

LATINA/O STUDENT SUCCESS AT AN EMERGING HISPANIC SERVING
COMMUNITY COLLEGE: UNDERSTANDING THE HEURISTICS
AT WORK IN THE BLACK BOX

By

DEREK R. BRANDES

A dissertation submitted in partial fulfillment of
The requirements for the degree of

DOCTOR OF EDUCATION

WASHINGTON STATE UNIVERSITY
College of Education

May 2013

©Copyright by Derek R. Brandes, 2013
All Rights Reserved

©Copyright by DEREK R. BRANDES, 2013
All Rights Reserved

To the Faculty of Washington State University:

The members of the Committee appointed to examine the dissertation of DEREK R. BRANDES find it satisfactory and recommend that it be accepted.

Paul E. Pitre, Ph.D., Chair

Xyanthe N. Neider, Ph.D.

Armando Laguardia, Ed.D.

ACKNOWLEDGEMENTS

I owe a great deal of thanks to my chair, Dr. Paul Pitre. Thank you for your continuous encouragement and guidance in making this a dissertation I could be proud of. I appreciate Dr.

Pitre taking his time to continue to work with me on this project despite having other commitments outside of the College of Education.

Thank you to Xyanthe Neider and Armando Laguardia for your insightful comments and willingness to serve on my committee. I appreciate Nancy Kyle and the late Lenoar Foster for serving on my committee for prelims. Thank you to Forest Parkay for serving on my committee during the proposal phase. Also, I want to say thank you to Gail Furman for serving as my initial advisor and helping to get my program off the ground.

Thank you to Miriam Fierro, Gabriella Whitemarsh, Beth Smith, Cindy Hough, Eileen Ely, Chris Johnson, Jessica Tichy, Joyce Hammer, my dad Dave Brandes and wife, Cate for their encouragement and support of this dissertation.

LATINA/O STUDENT SUCCESS AT AN EMERGING HISPANIC SERVING
COMMUNITY COLLEGE: UNDERSTANDING THE HEURISTICS
AT WORK IN THE BLACK BOX

Abstract

by Derek R. Brandes, Ed.D.
Washington State University
May 2013

Chair: Paul E. Pitre

Like many colleges across the United States, Pipe Lake Community College (a pseudonym) has experienced a dramatic increase in enrollment of Latina/o students and is considered an emerging Hispanic Serving Institution (HSI). Other than Santiago & Andrade's (2010) survey, little research has been conducted on emerging HSIs. And, little research has been done on Latina/o student success at community colleges.

Padilla (2009) developed a new line of inquiry focused on student success rather than student departure. Padilla used the metaphor of a black box, a space that is hard to see or measure the processes occurring within, to describe the challenges measuring why some students succeed and others fail in college. This study replicates the approach of Padilla to understanding the student success black box by determining the barriers Latina/o students experience and the knowledge needed and actions taken to overcome these barriers. Twenty-seven successful Latina/o students at PLCC identified 34 barriers that were classified into the following categories: psychological, decision-making, self-discipline, preparation, family, institutional, and

cultural barriers. Successful Latina/o students at PLCC used experiential, procedural, relational and comparative, motivational and anticipatory knowledge tools to address the barriers that they faced and took persuasive, supportive, pragmatic, strategic and introspective actions.

Identification of introspective actions has not been identified in prior student success research utilizing Padilla's approach. PLCC's successful Latino students took internal actions to address the psychological, family and self-discipline barriers they experienced. PLCC staff emphasize resource, preparation, and institutional barriers while the students focused on psychological, decision making and self-discipline barriers.

Based on this case study, several recommendations for PLCC are made including developing a mentoring and a parent involvement program. Success for Latinas/os at PLCC may be dependent upon whether they are selected to participate in grant programs at the college that provide support services. The institution should explore ways to institutionalize the grant programs to serve more students.

Future research on Latina/o student success is needed. Studies on the impact of college staff on Latina/o student success. Also, more research is needed on why the staff and students differed on their perceptions of barriers.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
LIST OF FIGURES	x
DEDICATION	xi
CHAPTER	
1. INTRODUCTION	1
Purpose of Study	4
Research Questions	5
Overview of Conceptual Framework	5
Significance of Study	7
Overview of Methodology	9
Organization of the Dissertation	9
2. LITERATURE REVIEW	11
Latina/o Student Success during College	11
<i>Financial Support</i>	12
<i>Transition to the College Environment</i>	12
<i>Campus Climate</i>	13
<i>Motivation</i>	14
<i>Coping Styles</i>	15
<i>Enrollment Factors</i>	15
<i>Campus Involvement</i>	15
<i>Success Network</i>	16

<i>Family</i>	16
Barriers Latina/o College Students Experience	17
<i>Psychological Barriers</i>	17
<i>Financial Barriers</i>	19
<i>Academic Transition Barriers</i>	19
<i>Lack of Social Network</i>	20
<i>College Climate Barriers</i>	20
<i>Family Barriers</i>	21
Knowledge of Successful Students	21
Actions of Successful Students	23
Summary	23
3. RESEARCH DESIGN	26
Introduction	26
Rationale for a Qualitative Design	26
Methods	27
Site Selection and Description	27
Participant Selection	29
Participants	30
Data Collection	31
Data Analysis	33
Limitations	34
Positionality	34
Summary	35

4. BARRIERS LATINA/O STUDENTS EXPERIENCE	36
Introduction	36
Internal Barriers	37
<i>Psychological Barriers</i>	37
<i>Decision Making Barriers</i>	38
<i>Self-Discipline Barriers</i>	39
<i>Preparation Barriers</i>	40
External Barriers	42
<i>Family Barriers</i>	42
<i>Institutional Barriers</i>	46
<i>Cultural Barriers</i>	48
<i>Resource Barriers</i>	50
Summary	51
5. KNOWLEDGE AND ACTIONS NEEDED TO OVERCOME BARRIERS	52
Introduction	52
Background on Heuristic Knowledge Taxonomies	52
Background on Action Taxonomies	53
<i>Knowledge and Actions Addressing Psychological Barriers</i>	54
<i>Knowledge and Actions Addressing Decision Making Barriers</i>	56
<i>Knowledge and Actions Addressing Self-Discipline Barriers</i>	57
<i>Knowledge and Actions Addressing Preparation Barriers</i>	58
<i>Knowledge and Actions Addressing Family Barriers</i>	59
<i>Knowledge and Actions Addressing Institutional Barriers</i>	60

<i>Knowledge and Actions Addressing Cultural Barriers</i>	61
PLCC Local Model of Latina/o Student Success	62
Summary	64
6. Conclusions, Recommendations and Suggestions for Future Research	66
Introduction	66
Conclusions	66
Recommendations	71
Suggestions for Future Research	72
Summary	73
REFERENCES	75
APPENDIX A – PARTICIPANTS	83
APPENDIX B – TANDEM GROUP PROTOCOL	84
APPENDIX C – INTERVIEW PROTOCOL	86
APPENDIX D – EXAMPLE OF UNFOLDING MATRIX	87
APPENDIX E – BARRIERS	88
Chart 1 – Successful Latinas/os’ Perspectives on Barriers	88
Chart 2 – Staff Perspective on Latina/o Barriers	88

LIST OF FIGURES

	Page
1. Latina/o Educational Attainment	3
2. PLCC Black Box Model of Latina/o Student Success.....	63

DEDICATION

To my wife, Cate and son, Dawson for sacrificing a lot of “daddy time” during my dissertation journey. Thank you! I love you both very much!!!

And, to my parents Dave and Ann Brandes who always supported me no matter what barriers I faced in my education.

CHAPTER 1

INTRODUCTION

Latinos are the fastest growing population in the United States. According to KewalRamani, Gilbertson, Fox and Provasnik (2007), from 1980 to 2005, the Hispanic population grew 192 percent, from 14.6 million to 42.7 million. Data collected from the 2010 U.S. Census revealed that in the last decade, from 2000 to 2010, the Hispanic population increased by 15.2 million and accounted for more than half the growth in the total US population (U.S. Census Bureau, 2011). The terms Latina/o and Hispanic are used interchangeably as indicating the same ethnicity. According to the Office of Management and Budget (OMB) which is responsible for establishing the guidelines for collecting race and ethnicity data for the federal government, the terms Hispanic and Latina/o are defined as a person of Mexican, Puerto Rican, Cuban, South or Central America, or other Spanish culture or origin, regardless of race.

Demographic data also reveals that the Hispanic population is a young population. More than one third of the Hispanic population is under the age of 18 (Chapa and De la Rosa, 2004). The median age for Hispanics is 27.6 compared to 40.8 for non-Hispanic whites (U.S. Census Bureau, 2009). By 2018, the number of public high school students of Hispanic origin is projected to more than double (3,983,368) the 2001 enrollment of 1,968,722 students (WICHE 2008). As a result, Latinos will represent larger proportions of the school-age and a large potential college-age population in the foreseeable future.

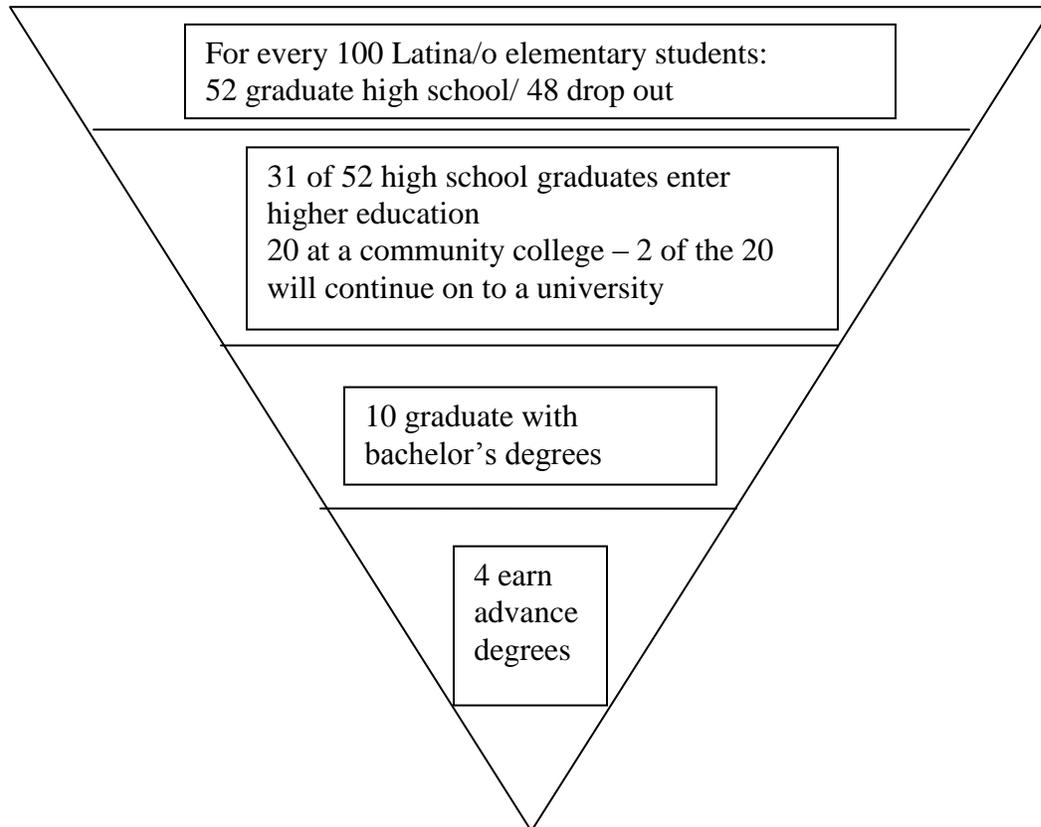
While the Hispanic population is growing in overall population numbers, the rate of Hispanic educational attainment remains low. Sólorzano, Villalpando, and Oseguera's (2005) critical race

analysis of Latina/o educational progress, shown in Figure 1, illustrates the challenge of educational attainment for this population. Sólózano et al. developed models of the US education pipeline to elucidate the advancement and attrition of students from elementary school to completion of advanced degrees. Their model for Latina/o students indicates that for every 100 Latina/o elementary school students, 31 of the students will continue through the K-12 school system and make the transition to college. Most Latina/o students enter higher education at community colleges. More than 50 percent of all Latina/o college students begin at a community college (Arbona & Nora, 2007) and Hispanic students represent fourteen percent of the total student population at community colleges (Provasnik & Planty, 2008). In Sólózano et al.'s model out of every 100 Latina/o elementary students, 20 will attend community colleges. Only two Latina/o students who enter a community college transfer to a four-year college. Overall, Sólózano et al. found that of every 100 elementary Latina/o students, ten students will graduate with a bachelor's degree, four will graduate from a graduate or professional school, and less than one student will earn a doctoral degree.

