change_. San Francisco: Jossey-Bass Publishers.

Merrifield, J. (1998). _Contested ground: Performance accountability in adult basic education_. (National Center for the Study of Adult Learning and Literacy [NCSALL] Report #1). Boston, MA: National Institute on Postsecondary Education, Libraries, and Lifelong Learning.

Merriam, S. B., & Caffarella, R. S. (1999). _Learning in adulthood: A comprehensive guide_ (2nd Ed.). San Francisco: Jossey-Bass.

Merriam, S. B. & Clark, M. C. (1991). _Lifelines: Patterns of work, love, and learning in adulthood_. San Francisco: Jossey-Bass.

Minor, E. (2003, August 13). _History of colonial and missionary linguistics in the Southern Sudan_. Retrieved April 30, 2005, from Nuer field notes at http://www.dlib.indiana.edu/collections/nuer/index.html

Murphy, S., & Murphy, T. (1997). _Creativity as a core competency_. Paper presented at the 23rd National Consultation on Career Development. (ERIC Document Reproduction Service no. ED249250)

Murray, C. (2003, January/February). Risk factors, protective factors, vulnerability, and resilience: A framework for understanding and supporting the adult transitions of youth with high-incidence disabilities. _Remedial and Special Education, 24_(1), 16-26.

Mutter, P. (1992). Tinto's theory of departure and community college student persistence. _Journal of College Student Development, 33_, 310-317.

National Center for Education Statistics (NCES). (2002). Quick tables and figures. Retrieved August 30, 2004, from http://nces.ed.gov

National Council of La Raza, (NCLA). (2003). *NCLR Agenda for Hispanic Families: A public policy briefing book*. Washington, DC: National Council of La Raza. (ERIC Documentation Reproduction Service No. ED480990)

O'Banion, T. (1989). The renaissance of innovation. In T. O'Banion, (ed.), *Innovation in the community college* (pp. 1-22). New York: Collier Macmillan.

O'Banion, T. (1994). Guidelines for auditing the effectiveness of teaching and learning. In T. O'Banion (Ed.), *Teaching and learning in the community college*. (301-318). Washington, DC: Community College Press.

Ogbu, J. U. (1992). Understanding cultural diversity and learning. *Educational Researcher, 21*(8), 5-14.

Ogunyemi, O. A. (2001). A systems model for designing curriculum for developmental studies. In V. L. Farmer and W. A. Barham (Eds.), *Selected models of developmental education programs in higher education* (pp185-202). New York: University Press of America.

Palmer, J. C., & Zimbler, L. J. (2000, May). *Instructional faculty and staff in public 2-year colleges*. (NCES Publication 2000-192). Washington, DC: National Center for Educational Statistics, Department of Education.

Parnes, S. J. (1967). *Creative behavior guidebook*. New York: Schriber.

Parsad, B., & Lewis, L. (2003). *Remedial education at degree-granting postsecondary institutions in fall 2000*. Washington DC: National Center for Education Statistics, U.S. Department of Education.

Pascarella, E. T., Smart, J. C., & Ethington, C. A. (1986). Long-term persistence of two-year college students. *Research in Higher Education, 24*(1), 47-71.

Pierson, K. P. (1993). Effectiveness of developmental courses and the voluntary placement system at an Iowa community college. Dissertation Abstracts International, 54 (7), AAT 9335009. (UMI No. 9335009)

Piantaninda, M., & Garman, N. B. (1999). *The qualitative dissertation: A guide for students and faculty*. Thousand Oaks, CA: Corwin Press, Inc.

PLATO, Learning™ (2003). PLATO® K-12 & adult learning technologies software and service guide. Bloomington, MN: PLATO Learing, Inc.

Reder, S. Hart-Landsberg, K. R., Schwab, R. G., & Wikelund, K. R. (1991). *Literacy development: Transitions, opportunities and participation*. Philadelphia: National Center on Adult Literacy, University of Pennsylvania.

Rhoads, R. A., & Valadez, J. R. (1996). *Democracy, multiculturalism, and the community college: A critical perspective.* New York: Garland.

Richardson, R. C., Jr., & Bender, L. (1987). *Fostering minority access and achievement in higher education: The role of urban community colleges and universities*. San Francisco: Jossey-Bass.

Richardson, R. C., Jr., & Elliott, D. B. (1994). In T. O'Banion (Ed.), *Teaching and learning in the community college*. (97-114). Washington, DC: Community College Press.

Richardson, R. C., Jr., & de los Santos, G. E. (2001). In B. K. Townsend & S. B. Twombly (Eds.), *Community colleges: Policy in the future context* (pp. 57-76). Westport, CT: Ablex Publishing.

Sandler, I. N. (1981, August 24-26). *On buffers and boosters: Social support for negative and positive life events.* Paper presented at the Annual Convention of the American Psychological Association, Los Angeles. (ERIC Document Reproduction Service No. ED210599)

Scanlan, C. (1986). *Deterrents to participation: An adult education dilemma.* Information Series no. 308. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education. Ohio State University. (ERIC Document Reproduction Service No. ED 272768)

Scollon, R. & Scollon, S. W. (1995). *Intercultural communication: A discourse approach.* Oxford: Blackwell.

Shaw, R. G. (1989). Curriculum change in the community college: Pendulum swing or spiral soar?. In T. O'Banion (ed.), *Innovation in the community college* (pp. 23-45). New York: McMillan.

Stein, S. (2000). *Equipped for the Future content standards: What adults need to know and be able to do in the 21$^{st}$ century.* Washington DC: National Institute for Literacy: Equipped for the Future.

Sternberg, R. J. (2001). Metacognition, abilities, and developing expertise: What makes an expert student? In H. J. Hartman (Ed.), *Metacognition in learning and*

*instruction: Theory, research and practice.* (247-260). Dordrecht, The Netherlands: Kluwer Academic Publishers.

Szelenyi, K. (2002). National transfer rates are up! Results of the 2001 Transfer Assembly Project. (ERIC Document Reproduction Services No. ED482719)

Szelenyi, K, & Chang, J. C. (2002). Educating immigrants: The community college role. *Community College Review, 30*(2), 55-73.

Thorne, J. & Fleenor, J. (1993). *Profiles of the adult education target population: Information from the 1990 census.* Washington, DC: Center for Research in Education, U.S. Department of Education.

Thomas, W. P., & Collier, V. P. (2001). *A national study of school effectiveness for language minority students' long-term academic achievement.* Washington, D.C.: U.S. Department of Education, Center for Research on Education, Diversity & Excellence.

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition.* Chicago: University of Chicago Press.

Tinto, V. (1996). Reconstructing the first year of college. *Planning for Higher Education, 25*(1), 1-6.

Tinto, V. (1997). Classroom as communities: Exploring the educational character of student persistence. *Journal of Higher Education 68*(6), 599-623.

Tinto, V., & Russo, R. (1994). Coordinated study programs: Their effect on student involvement in a community college. *Community College Review, 22*(2), 16-25.

Torff, B., & Sternberg, R. J. (1998). Changing mind, changing world: Practical intelligence and tacit knowledge in adult learning. In M. C. Smith & T. Pourchot (Eds.), *Adult learning and development: Perspectives from educational psychology.* (pp. 109-126). Mahwah, NJ: Lawrence Erlbaum Associates.

Torrence, E. P. (1970). *Creative learning and teaching.* New York: Dodd.

Turner, M. (1997). *Psychological assessment of dyslexia.* San Diego, CA: Singular Publishing Group.

U.S. Department of Education (DOE). (2005). *FAFSA on line.* Retrieved from January 25, 2005, from http://www.fafsa.ed.gov

Venezky, R. L., Bristow, P .S., & Sabatini, J. P. (1994, April). *Measuring gain in adult literacy programs.* (Technical Report TR93-12). Philadelphia: National Center on Adult Literacy.

Werner, E. E. (1993). Protective factors and individual resilience. In S. J. Meisels & J. D. Shonkoff (Eds.), *Handbook of early childhood intervention.* New York: Cambridge University Press.

White, R.V. (1988). *The ELT curriculum: Design, innovation and management.* Oxford, England: Blackwell.