Due to the challenges of Hispanic educational attainment, López (2007) argues that there has been considerable importance placed on increasing research on Latina/o student success. López states that policymakers, scholars, and administrators are all asking the same question: "What works for Latina/o college students?" (p. 133). Santiago and Andrade (2010) discovered that more than half of the emerging Hispanic-serving institutions had targeted recruitment strategies for Latina/o students, while only a third of the same institutions had academic programs or support services focused on retaining Latina/o students. Solorzano et al.'s (2005) analysis uncovered weak support structures at colleges and universities; finding that Latina/o students commonly implemented their own retention programs without the assistance or

Figure 1

Latino/a Educational Attainment



Adapted from “Educational inequities and Latina/o undergraduate students in the United States: A critical race analysis of their educational progress,” by D.G. Solorzano, O. Villalpando, & L. Oseguera, 2005, *Journal of Hispanic Higher Education*, 3, p. 279. Copyright 2005 by SAGE.

endorsement from college administrators. Aguire's (2009) personal case study of his college experience supports Solorzano et al.'s assertion that institutions lack support systems for Latina/o students. Aguire recounts how he had to initiate his own tutoring support network to ensure his success in math and science classes. Further, Solorzano, Villalpando, and Oseguera comment, "We are hard-pressed to find examples of institutions that even bothered to inquire about, let alone replicate, the components of these successful retention efforts students have been adopting" (p. 288). More research is needed to understand what strategies successful Latina/o students are using at emerging Hispanic-Serving two-year institutions, so these institutions can replicate these strategies and generate more Latina/o student success.

This study seeks to understand the experiences of successful individual Latina/o students and how they overcome barriers at an emerging Hispanic-serving community college. While Hispanic Serving Institutions (HSIs) are defined by the federal government as having Hispanic student enrollment of 25 percent or more in college-level courses, "emerging HSIs" are institutions that have Latina/o college-level enrollment between 15 and 24 percent (Santiago & Andrade 2010). A research study, such as this one, has the potential to assist local community college leaders at Pipe Lake Community College (a pseudonym) and other colleges with similar demographics to address the needs of a growing Latina/o student population.

Purpose of the Study

The purpose of this case study research was to explore the expertise that successful individual Latina/o students at an emerging HSI community college developed while navigating around barriers they encountered. Specifically, this study will examine the accumulated knowledge and actions taken by Latina/o students to avoid or overcome barriers to their success.

By discovering the knowledge and actions occurring within the black box of Latina/o student success, it might inform efforts to improve Latina/o retention efforts at PLCC.

Research Questions

The following research questions will guide this study:

- 1) What barriers and obstacles do successful Latina/o students encounter at an emerging HSI college?
- 2) What knowledge did successful Latina/o students at an emerging HSI college need to overcome the barriers they faced?
- 3) What actions did successful Latina/o students take to overcome barriers at an emerging HSI college?

Overview of Conceptual Framework

Tinto's theory institutional departure has been the dominant framework of student retention research. However the initial formulation of the model did not speak to the experience of students in two-year institutions or to the experience of diverse student populations such as gender, race, ethnicity, income, and orientation (Tinto 2006 p. 3). One troublesome area for researchers is Tinto's (1993) assertion that student persistence depends on a students' ability to integrate into the social and academic communities at their college. Specifically, Attinasi (1989), Tierney (1992), and Kraemer (1997) equated the academic and social integration aspects of Tinto's model to assimilation expectations of the dominant, often White, campus cultures. While some researchers have questioned the application of Tinto's model with diverse student populations and with non-residential two-year campuses (i.e. Attinasi (1989), Tierney (1992), Kraemer (1997), Braxton and Lien (2000), and Rendón, Jalomo, and Nora (2000)), another

researcher, Raymond Padilla, developed student success as a new line of inquiry. Padilla felt that many researchers were only using student departure models like Tinto's because no alternative frameworks existed for researching student success at the time (Padilla 2009). Padilla argues that knowing why students leave college is not the same as knowing what their success is attributed to. Padilla states, "Student success involves more than preventing students from abandoning their studies. To promote student success one also must understand why many students, some of them under the most challenging circumstances, are able to complete all program requirements and actually graduate with a diploma or degree" (p. 9). With no student success frameworks available, Padilla developed an expertise model of student success based on Harmon and King's (1985) approach of applying expert systems to artificial intelligence. Padilla's student success modeling approach has been used recently to illustrate student success at an elementary school (Miller, 2009), a high school with a high-minority demographic (Barker, 2009), a community college, (Wirth, 2006; Wirth & Padilla, 2008), and a 4-year Hispanic-Serving university (Padilla & Norton, 2009).

Padilla's expertise approach to student success modeling serves as the theoretical basis for this study (1991, 1994, 1999, 2009; Padilla et al. 1997). Padilla (2009) explains that the Expertise Model of Student Success (EMSS) is built on four assumptions: 1) we don't know why students succeed, 2) all college students experience barriers, 3) students who are successful have become experts at being students on their campus, and 4) in order to overcome barriers, students must have the knowledge of how to overcome the barrier and also must possess conation, the will to act on that knowledge. Padilla states, "combining all of the assumptions, it can be seen that EMSS includes three parameters: namely the barriers to success plus the knowledge and actions that successful students use to overcome the barriers (2009, p. 26). According to Wirth

and Padilla (2008) college campuses can develop local models of student success can by collecting data on the knowledge base and action repertoire that enable successful students to overcome barriers (p. 689).

Significance of Study

This study occurs at an intersection of three strands of research that are currently underserved: community colleges, Latina/o college students, and student success. Several researchers such as Cofer and Somers (2000); Townsend, Donaldson and Wilson (2005); and, Alfonso (2006) have observed a lack of research on community college students. Marti (2008) went further, describing the lack of research on community colleges as a research bias. According to Marti, less than ten percent of published higher education research focuses on community college students. This is an unfortunate situation considering the growth, diversity and complex issues that community college student populations uniquely face. Not only do community college students tackle the typical college adjustment issues, but these issues occur in the midst of external demands from family, friends and work (Napoli & Wortman, 1998).

In addition, this study responds to a call for more research on the growing Latina/o population at community colleges. Martinez and Fernandez (2004) point to the overrepresentation of Latina/o students at community colleges in comparison to four-year institutions as a motivator for more research on issues, policies, and practices that affect Latinos at community colleges. Currently, there is a dearth of information on emerging Hispanic Serving Institutions. Morales (2008) recommends that more research needs to be focused on positive and successful Hispanic students. He comments that a deeper understanding of Latina/o student achievement can be attained with more research focused on successful students (pg. 245).

Of practical significance, developing a current understanding of Latina/o student success at Pipe Lake Community College might assist the development of future institutional success initiatives. Wirth (2006) hoped that the decision-making processes of local leaders would improve with current information about the strategies successful students use to overcome that barriers they faced while attending their institution. It would also be useful for PLCC staff to understand what heuristic (rules of thumb) knowledge Latina/o students need to be successful at the institution. Padilla (2009) felt that local models of student success developed from identification of barriers and the knowledge and actions successful students take to overcome those barriers could be used to help student affairs professionals. Padilla thought that such models would assist student affairs staff to see their instructional mission as educating students to be successful. Padilla states, “once student affairs is seen as having a fundamental teaching role (i.e., conveying heuristic knowledge) rather than being just a service unit, it will lead to a fundamental rethinking of the organization and staffing of student affairs,” (2009, p. 202). Gloria, Castellanos and Ozozco (2005) conclude that, “assessing personal perspectives of educational barriers would assist student affairs professionals in understanding student needs and facilitate retention efforts” (p. 178). Even if institutions decide not to change practices based on the data collected on student success, Padilla et al. (1997) argue that a local level approach to student success “empowers individual students directly by helping them to overcome existing barriers within their own campus environment” (p. 134).

Ultimately, the goal of the study is to help more Latina/o students become successful. The phenomenon of chain migration within the Latina/o population reveals the importance of improving Latina/o student success. Work by Person and Rosenbaum (2006) and Pérez and McDonough (2008) on chain migration reveals that the more Latina/o students have successful

college careers, the more others in the Latina/o community are influenced by their example and as a result are more prepared to be successful in college themselves.

Overview of Methodology

This case study was developed primarily from the experiences of 27 successful Latina/o students enrolled in a single community college emerging as an HSI. Padilla's (1994, 1999 & 2009) qualitative process for examining student success was the primary tool for gathering data for this case study. Padilla approach utilizes tandem groups of successful students and a qualitative data matrix called an unfolding matrix to organize the data collected. Tandem groups are a special type of focus group where each group builds on the contributions of the previous group(s). The tandem groups first discussed barriers to student success. Barriers that were disclosed were displayed for the group in the first column of a matrix. For each barrier, additional columns were revealed to the tandem groups to fit the needs of the research questions. The tandem groups were prompted similarly as Wirth and Padilla's matrix approach (2008) with barriers in the first column, knowledge to overcome each barrier in the second column and actions take in response to the barrier in the third. In addition to the tandem groups of successful students, this study used the perspectives of eight college personnel for triangulation with the tandem groups of successful Latina/o students.

Organization of the Dissertation

This dissertation on Latina/o Student Success at a community college emerging as an Hispanic-serving institution consists of six chapters. Chapter One outlines the focus of the study. Chapter Two reviews the relevant literature. The research design is discussed in Chapter Three. Chapter Four presents the barriers that emerged from the study. The knowledge and actions

needed to overcome barriers is the focus of Chapter 5. The report concludes in Chapter Six with discussion of the conclusions, implications and suggestions for future research.