Wlodowski, R. J., & Ginsberg, M. B. (1995). Diversity and motivation: Culturally responsive teaching. San Francisco: Jossey-Bass Publishers.

Worthen, B. R., Sanders, J. R., & Fitzpatrick, J. L. (1997). *Program evaluation: Alternative approaches and practical guidelines* (2$^{nd}$ ed.). New York: London.

Wynn, E. S. Belton, A. H., Porter, P. R., & Jaggers, L. W. (2001). A whole language model employing collaborative activities to teach developmental college readers. In V. L. Farmer and W. A. Barham (Eds.), *Selected models of developmental education programs in higher education* (pp. 265-299). New York: University Press of America.

APPENDIX A

QUESTIONNAIRE INFORMATION

There are 15 basic questions that I asked in the interviews. However, the objective of the interviews was not just to get the students to respond to these 15 basic questions. The objective was to get them to describe how they feel, tell their personal stories, and to elaborate on how education has changed their situations and their lives. My methodology required that the students be given open-ended questions which would allow them free responses. However, it was sometimes necessary to bring them back to the topic of the study if their stories ranged too widely. Sometimes, it was also be necessary to stimulate their memory or to rephrase a question so that they could better understand its purpose. Therefore, I have included a number of prompts. These were additional questions that were asked if the student lost his/her train of thought or if they needed additional guidance in order to properly answer the question.

1. Tell me about your life as you were growing up.

   - Did you live with both of your parents?

   - Did you have brothers and sisters?

   - What was your economic situation?

   - Did you move around a lot?

   - What kinds of jobs did you do in your family?

   - Do you think you were happy?

2. How did your family view education?

   - Did your parents go to college?

- Were and your siblings encouraged in school?

- Were there books and magazines in the home?

- Did your parents teach you things?

- Did your mom or dad help you with you homework?

- Did your cousins or uncles or anyone in your family go to college?

- Did you watch a lot of TV?

3. Tell me about elementary school.

- What did you like?

- Did you have good teachers?

- How did you get along with the people in school?

- Do you think you did well?

- How were the other kids?

- How did your parents interact with the school and the teachers?

- Did your parents go to teacher's conferences?

4. Tell me about your high school experience.

- What subjects did you like?

- What subjects did you hate?

- How were your teachers?

- Did you get in trouble?

- Were you popular?

- Did you finish high school?

- How did your family view high school?

- What kind of student were you?

- What did you do for fun?

- Were you in any school activities?

5. What happened after you finished high school?

- Did you go to work?

- Get married?

- Have a family?

- How did it go?

- Did you like working?

- Were you happy?

- What made you decide to come back to school?

6. What is your economic situation now?

- How are you paying for college?

- How many hours do you have to work?

- Does your spouse work?

- How does your spouse feel about you going to college?

- Do you have children?

- How about your extended family, your relatives, do they help you with problems that you have to overcome in order to complete your education?

- What do you do if you have car trouble?

- What do you do if one of the children gets sick and can't go to daycare?

- Are you living in the dormitory?

- Are you renting? Buying?

- Do you live in town or on a farm or in a small town around here?

7. When you first came here, what did you want from your education?

- What was your major?

- What were your diagnostic (COMPASS or ACT) test scores?

- What kind of grades did you expect?

- What subjects did you think were going to be the most difficult?

- What skills did you think that you already had?

- What did you think was going to be different about this experience compared with your high school or previous college experience?

- What influenced the change?

- What was your initial plan?

- Were you working toward a four-year degree?

8. What was your college experience like?

- How did you like the teachers you worked with? Were there some you liked better than others? Why?

- Did you get the grades that you thought you were going to get?

- What new skills did you have to learn?

- How did your approach to your classes change?

- What did you learn about yourself?

- Do you have the same major as you did when you started?

- Did you think about changing your major after you started?

- Did you decide to change your long-range goals—go for a four-year degree or stay with a two-year?

- What classes did you find were the most difficult?

9. Besides academic problems, what kinds of problems did you face as a student?

- Did you have personal problems that you had to overcome? (motivation, anger, procrastination, etc?)

- Did you have economic problems? (loss of job, housing, financing)

- Did you have family issues? (health, divorce, child, parents, relationships)

10. Were their changes in your situation that affected you as you went through college?

- Change in family size?