CHAPTER 2

LITERATURE REVIEW

The purpose of this case study was to examine Latina/o student success at an emerging Hispanic Serving community college. This chapter contains a literature review with sections framed by the four assumptions of Padilla's Expertise Model of Student Success (1991, 1994, 1999, 2009; Padilla et al. 1997). The first section discusses research on Latina/o student success during college. The next section focuses on the barriers to success that Latina/o college students' experience. The third section reviews the knowledge that college student experts have amassed in order to be successful on their campus. The last section of this literature review examines research on the actions successful students take to progress through college.

Latina/o Students Success during College

The first assumption of Padilla's Expertise Model of Student Success is that there is limited research that addresses the reasons why students succeed in college (Padilla 2009, p. 21). Padilla (1999, 2009) calls this the 'black box' assumption. Borrowed from the world of physical science, a "black box" is when inputs and the outputs of a phenomenon are known but processes in between are unclear. The space where student activities take place is unknown, resembling a black box or a space that is not visible, recordable, or understood. In the case of student success, Padilla (1999) argues that the background and experiences of students entering college and the profiles of students leaving college or graduating college are well established; however, what is unknown is how students over time become degree completers or non-degree completers (p.

134). For the purposes of this study, the black box is defined as the space in which Latina/o students experiences lead to goal completion or non-completion.

Research on student success is complicated by the multiple paths students take to achieve college success. According to López (2007), there is not just one way for Latina/o students to achieve success on a campus (p. 130). However, López found there are some common conditions that make Latina/o student success more likely to occur. These factors include financial support, successfully transitioning into the college environment, a positive campus climate, motivation to persist, active coping styles, campus enrollment factors, involvement, mentors and sponsors, and family.

Financial Support

Financial support through scholarship and financial aid was found by Zalaquett (2006) to be a core factor in Latina/o student success. Nora (1990) found that both campus (such as work-study) and non-campus based financial resources (such as Pell grants) had a significant impact on the retention of Hispanic students at a community college. Specifically, Hispanic students who received some campus-based aid in their aid package, such as college work study, performed better academically and had higher levels of retention. Nora concludes that financial resources have a larger effect on the retention of Hispanic students than academic preparation (high school grades) or academic performance in college (college GPA).

Transition to College Environment

According to Jalomo (1995), a successful transition for Latina/o students to their community college may depend upon how the students' cultural values, beliefs and perceptions match the campus culture. Individual characteristics (i.e. self-initiative and resilience), external

influences (i.e. family, peers, former teachers, and co-workers), and student experiences (i.e. enjoying diversity, fulfilling goals, planning for their future, and forming new social networks) were found to be positive elements that assisted Latina/o students' transition to community college.

Campus Climate

Evans (2004) advocates for the adoption of a caring curriculum to overcome the barriers facing nursing students of color. The caring curriculum includes personal relationships with students, drawing discussions based on readings, teaching holistically rather than linearly, sharing stories and personal experiences in small groups and developing a noncompetitive environment. LeSure-Lester (2003) discovered that Latino students will persist when the academic environment, i.e., faculty showing concern and interest in students, supports the active coping styles of Latina/o students.

Cejda and Rhodes' (2004) conducted an exploration of three faculty members from vocational programs at an Hispanic Serving Institution (HSI) in Texas, to observe how faculty behaviors assist in the persistence of Hispanic students. Mentoring by faculty was one of the themes that emerged as a key factor for Hispanic student persistence from Cejda and Rhodes' study. The three faculty members who were subjects in their case study indicated that mentoring does not automatically happen, rather the faculty waited until they observed specific behaviors from Hispanic students before they mentored them. These behaviors included attendance, completing assignments, accepting responsibility, and expressing their goals to faculty. Participants noted the importance of faculty having cultural sensitivity in order to foster retention and persistence of Hispanic students. The faculty members also observed that Hispanic students

thrived in classes which fostered active participation, frequent instructor feedback, and collaborative learning.

According to research by Hagedorn, et al. (2007) a critical mass of Latina/o students and of Latina/o faculty has a positive impact on Latina/o student performance at a community college. This research found that high (fifty percent or higher Latina/o population) and moderate (thirty to fifty percent Latina/o population) Latina/o student and faculty populations were found to have a positive relationship on student success and enrollment in college level courses/non-remedial courses. Latina/o students at institutions with high and moderate proportions of Latina/o faculty and student populations had higher GPAs, were more likely to enroll in college-level courses, and had more successful course completions than Latina/o students at institutions with Latina/o representation in the faculty and student populations below 30 percent.

Motivation

A drive to be successful was found by López (2007) to be a factor in Latina/o students' success and persistence. López (2007) also found that when Latina/o students embraced on and off campus learning experiences, they were successful. In Zalquett's (2006) study, one core factor for Latina/o student success was that they valued their education. Successful Latina/o college students saw their education as a way to honor their parents and be a role model to siblings. Another common motivational factor in Latina/o students who were successful was a sense of accomplishment earned through their educational achievements (Zalaquett 2006).

Solis (1995) identified factors that increase Hispanic students' intention to persist at community colleges. Solis explored several factors: motivation, use of tutoring services, remediation coursework, quality of academic support services, maturation, declaration of major, financial assistance, economic incentives for completing education, meeting state testing

requirements, and having academic deficiencies. Of the factors examined, only motivation to persist and commitment to attend appeared to directly contribute to students' intention to persist.

Coping Styles

LeSure-Lester (2003) examined a possible correlation between coping styles and Latino student persistence at two year colleges. LeSure-Lester surveyed 111 Latino students and found that active coping strategies-where there is an effort to remove a stressor or a plan to minimize the impact of a stress producing event-were the strongest predictors of student persistence. Also, LeSure-Lester found one of the strongest active coping strategies for Latina students was seeking spiritual guidance in the midst of college stressors. This was observed to be a stronger coping strategy for Latina respondents than Latino.

Enrollment Factors

Arbona and Nora's (2007) study analyzed a longitudinal data set from the National Center for Education Statistics (NCES) which revealed that Latina/o students who maintained a full-time course load continuously were also more likely to complete their college degrees than part-time enrolled Latina/o students. Arbona and Nora (2007) also found that Latina/o community college students who enrolled within six months of completing high school are more likely to earn their degree than students who waited eight months or more after high school.

Campus Involvement

López (2007) found "being involved" as contributing to Latina/o college student success. López conceptualized "being involved" as participation in student organizations, holding student leadership positions, experiences with peers, having a sense of belonging on campus, and giving back to the community.

Success Network

Exploring the role of mentoring in thirteen successful Latina/o students, Zalaquett and Lopez (2006) found that Latina/o students benefited from informal mentors and sponsors. According to the researchers, while sponsors did not serve a mentoring role, they did support Latina/o students through financial assistance and opportunities for networking. Informal mentors occurred mostly after Latina/o students entered academic programs at the college. Successful Latina/o students indicated that mentors welcomed them to the university, oriented them to the college's culture, values, customs, and resources, and provided advice and support when needed (p. 347).

López (2007) found that Latina/o college students' success was contingent upon a network of support from peers, staff and faculty on campus (p. 92). Saunders and Serna (2004) found that successful students utilized social networks. The strongest transition to college occurred with those Latina/o students who were proficient at developing new support networks at their college and actively sought out assistance. Also successful were a group of Latina/o students who struggled to develop new networks but were able to maintain the support networks they developed while in a high school. This existing network was found by Saunders and Serna to aid their success in college.

Family

Support from family members-primarily parents-is an important factor in Latino college student success according to research conducted by López (2007). Zalaquett and Lopez (2006) found that strong family support through encouraging words, moral support, personal challenges, and understanding had a critical role in encouraging students to be successful in their pursuit of a college education. Gloria, et al. (2005) found that Latina's did not seek out professional advice,

such as campus counseling services, when encountering an educational barrier. Rather, Latina's preferred to talk with family members about issues and barriers.

Barriers Latina/o College Students Experience

The next core assumption of Padilla's (2009) approach to student success is that all students face a series of barriers as they progress through their college experience (2009, p. 22). Padilla points out that while all students experience barriers in their college experience, students don't face the exact same set of barriers and the severity of each barrier can vary from student to student (p. 23). Padilla and Norton's (2009) research confirms this point. Padilla and Norton compared the experiences of successful Hispanic students with successful non-Hispanic students and discovered that the two populations experienced different barriers. They found that non-Hispanic students experienced barriers that centered on academic and communication issues. In contrast, Hispanic students experienced barriers that included challenges with academic support services, faculty, student life, navigating around the academic systems and social systems of college and issues with the lack of campus resources. Becerra's (2010) work also serves as an example of some of the variance that occurs in how students experience of barriers. Becerra discovered that Latina/o student's level of linguistic acculturation influenced their perceptions of barriers; respondents with higher levels of linguistic acculturation perceived more barriers to education such as discrimination.

Psychological Barriers

Research has found that some Latina/o college students face psychological barriers to college success. Zell's (2010) interviews with seventeen community college Latinos demonstrated that many Latina/o students deal with psychological barriers such as feeling

marginalized by teachers, self-doubt, hopelessness, and fear of competition with other students. According to Zell's study, as much as 60% of participants put off entering college due to such psychological challenges.

A pervasive presence of fear was found as a barrier to college success by Contreras' (2009) exploration of the experiences of twenty undocumented Latina/o students at colleges and universities in Washington State. One common theme found in Contreras' work was that undocumented Latina/o students experienced fear of potentially being deported. This fear, mixed with student's realization that if they were deported it would mean being separated from their families, impacted Latina/o students ability to be successful in college. The by-product of this fear was that many undocumented students indicated that they struggled to trust individuals at their college. As a result, many undocumented students did not build a support network of college staff or faculty who could aid their college success.

LeSure-Lester's (2003) examination of coping mechanisms among Latino college students at two year colleges revealed that the use of certain poor coping mechanisms in the face of college stressors were more likely to lead to the non-persistence of Latina/o students. LeSure-Lester found that the use of alcohol and drugs or denial of college stressors as coping strategies were the strongest predictors of non-persistence. LeSure-Lester also discovered that Latina/o students who used less effective coping strategies were negatively influenced by faculty and staff disinterest and as a result were less likely to persist.

Being teased for not attending a "real" college or being ridiculed for attending college were found by Jalomo (1995) to be psychological elements that impeded Latina/o students' successful transition to community colleges. Jalomo also found that Latina/o students who did not value their education had a hard time transitioning successfully into a community college.

Financial Barriers

Another challenge to Latina/o success in college is finances. Undocumented Latina/o students struggle to finance college, since their undocumented status disqualifies them from receiving federal or state financial aid. Due to financial difficulties paying for college, Contreras (2009) found that undocumented Latina/o students were more likely to work longer hours and were also less engaged with campus resources that could enhance their ability to be successful in college.

Wirth and Padilla's (2008) research on student success found that examples of financial barriers included unemployment, student loans, book prices and campus food prices. Padilla, Treviño, Gonzalez and Treviño (1997) found that financial resource barriers included dealing with cost of college and the challenges that students face navigating the financial aid process. Participants in Zalaquett's (2006) research study identified a lack of information about costs, financial aid and scholarship opportunities as a barrier to college success.

Academic Transition Barriers

Hernandez (2000) found that some Latina/o students experience challenges adjusting to college. Through the exploration of ten Latina/o students at a predominately White university, Hernandez discovered that academic adjustments were the most serious challenges these Latina/o students faced. Many of the students in the study felt that their high school did not prepare them adequately for the rigor or time commitment of college work. As a result of feeling overwhelmed academically, many of the students decided not to participate in on-campus activities, which could have aided their engagement in college. Attinasi (1989) found that students sought to manage the overwhelming size and complexity of the physical, social and academic environments of college. Students negotiated the college environment by gaining

information through mentors, sharing information with peers and by focusing on smaller parts of the college. Students who participated in Attinasi's study described using tactics such as avoiding large social places on campus, choosing small social and support networks, and focusing on classes within their major.

Lack of Social Network

Saunders and Serna's (2004) work suggests that Latina/o students without a social network do not persist in college. These researchers conclude that Latina/o students who are unable to maintain old support networks outside the college or develop new relationships within the college do not persist in college.

College Climate Barriers

Evans' (2004) work with American and Latina/o nursing students found students struggled with the following college climate issues: having work/school schedule conflicts, racism, noticing the lack of a welcoming environment, a lack of understanding and support by instructors, rigid college environments, struggles with language issues, and meeting academic demands.

Several studies have found attitudes and actions of college instructors and staff can be a hindrance to Latina/o college success. Jalomo's (1995) exploration of Latina/o students' transition into a community college found that low expectations of Latina/o students by college instructors and staff had a negative effect on their transition.

Padilla, Treviño, Gonzalez and Treviño's (1997) used the term "lack of presence barriers" to describe Latina/o students' culture not being reflected in the college culture.

Latina/o students experienced a lack of cultural representation in the curriculum, in college programs, and in the low number of Latinos among staff, faculty and students populations.

Family Barriers

While most parents supported their child's desire to go to college, Zalaquett (2006) found that Latina/o students had minimal adult guidance when it came to college decisions. Many of the Latina/o students in the study were first generation college attendees. Because their parents did not have a college experience, it limited their ability to assist their children with college processes. Several of the parents were also limited English speakers, which added to the challenge of helping their child through college. In Evan's (2004) study family barriers included students feeling tension if they left home and where away from their family or if they stayed home trying to manage college with family obligations.

Knowledge of Successful Students

The third assumption of the Expertise Model of Student Success is that successful college students develop an expertise in overcoming barriers. Padilla suggests that this expertise is gained by the students' collection of informal (heuristic) and formal (academic) knowledge (2009, p. 24). Formal knowledge is gained in classroom or other academic settings. Heuristic knowledge is informal and often occurs outside of the classroom. Harmon and King (1985) explain that heuristic "rules-of-thumb" are helpful in organizing information into manageable pieces (p. 31). Padilla (2009) states that heuristic knowledge is central to student success and is acquired through informal contact with faculty, staff, and other students and from family members and friends who have already gone to college (p. 25). Heuristic knowledge is crucial in

helping students overcome barriers at a given college (Padilla 1991, 1999; Padilla et al., 1997; Wirth 2006).

Wirth and Padilla (2008) developed a heuristic knowledge taxonomy utilizing data collected from successful students at one urban community college in South Texas. This taxonomy included experiential knowledge, knowledge about studying and study skills, procedural knowledge, relational and comparative knowledge, and motivational knowledge (p. 699). Experiential knowledge included six subcategories of knowledge: self-understanding, alienation, financial issues, employment, advising and student support, and institutional issues. Knowledge about studying and study skills had three subcategories of knowledge: improvement of learning and skills, time and place of study assignments, and group work. Procedural knowledge included two subcategories: inquires and institutional issues. Balance, institutional, coursework, and finances are subcategories of relational and comparative knowledge. Motivational knowledge was comprised by two subcategories: individual and social.

Padilla, Treviño, Gonzalez and Treviño (1997) study of successful ethnic minority students at one university found that students had gained knowledge to overcome four major barriers: discontinuity (smooth and continuous transition to college), lack-of-nurturing, lack-of-presence, and resources. The knowledge successful ethnic minority students used to navigate through discontinuity barriers was characterized by the authors as anticipatory: developing mental conditioning that college was going to be different and more challenging than previous situations (p. 130). As a result of the “lack-of-nurturing” barriers, successful students knew that they had to be self-reliant or find nurturing through supportive groups like ethnic clubs and organizations (p. 131). In dealing with lack-of-presence barriers, Padilla et al. (1997) found that successful ethnic minority students discovered the importance of being grounded in their culture and

seeking out other ethnic students on campus (p. 131). Padilla et al. (1997) observed that resources barriers were addressed by students gaining knowledge of the financial aid process and scholarship opportunities.

Campa (2010) explored student success of five Mexican American students at a community college through the perspective of critical resilience. Campa discovered that Mexican American community college students who were critically resilient used knowledge from family, cultural and institutional resources to overcome barriers. Often through oral traditions, family or mentors provided survival skills and motivation. According to Campa, these resources allowed successful Mexican American community college students to build a bridge between their culture and the college. Part of this bridge was students focusing on a collectivistic purpose for their education; the notion of their education having a larger benefit to their family and community (p. 450).

Actions of Successful Students

The last assumption of Padilla's expertise model is that students have to act on their knowledge in order to be successful (2009, p. 26). The term Padilla uses to describe this assumption is conation. Conation means acting or having the will to act (p.26). In order for students to overcome barriers to success they need to take appropriate actions based on the heuristic knowledge and formal knowledge that they have gained.

Wirth and Padilla's (2008) local model of student success at one community college contained the following categories of actions: strategic, pragmatic, persuasive, and supportive actions. Strategic actions included such things as: scheduling school around work and family, setting a study time, creating study groups, and requesting the same academic advisors (p. 704). Talking to co-workers about schedule, applying for financial aid, going to a quiet place to study,

and using a carpool are examples of pragmatic actions that successful students employed (p. 704). Persuasive actions by successful students included asking instructor to assign work over weeks and asking instructors to post grades in a reasonable time (p. 705). Supportive actions that Wirth and Padilla found included talking to other students with the purpose of making friends and encouraging other students to participate during group work (p. 705). Padilla, Treviño, Gonzalez and Treviño (1997) discovered several actions that students took to overcome four major barriers identified in their study. Successful students who overcame discontinuity barriers had anticipated being treated differently in the college environment and took several actions such as building a support base through involvement in ethnic clubs, making their own decisions, taking reasonable risks early in their college experience, and researching the profitability of their future career (p. 130). Padilla, et al. (1997) observed that actions successful students used to overcome the lack-of-nurturing barriers were to engage their biological family in their college experience, create a supportive family on campus, seek out nurturing persons, participate in ethnic student organizations, and use resources such as faculty advisors, tutors and other institution staff resources (p. 131). To overcome the “lack-of-presence” barrier that Padilla et al. (1997) identified that successful students sought out assistance from the existing ethnic population on campus. Padilla et al. (1997) also found that successful students dealt with resource issues by accessing the financial aid system early and networking with people who understood the process.

Campa (2010) found in the stories of five successful Mexican American students at a community college that they took actions based on learning the codes of power on campus. Delpit (2006) contends that there are rules for participating in power and that the cultural of power is based on the culture of the upper and middle classes (p. 25). Making a good impression

and building a strong connection with their profession were two codes that Campa's study uncovered. Campa reports that the students called uncovering the codes, "playing the game" (p. 444). Participants in Campa's study took actions such as participating in class, conversing with the instructor, attending activities, sitting in the front row, attending class every day and being prepared to make a good impression and build a strong connection with their professor.

Summary

This study seeks to examine Latina/o student success at one community college emerging as an HSI. While the Padilla approach assumes that there are difficulties determining what is in the black box - why students are successful, the first section of this literature review highlighted research that revealed that financial support, having a successful transition to the college environment, positive campus climate, student motivation, active coping style, involvement in college, having mentors and family support contribute to the likelihood that Latina/o students will be successful in college. Several researchers have identified barriers that Latina/o student face. These barriers discussed in this chapter include: psychological, financial, transitional, campus climate, lack of a support network, and family. Research on successful students particularly the knowledge base needed and the actions taken to overcome barriers was described in the last two sections of this chapter. The next chapter will focus on research design.

CHAPTER 3 RESEARCH DESIGN

Introduction

This study explored the knowledge and actions successful Latina/o students used to overcome the barriers they faced while attending a community college emerging as an HSI. A review of literature suggests that more research is needed to discover what is in the “black box” that determines whether or not Latina/o community college students will complete their goals. Padilla (2009) used the black box metaphor to symbolize the challenge of determining why some college students are successful and others are not. The metaphor of a black box suggests a space that can’t be readily observed. However, by comparing what enters with what exits the black box, it is known that changes occur within the unknown space of the black box. Given his assumption of a black box, Padilla proposed a new line of student success research to attempt to understand the processes occurring with the black box. Padilla’s (1991, 1994, 1999, 2009; Padilla et al. 1997, & Wirth and Padilla 2008) employed a qualitative approach for exploring student success utilizing tandem focus groups and an unfolding matrix technique to organize the data collected. The research design for this study replicated Padilla’s approach. This chapter includes the rationale for choosing a qualitative design and the methods used including site selection, participant selection, data collection, data analysis, limitations and a statement of positionality of the researcher.

Rationale for a Qualitative Design

Marshall and Rossman (2006) describe qualitative research as being pragmatic, interpretative, and grounded in the lived experiences of people (p. 2). Rather than imposing

artificial social science research parameters as is often a characteristic of quantitative research, Rossman and Rallis (2003) explain that qualitative research is conducted in the messy and complex everyday world (p. 9). A qualitative design was used for this study because it allowed for a richer understanding of the complex experiences of successful Latino students at PLCC. Researchers have employed qualitative methods to explore challenges Latina/o college students face, Latina/o transitional issues, and Latina/o student success, such as Attinasi, 1989; Rendon & Valadez, 1993; Jalomo, 1995; Hernandez, 2000; and, Zurita, 2004. As a result of using qualitative research designs these researchers were able to conduct studies that had a high level of detail about Hispanic student's experiences in the college environment.

Methods

Site Selection and Description

Pipe Lake Community College (PLCC) (a pseudonym) was selected as a research site for several reasons. First, the college is located in a Hispanic-majority county. The Hispanic population represents 51% of the total population in the county where Pipe Lake Community College resides. Second, the college is actively pursuing HSI status and wants to certify as an HSI in 2012 - 2013. Currently, 24 percent of the college-level student enrollment is represented by Hispanic students. Lastly, Pipe Lake Community College is open to exploring improvements to both recruitment and retention of Hispanic students. This is evidenced by an enrollment management sub-committee formed to develop strategies to specifically increase Hispanic student recruitment and retention and by the PLCC's Board of Trustees allowing time for student testimonials on the struggles of undocumented Latina/o students and the importance of the Dream Act legislation.

PLCC is a comprehensive two year community college and has a service district that includes two counties with a combined population around 250,000. PLCC has two campuses, and several offsite locations for ESL classes. The majority of students at PLCC attend classes during the day (82 percent) at the main campus (80 percent).

According to the PLCC website, during the fall of 2009, headcount enrollment at PLCC was approximately 8200. Females represented 54 percent of the student population. PLCC also has a relatively young student population with 55 percent of the students below the age of 24. Much of this trend is attributed to the growth of a dual enrollment program which allows high school juniors and seniors based on college placement test scores to take college classes for high school and college credit. In fall 2009, 690 students qualified and participated in the dual enrollment program.