- Loss of relative or close friend?

- Marriage?

- Better job/social situation?

11. What support network do you use?

- Family?

- Friends?

- Social services?

- Workforce development?

- Church?

- College?

- Other?

- How has this changed since you started?

- Did you make new friends?

- Did you get a new job? (How?)

12. What cultural difficulties did you face?

- What were the language problems you faced?

- How did your cultural background help you?

- How did your culture make it difficult for you?

- Did you experience any problems because of the way that people treated you?

- How did you learn English?

13. How did you overcome your problems?

- What do you think are your strongest characteristics?

- Did these strengths help you to stay in school?

- How did you develop these strengths and make them stronger?

14. What kind of activities were you involved in at school?

- Do you have time for school activities?

- What kinds of organizations do you belong to outside of school?

15. How would you define success?

- What do you think success is for you?

- Do you think it's the same thing that the college wants out of successful students?

- How would you define success for your children?

- What goals do you have for yourself after you finish college?

- How have these goals changed since you started college?

- Will college change things at work for you?

- Will they change you in your workplace?

- Will college mean a better career? How so?

- What do you want your children to understand about college?

- Do you think that you will become more involved in the community after you graduate?

- Do you think that you will become more involved in community organizations?

- Do you vote? Will you? Have you?

16. How did the LAC contribute to your success?

- Did the LAC help you discover what type of learner you are?

- Did the LAC help you overcome any special problems?

- What kinds of things did you learn in the LAC?

- How much time did you spend there?

- How would you characterize your relationship with the LAC staff?

- How would you characterize your relationship with the rest of your professors?

- How did the LAC affect your ability to learn?

- Did you meet new friends in the LAC?

- Do you still have friends from the LAC?

- Did you use the LAC rather than the library? If so, why, if not, why not?

- Did the LAC staff help you with your scheduling?

- Did the LAC staff help you with your academics?

- Did you receive peer tutoring?

- Did you receive any special accommodations for any disability?

17. How could things in the LAC be improved?

- What could the staff do to make it easier to learn?

- What resources (books, equipment, etc) could be included?

- If you could change one thing about the LAC, what would it be?

APPENDIX B

NUMERICAL LIST OF INITIAL CONCLUSIONS

I. There are many ways to define success:

    1. Traditional

    2. Graduation

    3. Grade Point Average

    4. Transition to the next level of education (University)

    5. Getting a job in the chosen career field

II. Family support

    1. Earning enough to provide a home for your family

    2. Reaching your own financial goals

    3. Teaching your children and sponsoring their education

    4. Helping out with your extended family

III. On the job

    1. Getting a promotion or getting a job in your field

    2. Having the respect of the people you work with

IV. In your community

    1. Getting involved in community projects

    2. Helping others who are like you

    3. Changing the system

V. These are some of the major problems that students face when they come to

college:

1.  Being unprepared

    a)  Math

    b)  English

    c)  Reading

    d)  Writing

    e)  Science

    f)  History

    g)  Social sciences

2.  Financial and logistical problems

    a)  Financial aid FAFSA

    b)  Transportation

    c)  Housing

    d)  Daycare

3.  Emotional issues

    a)  Not knowing what to do first

    b)  Not knowing how to overcome an academic problem

    c)  Not knowing how to fix problems outside of college that make study and attendance difficult

    d)  Fear about getting started was a big problem

    e)  I trusted the college to get me going the right way

VI.  While I was in college:

    1.  I leaned that career knowledge is really important

2. I needed to change my career goals

3. I learned how to learn things

4. I expanded my knowledge about things outside of my career

5. I improved in my weak areas

6. I developed my strengths

7. I discovered new strengths

8. I learned new ways of dealing with people

9. I learned how to make the system work for me

10. I learned that focus, responsibility, and endurance were important

11. I learned things that made me appreciate life more

12. I can understand things like art, politics, and literature better now

13. I am not confused by technology now

14. I know that even when bad things happen, I can find a way to make my life work and create a new opportunity

15. I made lots of new friends

APPENDIX C

QUESTIONS FOR SECONDARY ANALYSIS

1. How do you rate the different definitions of success in your own life?

2. Which of those definitions suits you best?

3. Which suits you least?

4. Did you agree with the college's testing and assessment of you? Do you think

   you were put in the right courses?