PLCC awarded about 900 degrees and certificates in 2009. The majority of graduates (67 percent) earned an Associate in Arts in Science degree, commonly referred on campus as an “AA degree” or “transfer degree.” Of the remaining graduates nine percent received one-year certificates and 23 percent earned an Associate in Applied Science degree from an occupational program.

Roughly 500 faculty and staff worked at PLCC in the fall of 2009. During the fall of 2009, PLCC employed about 300 in full and part-time faculty positions. Currently the ethnic and racial demographics of PLCC do not reflect the growth in the Latina/o population in the surrounding community. The majority of faculty at PLCC are White (86 percent), female (58 percent), between 50-59 years old (33 percent), hold master’s degrees (51 percent) and teach part time (62 percent). Four percent of full and eight percent of part-time faculty members at PLCC are Hispanic. PLCC has about 200 exempt and classified staff members. The majority of staff

members are (76 percent) White. Hispanics comprise 18 percent of the exempt and classified staff at PLCC.

Participant Selection

A purposeful selection process was used to identify 27 student participants in this study. According to Creswell (2003) rather than random sampling or selection of a large number of participants as in quantitative research, the goal in qualitative research is to find the participants that will best assist the researcher in understanding the research questions (p. 185). Purposeful sampling methods help identify the participants that can contribute good information for the study.

To participate in this study student participants had to meet the following criteria: 1) Latina/o, 2) enrolled full-time in minimum of twelve hours, 3) completed at least three quarters at PLCC, and 4) be degree seeking. Student participant selection standards were influenced by Padilla et al. (1997) and Wirth's (2006) research on student success modeling. The decision to narrow the participants to one ethnicity, Hispanic, is due to Wirth's (2006) suggestion that local models of student success should be extended to populations within the individual community college to address the diverse needs of specific groups (p. 172). Narrowing the participant pool to Latina/o students was deemed important due to the low participation, transfer, and completion rates relative to other populations nationally but also at the research site. Similar to Padilla et al. (1997) part time and students below three quarters of college work were not considered in the study because they might not have enough experience and knowledge at PLCC yet to generate meaningful data. The intention of completing a two year degree was an important selection criterion since students enter community colleges for a variety of reasons including personal enrichment, high school completion or GED, short term training or certificate programs.

Statistics on Hispanic education attainment reveal that 70 percent of Hispanic students at community colleges enroll in degree rather than certificate programs (Alfonso, 2006).

Eight PLCC faculty and staff were selected to be interviewed. Initial selection of staff for interviews was purposeful. The selection of the first three staff members to be interviewed was based on their work with Latina/o student populations at PLCC. A snowball sampling technique was employed to select five additional staff or faculty to be interviewed. If a faculty or staff member was mentioned by students during the tandem focus groups on more than three occasions, they were asked to participate in an interview. All the individuals who were asked agreed to participate in the study. No compensation was provided to faculty or staff participants.

Student participant recruitment was sought through PLCC staff members working with diverse populations in grant programs. These staff members were sent a letter. The letter was followed up by an office visit to staff members to answer any questions about the study. PLCC staff identified over 60 students who met the criteria of the study who were invited to participate in the study. Nominated students were screened for selection criteria. Based on recommendation of PLCC staff, phone calls and face book were the primary ways of inviting students to participate. Text messaging was used for reminding students of focus group appointment times. No compensation was provided to student participants.

Participants

No student participant attended less than four quarters at PLCC; with the average participant attending just below seven quarters (6.74). All participants declared an intention to transfer to a baccalaureate institution and most participants, except two, had an educational goal in mind. Twelve of the students (44%) were female - Latinas and 15 (55%) were male -Latinos. Appendix A shows the gender, age, number of quarters at PLCC, GPA, and intended major of

the participants. The youngest participant was 18 and the oldest was 26. The average age of the student participants was greater than 20 years of age (20.55).

Appendix A also displays the gender, age, and length of service of each staff participant. The staff sample was equal in gender and had an age range of 27 to 50. The shortest term of service at PLCC was two years and the longest ten. Seven of the staff participants were Latina/o and one participant was Asian American.

Data Collection

Tandem focus groups, where multiple focus groups verify and build upon the work of previous groups, was the primary method for collecting data from Latina/o student participants. A tandem group allows the researcher to efficiently collect information for participants within time constraints (Padilla 1994). Tandem groups have been used by Padilla in conjunction with his unfolding matrix technique, e.g. Padilla et.al. 1997. Tandem focus groups allow the researcher to complete an unfolding matrix using multiple groups. One group starts the matrix and each of the remaining groups continue to develop the matrix from where the previous group ended. Each of the tandem focus groups had a minimum of three participants and the largest tandem group contained eight students. A total of eight tandem focus groups were conducted with a total of 27 Latina/o students participating. All tandem focus groups were conducted in a classroom on campus. Appendix B contains the protocol used for the tandem focus groups. This protocol includes introductory activities, guidelines for the effective functioning of each group, and questions to be asked to group members. The protocol for the tandem groups utilized Vaughn, Schumm, and Sinagub (1996) guidelines for managing focus groups.

The PLCC tandem groups of Latina/o students began by discussing barriers to Latina/o success. Large empty matrices 36 inches by 60 inches made out of butcher paper were taped to a

wall in the focus group room. One paper matrix was used for each barrier suggested by the student participants. As a new barrier was discussed, it was written on the first row of the matrix, labeled “barriers”. (See Appendix D for an example of a matrix). After barriers to success were discussed a second row was revealed, labeled “knowledge”. For each barrier, the knowledge needed to overcome that barrier were explored and recorded on the matrix. Next, for each barrier, a third row was added and labeled “actions”. In this new section actions used to overcome each barrier were considered. The last column to be developed on the unfolding matrix for this study was “recommendations.” Student participants offered their recommendations for how the institution can assist their peers in overcoming each barrier. As each group discussed a row and subsequent rows, the research assistant recorded short phrases or a word on the matrix to represent the thoughts of each group.

All focus group sessions were tape recorded and transcribed to capture further detail. Pacuilla (2003) points out that transcribing and analyzing the group dialogue is useful for synthesizing and adding themes to the matrix (p.36). A different marker color was assigned to each tandem group to track contributions of each group to the matrices. The recordings were reviewed to verify the accuracy of the information contained on the matrices. Member checking was used to check the accuracy of each groups’ contribution to the matrix. Participants were invited back with 12 students returning to see the finished matrix sheets and to voice further clarifications.

Padilla (1994) developed the qualitative unfolding matrix technique to address the challenge of setting boundaries or limits to data collection in qualitative studies. Rather than organizing data after it is collected, the unfolding matrix technique allows a researcher to organize the data while it is being collected (p. 274). Pacuilla (2003) who used the unfolding

matrix technique for conducting a feminist participatory action research on women with disabilities states, “While the term matrix denotes a two-dimensional system acting as one unit (i.e., not a linear system), what unfolds ...is a multidimensional and multi-vocal, reflecting the experience of shared investigation” (p. 40). The design of the matrix was informed by the research questions. Padilla et al. (1997) and Wirth and Padilla (2008) used a Padilla (1999) matrix that captured data to build a local model of student success (p. 141).

In addition to the tandem focus groups, eight PLCC staff and faculty members were interviewed to triangulate the data collected from the student focus groups. Interviews of faculty and staff were conducted following the interview protocol in Appendix C. Once consent was given by participants, they were asked seven questions aimed at the barriers successful Latina/o face and the knowledge and action they take to overcome these barriers while attending PLCC.

The audiotapes, transcriptions and notes from the focus group sessions and interviews were stored in a locked safe. Staff and faculty participants were provided a copy of the transcript to check for accuracy and to make corrections.

Data Analysis

The data analysis was primarily framed unfolding matrix technique replicated from Padilla (2008). Latina/o student participants during the tandem groups populated the matrix with data on barriers, knowledge needed to overcome each barrier, and actions taken to address each barrier. Audio recordings of the focus groups sessions and interviews were transcribed. These transcriptions were reviewed several times to clarify, organize and refine elements on the matrix. The first review of the transcriptions was to check the accuracy of the transcript against the audio recording. Further reviews of the transcript were to code for categories. As the categories emerging patterns for data emerge similar to Wirth and Padilla (2008) heuristic

knowledge taxonomy and the concept of anticipatory knowledge from Padilla, Treviño, Gonzalez, and Treviño (1997). Wirth and Padilla (2008) classification scheme of actions was used as an organizational framework as well. These frameworks were used for further coding. Information from the staff interviews were coded similarly but kept separate for comparison.

Limitations

The results of this study are limited to one specific site and are not meant to be generalized to other campuses. Another limitation is that the use of the unfolding matrix technique purposely limits data collection to the themes of barriers, knowledge, actions, and recommendations for the institution. Additionally, this study utilizes one ethnic population at the PLCC campus. Moreover while some elements of Latina/o student success at PLCC might be helpful to other student groups, student success should be explored for the other race and ethnic student populations at PLCC. Finally, the approach of this study does not quantify how many Latino students face a given barrier or the length of time that the barrier occurs. Despite these limitations, this study provides some insight into the how successful Latina/o students at PLCC responded to and overcame the barriers that they faced.

Positionality

The inspiration for this dissertation started while I was an adjunct instructor at YVCC Grandview Campus. I am very grateful to my former students at YVCC Grandview Campus – the majority of which were first generation and Latina/o students. Seeing these students overcome the barriers they faced and being role models to their families and communities motivates me to continue my work at community colleges.

Another influencing factor for this research was an admissions counselor, Juana Vasquez, I hired while at WSU Tri-Cities to outreach to Latina/o students. Juana taught me the

importance of family in the Latino culture and she sought to develop strategies that informed parents about college from other Latino parents with college going children – “Promotores de la Educación”.

While in my doctoral program and searching for a dissertation topic, Dr. Len Foster’s diversity class assisted me in developing the focus for this study. Around the same time, I became an activity director for a Title V Hispanic Serving Institutions grant. In this role I had to develop strategies to increase retention and student success.

Summary

This chapter outlined the methodology used to explore Latina/o student success at a community college emerging HSI. Padilla’s qualitative approach that employs tandem focus groups and an unfolding matrix technique to organize data was utilized. Data was collected from 27 student and eight faculty and staff participants. As the student participants had discussions on three topics areas: barriers to college success, knowledge needed to overcome barriers, and actions needed to overcome barriers, the key points of the discussion were recorded on large matrices. Interviews of the eight faculty and staff members were conducted to triangulate the data collected from successful Latina/o students. Data collected was transcribed, coded, and used to refine themes. Results of the study should not be generalized to other campuses or other individual populations at the research site. The next chapter will contain the data collected on the barriers Latina/o students experience at PLCC.

CHAPTER 4

BARRIERS LATINA/O STUDENTS EXPERIENCE

Introduction

More research is needed on Latina/o student success at community colleges. The majority of Latina/o students begin post-secondary education at a community college. Padilla (2009) applied the systems concept of the black box to the challenge of student success - not knowing why some students succeed and why others fail. The first research question of this study sought to determine the barriers and obstacles that successful Latina/o students encountered at a community college that is emerging as an HSI. This chapter captures the expertise of successful Latina/o students at PLCC who identified 34 different barriers. The 34 barriers were reduced into seven thematic clusters: psychological, decision-making, self-discipline, preparation, family, institutional, and cultural barriers. A detailed chart which displays how the barriers the students identify fit into each thematic cluster is located in Appendix E (see chart 1).

PLCC staff and faculty identified 39 barriers. The staff barriers were reduced and fit into the same barrier clusters as the PLCC Latina/o students with one exception. PLCC staff discussed several barriers that seemed to fit into an additional, separate cluster, resource barriers. A listing of how the PLCC's staff perspective on barriers fit into barrier clusters is displayed in Appendix E (see chart 2).

The first part of this chapter discusses the internal barriers Latina/o students face. Internal barriers are ones where the primary source of the barrier is within the individual student. The next section focuses on external barriers Latina/o experience while attending PLCC.

External barriers occur from people or groups outside the student. A separate section discusses the resource barriers PLCC staff perceived as an obstacle facing Latina/o students.

Internal Barriers

Successful Latina/o students at PLCC internal barriers represented with four internal barrier clusters: psychological, self-discipline, decision making and preparation. The following sections describe these clusters of internal barriers in more detail.

Psychological Barriers

One of the clusters of internal barriers was psychological barriers. Central to the psychological barriers were issues around motivation. The psychological barriers found in this study were consistent with the psychological barriers found in Zell's (2010) interviews with Latina/o community college students. Latina/o students felt the lacking motivation and ambition or having improper motivations were barriers to college success. Of particular concern was having motivations solely focused on attainment of money. The student felt success in college required deeper motivations than attending college for potential future monetary gains. Successful Latina/o students at PLCC felt motivations of personal growth, contributions to family and being a role model for their community were stronger motivating factors to continue in college.

Not being able to deal with setbacks in their education was another psychological barriers that PLCC Latinas/os experience. Irma, a fourth quarter PLCC student suggested, "sometimes students who fail a quarter don't come back because they don't think that they can progress and get better." PLCC staff participants also observed similar impacts of educational setbacks as reported by students. For example, PLCC staff member, Nicholas, discussed a Latina student he

met with earlier in day about failing a remedial class and had this to say: “this is a student who I have worked with quite a bit and she is failing Math 95 and it is a matter of telling them, ‘yes I know that this isn’t a college level class’ and they get disillusioned, ‘why am I spending so much time on this class, it doesn’t even count’”. Both staff and students both observed PLCC Latina/o students being discouraged by the amount of time they spend in remedial classes.

Another PLCC staff member, Lela, noted that if things don’t come easy, students get frustrated. Often she finds students telling her, “God, it’s hard!” or assigning blame externally for negative events, “it’s his fault – the teacher hates my guts” or, “he doesn’t like Latinos.” Lela said, “I hear just preposterous stuff like that” and felt that often students lack accountability for their statements.

Decision Making Barriers

Decision making barriers were another cluster of internal barriers successful Latina/o students at PLCC faced. One decision that participants focused on as a barrier was whether or not to stop out. Alberto suggested that many Latina/o students will use finances as an excuse to justify taking a quarter off:

One aspect that holds people back from being successful is when they decide to take a quarter off. They decide that the first quarter was rough or that they need to save up some money so they can pay fully for next quarter. But, what usually happens is that they end up taking a quarter off, they don’t end up coming back. I already got six friends already who took a quarter off and they ain’t coming back. I can already say they are not coming back. And, since they aren’t working and supposedly they were going to stop one quarter just to build up that money or now

that they have that money saved up they want to keep getting more and more and more. They just keep postponing going back to college.

Other decision making barriers successful Latina/o students at PLCC identified were issues around course section. Taking too many classes, too many difficult classes at the same time, or choosing to take a course without having the proper background knowledge were issues within course section decision making. Several students suggested that often hard for students to take a step back a take a refresher course to prepare for a challenging mathematics or science course.

Carlos, a PLCC faculty member, explained that a big barrier for successful Latinos at PLCC is their decision making around work hours. Many PLCC Latinas/os have to work in order to attend school. Carlos described one of his students:

I had a guy that I had in two classes who said 'I am not going to be able to be in class a lot for the first two or three weeks' because he worked like outrageous hours and he needed the money – it was a processing plant. He had to commute from 45 miles away to work, so that was an obstacle.

Self-Discipline Barriers

The next grouping of internal barriers that PLCC successful Latina/o students identified was self-discipline barriers. Pia, like many successful Latinas/os at PLCC, fought to overcome self-discipline challenges like effectively managing time:

I struggled with – learning how much I have to put into homework and how much work. Then also, not only are you playing the student role but you are also playing the sister, the daughter, the aunt – it is different roles. Having to do those roles is hard.

Within the barrier of time management occurred such issues as balancing school, life, work and finding time to rest. Successful Latinas/os also struggled with finding a balance.

Alberto, for example, felt stressed until he learned to allow time to relax:

I know my first quarter, I had to plan out working full time - working 40 hours - I still have to go to the gym and make time to plan out for all my class work and that left no time for me just to relax so like over time it started building and getting to me and you feel stressed out and you can't be relieved or nothing so luckily at work my boss was pretty cool enough to give me days off when I looked too stressed out so I could just relax.

Lela, a PLCC staff member, explained that often until students take a college success class, they don't manage time well and they have a hard time setting boundaries at home for study time. Lela described a frequent interchange she has with students:

They come here and tell me, 'I can only take classes from 8 to 11' – boom, boom, boom, boom – well what are you doing afterwards? 'Work'. Okay? I respect that – when are you going to do homework? 'Well, I don't get home until 10 and then I have to be here'. Tell me how this is going to work?

PLCC staff members were clear that not enough Latina/o students made adequate time in their daily schedules for studying. A common struggle participants described was lacking discipline around social media usage. While social media was used by participants for good outcomes such as organizing study groups, more often they not social media was a distraction both inside and outside of the classroom. It was felt that many students suffer from addiction to social media.

Preparation Barriers

The last cluster of internal barriers was preparation barriers. Being undecided about you major or career was the main barrier student participants identified. Pia explained that being undecided was a challenge that stopped other students she knew from progressing at PLCC:

Most students, like most of my friends, they didn't know what to come for. They just wanted to come because they just wanted to go to college or further their education. But, they got to a point where they didn't know where to go and they didn't have that help...they ended up dropping.

While being undecided is a clear barrier for all students who enter college undecided, it could exacerbate problems the Latina/o student population.

PLCC staff identified several other preparation barriers that Latina/o students deal with such as: inadequate high school preparation, poor study skills, and not understanding what kind of commitment college takes. Lela, a PLCC staff member recalled a common conversation with her student advisees around high school math levels. I will ask some of them, what math did you get up to when you left? Students say, "well, I only took this." Lela then asks them why they weren't taking trigonometry or higher. And she cringes when they respond "they didn't tell me that I needed that." Lela wished more students would take advantage of math in high school to avoid having to take a math class they should have taken in high school now at college demanding faster learning pace. Lela was also frustrated that she did not see high schools encouraging Latina/o students to take the tougher classes like advance placement.

Students not understanding the commitment needed to be successful in college was another example of a preparation barrier. Several staff commented about the struggle Latina/o students have adapting to the faster pace of college. For example, Nicholas, explained how he demonstrates to his Latina/o advisees the commitment that college will take. He scares them

with a psychology book and says “in high school you may spend a year or two years going through that. Imagine going through that in a semester or a quarter...that is pretty much what you are looking at.” Lela also warns students that they will be going through a lot of material within a very short period of time. She finds that a lot of the students she advises don’t keep up, “they don’t have the study skills.”

External Barriers

Three barrier clusters were organized around external barriers successful Latina/o students dealt with. These were environmental barriers that potentially challenged their success in college. The sections below describe the family, institutional and cultural barrier clusters.

Family Barriers

One external barrier facing PLCC Latina/o students are family barriers. The family barriers described by students were consistent with family barriers identified by Zalaquett (2006) and Evans (2004). Family support was a very important variable in the academic lives of Latina/o students at PLCC. While some Latina/o students enjoy enormous support from their families, others felt challenged by barriers created by their families. Now on her seventh quarter at PLCC, Pia’s family questioned why she needed to go to college. They felt she should be working. Pia said, “it is kind of hard to focus even on school when they (my family) are like ‘you should be here’, or ‘you should be doing this’, or ‘you should be working.’”

While some successful Latina/o students directly challenged college attendance, other students felt their families would be supportive if they knew how to support a college going child. Alberto, a fourth quarter business major, for example, stated:

For my family, it is not like they didn't support me. They supported me but, because I am a first generation college student, they know as much about college as I did. So, going into it – they didn't know how to tell me to look for scholarships. They didn't tell me go do this or take these classes it is going to help you out. They didn't know any of that. All they could possibly say was, 'good luck'. Good luck? And, going out here being the first college student and not knowing what to do, you are kind of scared.

Students whose parents had limited educational backgrounds posed some challenges for them. Pedro's parents dropped out of school in the third grade and he shared how not having parents who went to college impacted him:

I wish I had those parents who went to college that I looked up to. Someone that I looked up to - that knew the hardships and stuff. For me as an Hispanic, there is like this mentality that always keeps you right there in this little spot that doesn't let you go outside the box, they just think okay this is all we are going to do for the rest of our lives and we are – no, I wish I had parents who had that knowledge to tell me that you can do anything that you want. You can get anywhere that you want. Don't be just in one certain spot. You know - think outside the box.

Despite not having the educational role models he wishes his parents were, Pedro has a 3.0 GPA studying mechanical engineering pre-major classes at PLCC.

Carla also felt frustrated by her family lack of acceptance of her choice of major. She labeled her frustration as being "false support" from her family:

They (family) want you to do something but, you are thinking of doing something higher than that. Like 'just do this and you can get a job and make money.'

Instead of going for what you really want to go for. You know I did that for almost a year and a half, I went for business. I hated business (laughs) just because my mom wanted me to be an accountant. I don't want to do that – I want to be a doctor. She said, 'you can't do that.'

Carla is currently taking an extra year of classes due to switching from business to biology.

Having family responsibilities and obligations fits into this cluster of family barriers as well. Some family obligations for participants occurred around health issues. For example, Alberto described what he faced with deaths of several family members:

I had a lot of relatives pass away this year. I had three of them. And, that really takes away my attention for school because then I am consistently focusing on family in Mexico that I didn't get to see because they passed away or now we are in charge of having to pay for funeral bills and my mom stresses out, so I try to help her out and it just takes away from my concentration with school. I know my grades could have been better but since I had so many things going on and I had to help my mom out it took a little away from school.

Alberto is a good example of the several comments from students about family situations causing them to make decisions that could compromise their success in college.

Staff members' discussed Latina/o students' experience dealing with family as well. Emily described that while many parents are supportive of college, the reality is that many families are counting on their child to help support the family:

So that financial need and the fact that our students are bread winners and their family is at home and knowing that in order to pay the electric bill - they have to help - they have to contribute. If their parents don't have their monetary

contribution, then they are not going to have electricity. They are not going to have water. They are not going to have food. They are not going to be able to have those necessary things.