5. Were emotional issues important to you?

6. Do you feel differently now than when you started? How are you different?

7. Which things on the list of learned items do you think applies to you?

8. Which do not?

## GENERAL DATA ON PARTCIPANTS

|  | Alfred | Brent | Carol | Diana | Ellen | Francis | Gilda | Harriet | ira | Jim |
|---|---|---|---|---|---|---|---|---|---|---|
| **Personal Data** | | | | | | | | | | |
| Gender | Male | Male | Female | Female | Female | Female | Female | Female | Male | Male |
| Birth date | 4/3/1971 | 4/2/1972 | 5/10/1978 | 9/20/1980 | 1/3/1961 | 12/22/1968 | 9/11/1953 | 11/16/1953 | 8/19/1960 | 7/4/1969 |
| Origin | Sudan | Sudan | Mexico | Mexico | IA | IA | IA | IA | IA | WISC |
| Citizenship Status | Res/refugee | Res/refugee | IMM/CIT | IMM/CIT | CIT | CIT | CIT | CIT | CIT | CIT |
| First Language | Nuer | Nuer | Spanish | Spanish | English | English | English | English | English | English |
| Disabilities | None | None | None | None | None | None | None | None | None | None |
| Health | None | None | None | None | None | None | None | Yes | None | None |
| Mental Health | None | None | None | None | None | None | Yes | Yes | Yes | None |
| Race | African | African | Hispanic | Hispanic | Caucasion | Caucasion | Caucasion | Caucasion | Caucasion | Caucasion |
| Drug/alcohol addiction | None | None | None | None | None | None | Yes | None | Yes | Yes |

Res = Resident
IMM = Immigrant
CIT = Citizen

APPENDIX D

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## FAMILY AND SOCIAL DATA

| | Alfred | Brent | Carol | Diana | Ellen | Francis | Gilda | Harriet | ira | Jim |
|---|---|---|---|---|---|---|---|---|---|---|
| **Family Issues** | | | | | | | | | | |
| Marital Status | Single | Married | D IVORCED | Single | Single | Widow | Widow | Divorced | Married | Single |
| Number of children | 0 | 5 | 0 | 0 | 3 | 3 | 1 | 0 | 3 | 0 |
| Extended family radius | UNK | 5 | 5 | 5 | 5 | 5 | 0 | 50 | 50 | 0 |
| Spouse education (Years) | N/A | 3 | N/A | N/A | N/A | N/A | N/A | N/A | 9 | N/A |
| Father's education | 0 | 0 | 6 | 16 | 12 | 12 | 12 | 6 | 0 | 12 |
| Mother's education | 0 | 0 | 3 | 12 | 12 | 12 | 12 | 6 | 6 | 12 |
| Education viewed in the home | UNK | UNK | POS | POS | POS | POS | POS | NEG | NEG | POS |
| | | | | | | | | | | |
| **Economic Issues** | | | | | | | | | | |
| FAFSA | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Income source | None | Working | Working | Working | Grants | Grants | Grants | Grants | Work | Grants |
| Working (ave hr. per week) | 0 | 40 | 30 | 30 | 0 | 0 | 0 | 10 | 25 | 0 |
| Work history | Good | Good | Good | Good | Good | Good | Good | Good | Good | Good |
| | | | | | | | | | | |
| **Community Involvement** | | | | | | | | | | |
| Neighbors | 3 | 5 | 5 | 5 | 3 | 3 | 1 | 1 | 1 | 1 |
| Religious groups | 5 | 5 | 5 | 5 | 3 | 3 | 1 | 1 | 1 | 1 |
| Legal problems | NO | NO | NO | NO | NO | NO | NO | NO | YES | NO |
| Military background | NO | YES | NO | NO | NO | NO | NO | NO | NO | YES |