Several of the staff members commented specifically on the expectations of Latina students in their families. Ema, a PLCC staff member, described some of the conversations she had with Latina students about their families' expectations:

'You're a girl, you need to stay home to cook. You need to take care of everyone else. Also, you are going to stay home, I don't care if you are 40 years old but you are not moving out.' And, these are the conversations that I have quite often as a female - female to female. Students saying, 'you know I am ready to transfer - I just can't wait to get out of here but my parents don't want me to leave' or 'my parents don't want me to leave and no one understands that I - the only way I am going to leave the house is if I get married. And, I don't want to get married right now because I am in school.' So, they really have to deal with that and I have spoken to some students to the problem where they are saying, 'If I leave, they will disown me.'

According to Carlos, a PLCC faculty member, there are still a few parents who think college isn't necessary especially for young women. Carlos felt that young Chicano and Mexican American women have incredible burdens, "they have got to run the errands. They do the household chores and they got to be bread winners now. So a lot of it falls on the young women who have these obstacles as well."

Ema, a staff member at PLCC for nearly a decade, pointed out that some of the Latina/o parents rely on their children to navigate for them since many of parents are monolingual

Spanish speaking and several have not had schooling beyond an elementary education.

According to Ema students are “coming in now not only with school and work but they are also going to doctor’s appointments with their parents. They are also the ones that are going through and reading documents.”

Institutional Barriers

Another external barrier cluster is institutional barriers. Successful Latina/o students at PLCC identified institutional barriers such as lack of information. Carla specifically mentioned a lack of information about programs and services that could benefit students, “I was at PLCC for almost two years before I learned of TRIO and MESA and also like some of the summer programs that are available. It is just very hard to find those.” Pia agreed, “I didn’t know about the CAMP program.

Interestingly, PLCC Latina/o students were more focused on institutional barriers from the high school systems that they came from than the current college system they are in. For example, Norma worked her way through ESL classes and now is studying political science at PLCC. She noted that within the ESL program at her high school going to college was not discussed with them, “they never talked to us about going to college or how to apply – knowing those kinds of stuff. It makes it harder for us to know where to start.” And, Carla felt that high school staff had an image of college. This image of college framed high school staff perceptions of what kinds of students are “college material” or whether certain students fit into a particular career or major:

You have to be this kind of person to do this - you have to be this kind of person to do that. So, they are saying like you are not smart enough to do that or I don’t have this skill to be able to do that. People think that they know the kinds of

people in certain professions are born that way and that is not true. They are made that way.

PLCC staff observed more institutional barriers at PLCC than that the successful Latina/o students did. Several staff felt that the financial aid process was a major institutional barrier. While several PLCC staff members felt that Latina/o student awareness of the FAFSA process had improved, Ema suggested that students still miss financial aid deadlines or do not follow up with the financial aid office. Specific to the administration of financial aid at PLCC, a data sheet that requires students to provide additional information prior to financial aid being processed was mentioned by several staff participants as an institutional barrier. One staff member Nicholas commented about the PLCC financial aid data sheet:

The issue that we have here is the verification piece and getting students to understand the importance of finishing that piece because a lot of times you fill that out, and it happened to me, you think you are good to go until August – ‘oh yeah everything is fine’- well, things can change and can trigger an audit later. They can say now we need your tax return or you know we need this other form and having students understand that there is this process that it is a two-step process and three-step in some cases.

Fabio, PLCC staff, discussed the challenge of Latina/o students finding a personal connection beyond discussions with an advisor prior to registration:

I think that personal connection with somebody, someone that cares about them and understands them and that they feel comfortable going back to. Unfortunately here because of the resources you see your counselor and they do your schedule and that is about it. There really isn't something beyond that.

Juana felt students had a hard time developing a connection with their instructors, “I think students don’t particularly see faculty or their instructors as sort of another supplement or support. They don’t make attempts to speak with them in class, outside of class at any time ever.” Juana also thought that Latina/o students need to receive more guidance from the institution and that the institution is quick to point out that being successful is a student responsibility not an institutional responsibility. Many of the staff perspectives on PLCC institutional barriers were congruent with Saunders and Serna (2004) conclusion that Latina/os students who don’t build supportive relationships at the college will not persist.

Cultural Barriers

The last section of external barriers focuses on cultural barriers. Successful Latina/o students at PLCC viewed undocumented citizenship status as one of the strongest barriers Latina/o students face. Pia pointed out that the financial challenges which result from being undocumented can often be insurmountable. Undocumented students are ineligible for state and federal financial aid and also for scholarships based on determining financial need through the financial aid process. Pia also explained that applying for apartments is hard for undocumented students since they need to have a social security card in many cases.

Undocumented status was also brought up as a barrier by most PLCC staff. Carlos, a PLCC faculty member, described a recent interaction with one of his students who is undocumented:

She found out the hard reality – you are not going to get as going to get as far as someone who is a documented student. So she reached the limit that she could go. She had already been paying everything for herself. She wanted to go to the nursing program, but she can’t. She as sitting right in front of me in tears - I was

very disturbed by this. So disturbed. She dropped my class. She tried to stay in my class but, she eventually dropped out. People like that we are not going to be able to help. I don't know if the politics will ever change. But, we stop people's dreams. Now, she is going to be stuck with paying fewer taxes as a menial worker.

For one PLCC staff member, Nicholas, undocumented status was personal as he has watched how being undocumented has impacted his brother:

The reason that I was raised by my grandparents is because my parents are in Mexico. My mom, my sister, and my brothers they are undocumented. I was born here luckily my dad became a citizen recently and my sister was born here but my brother is undocumented and going to PLCC right now but he is going through on scholarships. Academically in high school I tried to talk to him and say hey, this is what you need to do, try to get into running start (dual high school – college credit program). And, luckily for him he was really involved with Boys and Girls Club so they saw his involvement and they saw potential in him. So, they were able to help him.

In Ema's federally funded program at PLCC, students need to have their residency documented. However, residency can still be a barrier for her students as several of her students have families, parents, or spouses who are not documented. For many of these students undocumented status of a family member becomes a financial issue. Ema cited an example of a student trying to get a lawyer and working 80 hours a week to afford one. She also has had students who have to step into the role of being the provider for the family because their parents

have been deported, “I have an 18 year old student that has four siblings that she is solely responsible for, all of the sudden... they are the mother and no longer the child.”

Eduardo, a fifth quarter biochemistry major, felt that one of the cultural barriers successful Latinas/os face is low expectations, “society in general looks at Hispanics with low standards and not expecting a lot from us.” Eduardo mentioned that from some Latinas/os this can be something that turns into a self-fulfilling prophecy and results in setting low personal expectations.

Carlos, a PLCC instructor, pointed out some of the cultural barriers that are environmental and neighborhood based:

if they come from the east side – incredible environmental barriers. Like a lot of people don’t even graduate from high school in these places right? There are gangs there. There is a neighborhood culture that doesn’t value higher education or even working for that matter.

Resource Barriers

PLCC’s successful Latina/o students differed from staff members in their perspective on resource barriers. Finances and money were not barriers that successful Latina/o students discussed or identified directly. This finding could be similar to Zalaquett’s (2006) finding that it was the lack of information about costs, financial aid and scholarships opportunities that was a barrier rather than a lack of resources as a barrier. Most student participants saw other barriers such as family health issues and undocumented status as the cause of financial strain. So, financial challenges facing successful Latina/o students were a result of other barriers rather than a barrier themselves. However, most of the PLCC staff members interviewed such as Raul, Fabio and Ema felt money and finances were the primary barriers Latina/o students face. Staff

suggested that the difference between their perspective and students on financial resource barriers might be due to the students having attended at least four quarters at PLCC and having their college financing figured out and so it wasn't a concern to student participants now. More research is needed on student perspectives on resources barriers since on other barriers there were many examples of participants drawing from experiences beyond their current perspective to include even high school experiences.

Childcare was another resource barrier staff identified but, student participants did not. Staff suggested that Latina/o students don't want to think of their children as barriers and that is why they probably did not bring in up in the focus group. It was PLCC staff member Ema that identified childcare as a barrier. Students not having childcare-- or not being able to afford childcare-- are frequent issues for her students. She also mentioned that sometimes students run into attendance problems due to issues with their child care provider.

Summary

This chapter identified the barriers and PLCC Latinas/os experience. Student participants identified 34 barriers and staff identified 39 barriers. The barriers identified by students and staff were grouped into seven barrier clusters. These clusters were further divided into internal and external groupings. Internal barriers were challenges occurring within the individual student and included psychological, decision making, self-discipline and preparation barriers. External or environmental barriers included family, institutional, and cultural barriers. Student and staff participants differed in their perspectives on resource barriers. Now that the barriers have been identified, chapter 5 will discuss the knowledge possessed by successful Latina/o students at PLCC and actions they took to overcome the barriers they experienced.

CHAPTER 5

KNOWLEDGE AND ACTIONS NEEDED TO OVERCOME BARRIERS

Introduction

This study seeks to determine how successful Latina/o students overcome the barriers they experience by exploring the knowledge they garnered and actions taken in the midst of the barriers they face. The previous chapter described the psychological, self-discipline, decision making, preparation, family, institutional, and cultural barriers that successful Latina/o students faced at PLCC, a community college emerging as an Hispanic Serving Institution (HSI). This chapter focuses on the study's second and third research questions which sought to determine the knowledge successful Latina/o students needed to overcome the barriers they faced and to discover the actions successful Latina/o students took to overcome barriers at an emerging HSI college. The answers to these questions provide insight into what Padilla (2009) described as the black box phenomenon – where something is occurring that can be seen or measured very easily. Padilla argues that in the context of student success it is easier for researchers to measure input, factors prior to college entry that predict student success such as high school GPA, and to measure outputs, the results of education such as employment. The black box in student success, the throughput, or why some students are successful and other students don't reach their goals is much harder to determine. In order to discover more about the student success black box at PLCC, successful Latina/o students were asked to identify the knowledge and actions needed to overcome the barriers that participants had experienced. The knowledge and actions were then coded and reduced into knowledge and action typologies.

In this chapter, background and definitions of the knowledge and action taxonomies will be provided. The sections after these definitions describe the specific knowledge and action

taxonomies employed by successful Latina/o students in response to each barrier cluster. At the end of this chapter a black box model for PLCC Latina/o student success is presented that combines the knowledge and action taxonomies with the internal and external barrier clusters.

Background on Heuristic Knowledge Taxonomies for PLCC

Padilla (2009) defines heuristic knowledge as “rules of thumb” or practical information needed to be successful in college. Many of the heuristic knowledge taxonomies developed from the perspectives of successful Latina/o students at PLCC aligned with other knowledge taxonomies developed by Wirth and Padilla (2008) and Padilla, Treviño, Gonzalez, and Treviño’s (1997). The knowledge taxonomy developed from participant responses included experiential knowledge, motivational knowledge, relational and comparative knowledge, procedural and anticipatory knowledge. Experiential knowledge is built through information gathered from past experiences. Experiential knowledge also includes self-awareness. Motivational knowledge includes inspiring stories of others or recall successful past experiences. Relational and comparative knowledge is gained by observing others and learning what to do to not do as a result. Procedural knowledge is information students’ gain about college processes such as financial aid and registration. Anticipatory knowledge is information that helps students develop a mental conditioning to deal with potential challenges in their future (Padilla et al, 1997).