0 to 5 is POS to NEG

APPENDIX E

## ACADEMIC ISSUES AND HIGH SCHOOL PREPARATION

| | Alfred | Brent | Carol | Diana | Ellen | Francis | Gilda | Harriet | ira | Jim |
|---|---|---|---|---|---|---|---|---|---|---|
| **Academic Issues** | | | | | | | | | | |
| Degree type | AS | AS | AA | AA | GS | GS | AA | AS | AA | AG |
| Major | Computer Network | Web Page Design | Elementary Eduation | Business Administration | Nursing | Nursing | Psychology | Accounting | Computer Networking | General Studies |
| Total credits | 89 | 85 | 87 | 75 | 107 | 89 | 96 | 94 | 95 | 67 |
| Non-major (transfer) credits | 0 | 0 | 16 | 16 | 0 | 0 | 6 | 16 | 12 | 8 |
| Developmental credits | 24 | 25 | 23 | 11 | 3 | 7 | 9 | 14 | 7 | 3 |
| GPA CREDITS | 65 | 65 | 48 | 48 | 104 | 68 | 81 | 64 | 76 | 56 |
| GPA | 2.6541 | 2.2579 | 2.6815 | 3.8963 | 3.0916 | 3.18 | 3.1404 | 3.729 | 2.9301 | 2.4529 |
| Attendance % of possible days | 95 | 80 | 95 | 95 | 95 | 90 | 80 | 90 | 85 | 80 |
| Drop/redo credits | 14 | 12 | 3 | 0 | 59 | 21 | 22 | 6 | 15 | 21 |

AS = Associate in Science, AA = Associate in Arts, LPN = Lisenced Practical Nurse

**High school preparation (Number of years courses were taken in high school)**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Graduate? | NON US | NON US | SP GED | Yes | Yes | Yes | Yes | GED | GED | GED |
| Math | 0 | 0 | 1 | 3 | 1 | 1 | 1 | 0 | 1 | 1 |
| English | 0 | 0 | 1 | 2 | 1 | 2 | 1 | 0 | 1 | 1 |
| Science | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 |
| Social Sciences | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 |
| Humanities | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 |

APPENDIX F

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# COLLEGE ACADEMIC INFORMATION

| Testing | Alfred | Brent | Carol | Diana | Ellen | Francis | Gilda | Harriet | ira | Jim |
|---|---|---|---|---|---|---|---|---|---|---|
| R-ESL | 66 | 44 | 55 | 99 | N/A | N/A | N/A | N/A | N/A | N/A |
| W-ESL | 39 | 55 | 42 | 78 | N/A | N/A | N/A | N/A | N/A | N/A |
| S-ESL | 43 | 52 | 48 | 99 | N/A | N/A | N/A | N/A | N/A | N/A |
| READ | 39 | 38 | 62 | 53 | 89 | 93 | 86 | 65 | 62 | 78 |
| WRITE | 22 | 24 | 12 | 30 | 66 | 83 | 94 | 28 | 91 | 87 |
| MATH 1 | 39 | 24 | 22 | 85 | 33 | 39 | 39 | 32 | 100 | 47 |
| MATH 2 | N/A | N/A | N/A | 85 | N/A | N/A | N/A | N/A | N/A | N/A |

Post secondary grades by area

| | Alfred | Brent | Carol | Diana | Ellen | Francis | Gilda | Harriet | ira | Jim |
|---|---|---|---|---|---|---|---|---|---|---|
| Math | 1.835 | 1 | 2 | 4 | 3.415 | | 1 | 3.5 | 2 | 2 |
| English | 2.5 | 1.67 | 2.89 | 3.5567 | 3.375 | 3 | 2.625 | 3.6667 | 2.665 | 2.5 |
| Soc science | 1.67 | 0.67 | 2.4467 | 3.89 | 2.75 | 3.3333 | 3.3333 | 3.3333 | 2.5 | 1.6667 |
| Humanities | 0 | 0 | 2.92 | 4 | 2.5385 | | 2.8144 | 4 | 2.89 | 2 |
| Major | 3.779 | 3.154 | 2.6117 | 3.9588 | 3.2333 | 3.03 | 3.5797 | 3.6964 | 3.1671 | |
| Science | | | 2.24 | 4 | 3.0448 | 3.67 | 2 | 3.67 | 2.2843 | 2 |

APPENDIX G

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