Background on Action Taxonomies for PLCC

The actions successful Latina/o students at PLCC took in response to the barriers they faced were also reduced into an action taxonomies that included strategic, pragmatic, persuasive, supportive, and introspective actions used to overcome barriers. Strategic actions were tactics that had planning behind them. Pragmatic actions are practical steps taken to address barriers.

Persuasive actions were strategies used to influence the behavior of others. Supportive actions were taken when participant saw another person experience a similar barrier as them and they offered assistance. These actions taxonomies were informed by and aligned with Wirth and Padilla's (2008). An action taxonomy not discussed in prior research emerged from PLCC participants - introspective actions. PLCC Latina/o students frequently used introspective actions or internal strategies to overcome many the barriers they experienced.

Knowledge and Actions Addressing Psychological Barriers

In order to overcome psychological barriers, successful Latina/o students at PLCC identified that they used two sets of knowledge. The first, experiential knowledge was evident as Latina/o students sought to manage the psychological barrier of having a lack of confidence. Examples included students' acknowledging that failure is a part of the process and learning that you can be your own worst enemy. Another illustration of experiential knowledge occurred in response to feeling intimidated by others that they perceived as smarter. Life experiences taught students that no matter who you are there is always a bigger fish.

The second kind of knowledge was motivational. Adán, who has attended PLCC for 12 quarters and is a pre-engineering major, used motivational knowledge when he faced psychological barriers:

To me, it has always been about reading and running. I am not joking. When you go running you develop that thing that at a mile you go... I am going to stop now and just starting walking. And, that is the moment you have got to say, no! - I am going to keep on going, 20 minutes of pain. Afterwards, as you keep on going every day. You get used to it – 2 miles, 3 miles, 4 miles... So, the moment you say, I cannot do this – that is the moment you decide if you keep on doing, just for

a second more, just for a second more, because that pain is just going to be for a moment. And, reading also, because anything that we have ever experienced has happened to someone else in the past and they have written it.

Interestingly, much of the motivational knowledge came from stories Latina/o students learned about successful people. Pedro, for example, was inspired by Michael Jordan:

He didn't just become the greatest player ever in basketball history – he failed.

But, he got up – he had that goal and I think all of us have if you want something bad, we might have failed but have to learn and get up and hit it harder.

In addition to experiential and motivational knowledge, successful Latina/o students at PLCC dealt with psychological barriers by taking introspective, strategic, and pragmatic actions. One example of an introspective action came from Adam, undecided major in his sixth quarter at PLCC, who suggested that recognizing what your parents have done for you can be an action in overcoming a lack of ambition:

In my case realize everything that your parents have done for you. Like in my case, they did a lot, compromising what they had to come here for me and my little brother to seek a better life for us and a better future. I just keep that in mind. In my case they got deported six years ago and I haven't seen them since. And I just get to talk to them on the phone a lot and I guess their support and what they had in mind for us, I keep that in my head and as a goal I want to pursue my master's and be able to support my brother ... I just want to give back to them more than what they have given to me.

Another kind of actions mentioned by successful Latina/o students to address psychological barriers were strategic actions. Some of the tactics students took to address

psychological barriers were to surround themselves with positive people and people who are motivated about college.

Lastly, successful Latina/o students addressed psychological barriers with pragmatic actions. Isabel, another pre-engineering major at PLCC, discovered that many of her college professors experienced similar struggles or even worse situations. She suggested that students need to talk to their instructors and maybe they will learn something from the instructor's experience that students can avoid or that can stop them from making bad habits. Speaking to a teacher or counselor was mentioned several times as a pragmatic action to address psychological barriers like dealing with setbacks and lacking motivation.

Knowledge and Actions Addressing Decision Making Barriers

In dealing with decision making barriers, successful Latina/o students at PLCC drew on experiential knowledge. and utilizing pragmatic and strategic actions was recommended by successful Latina/o students at PLCC. A central theme of much of the knowledge needed in the midst of decision making barriers was self-awareness. Developing self-awareness is a part of experiential knowledge. Self-awareness around decision making was evident in successful Latina/o students seeking to become aware of how they manage stress; if they knew their time limits, if they knew what success strategies work, such as tutoring, if they knew where their money is going; and, if they knew their monetary limits.

Along with experiential knowledge, successful Latina/o students at PLCC employed pragmatic actions to overcome decision making barriers. One example of pragmatic actions was developing a support system of people that they could discuss their decisions with including: advisors; tutors or a teacher; and faculty and/or classmates.

Strategic actions were also used by Latina/o students in the midst of decision making barriers. For example, Latina/o students discussed several tactics to make it hard to decide to stop out from college. These strategic actions were: surrounding themselves with friends that support you to continue with school; talking to a counselor when having doubts about staying in college; and, not having stopping out as an option to begin with.

Knowledge and Actions Addressing Self-Discipline Barriers

To overcome self-discipline barriers successful Latina/o students at PLCC used experiential knowledge and relational and comparative knowledge. Examples of experiential knowledge gained to overcome self-discipline barriers included learning to sacrifice, manage, and prioritize activities to fit college into life. Eduardo demonstrated using experiential knowledge with his perspective of treating studying as work:

It is like looking at it as an investment. One of my friends was looking for a job and I was like okay - instead of working your (job) hours, what if you started studying. Instead of working and getting money for that day, what if you invest in getting better grades so you get more scholarships. What is the point actually working? It is going to benefit you more studying than actually working; then studying and get lower grades and not being able to get scholarships.

Relational and comparative knowledge was another type of knowledge used by successful Latina/o students to deal with self-discipline issues. Successful Latinas/os at PLCC knew not to hang around others who party a lot or who don't make school a priority.

Three types of actions were used in addition to the experiential and relational and comparative knowledge. Successful Latina/o students at PLCC dealt with self-discipline barriers by employing strategic, pragmatic, and introspective actions. PLCC Latina/o students suggested

several strategic actions to overcome self-discipline barriers. Many of the strategic actions involved sacrifices on the students' part such as being willing to reduce work hours to focus on school, being willing to quit a job that isn't sensitive to their needs and avoiding interruptions by not keeping the phone/network with them. Dante learned about time sacrifices needed to be successful in college:

I learned once I got to college that you have to sacrifice your time with some stuff, so you can make time for things that are more important. Sometimes you are not always going to be able to hang out with your friends or sometimes even with your family to get stuff done that needs to be done for classes or even for work.

Pragmatic actions were also taken by successful Latina/o students at PLCC to respond to self-discipline barriers. Most pragmatic actions centered on time management and organizational strategies. Students participants suggested several practical things such as keeping a calendar with dates and due dates, creating a to do list; taking time to prioritize and planning your schedule; making out a timeline for the day and doing important things first.

Lastly, introspective actions helped ameliorate decision making challenges confronting Latina/o students. Participants suggested several introspective actions such as always keeping studies at the center/focus and constantly evaluating costs versus benefits to being involved in campus activities.

Knowledge and Actions Addressing Preparation Barriers

Student participants only identified one preparation barrier, being undecided about their major and career. They identified areas to gain experiential knowledge in order to overcome this

barrier including volunteering in different settings to discover what interests them, looking for involvement opportunities like campus clubs, and taking a career exploration class.

Latina/o students at PLCC who are undecided about their college major or career used pragmatic actions to address this barrier. Taking a class that you might have an interest in, talking to students in various majors, seeing a counselor to help research interests and going to a business or professional to interview them were some of the pragmatic actions PLCC students suggested to take when being undecided about their major. Irene joined a club in high school that ignited her interest in business:

I remember when I was in high school I joined FBLA – Future Business Leaders of America and I didn't know what I wanted to major in when I was in high school but, after I joined that I realized that I was interested in business.

The vast majority of successful PLCC Latinas/os were connected to resources that help them make a decision about a college or career.

Knowledge and Actions Addressing Family Barriers

The primary knowledge type successful Latina/o students at PLCC used to respond to family barriers was anticipatory knowledge. Many of the anticipatory actions used to overcome family barriers on this hinge on communication strategies with family members. Successful Latina/o students at PLCC anticipated challenges communicating with family members -- especially parents. For example, students knew they needed to discover financial and other resource information in order to win their family over about college. Some of the information Latina/o students' gathered about resources that would generate family support of college attendance included: alternative funding sources, finding information about internships, considering a part-time job, and, discovering if their employer has a college education program.

In addition to anticipatory knowledge, successful Latina/o students at PLCC used a wide range of actions to deal with family barrier including introspective, strategic, pragmatic, and persuasive actions. Introspective actions occurred when Latina/o students were dealing with false support from their family of going to college. Students discussed choosing to believe in themselves after asking the self-reflective question – is this really what I want to do?

When successful PLCC Latina/o students encountered family barriers they often took strategic actions including such tactics as: working to educate their family about importance of college, inviting their family to the campus, and taking time to show family their college work.

Successful Latina/o students sought to take persuasive actions as well to overcome family barriers. In particular, family members who were seen by the students as nay-sayers, they try to win over by doing well in college and using their good performance to prove them wrong.

Pragmatic actions were also identified by successful Latina/o students as important in addressing family barriers. These actions focused on building a support network beyond the parents. Students sought support from friends, older siblings or others who have gone to college. Another pragmatic action to establish a network was to talk teachers and other campus service offices about college issues.

Knowledge and Actions Addressing Institutional Barriers

Institutional barriers were addressed by Latina/o students at PLCC with a combination of anticipatory and procedural knowledge. Question asking is at the heart of discovering the information needed to overcome institutional barriers. Anticipatory knowledge included students knowing to research early and preparing to be persistent by asking questions until they get what they need.

Procedural knowledge was also used to address institutional barriers. Participants learned most of their procedural knowledge of college processes through their interactions with college staff. Many participants used informational resources provided by more than one of PLCC's grant programs to navigate through college processes.

Along with anticipatory and procedural knowledge, a series of pragmatic, strategic and persuasive actions were used to manage institutional barriers at PLCC. Pragmatic actions that students discussed using in the midst of institutional barriers included: talking with counselor, asking questions, and using internet resources.

Participants discuss taking strategic actions when faced with institutional barriers. For example, students discussed developing a plan of what they need prior to seeing a counselor. Another example was one student's strategy of following a friend to the college to help him overcome not knowing where to start.

Lastly, persuasive actions were also used to overcome the institutional barriers students face. Isabel discussed her persuasive action of going to a counselor and being friendly with them:

I think that it is really important that you – like now that I am in college, it feels like if you have an advisor or counselor or whatever it is if you even just go in there one day and say hi to them, just often go and like even just say good morning or whatever, they start knowing you and they start kind of like going an extra mile to help you sometimes. Or they are more willing to support you just because they know you more on a personal level.

Knowledge and Actions Addressing Cultural Barriers

Similar to the other external barriers of family and institutional barriers, cultural barriers were addressed with anticipatory knowledge. PLCC Latina/o students recommended several pieces of knowledge needed to address the cultural barrier of undocumented legal status. The anticipatory knowledge needed to overcome the barrier of being undocumented included being aware that they are not alone, don't get frustrated, don't be afraid to move forward and, look for opportunities rather than focus on the problem. Anticipatory knowledge was also important in addressing low standards or expectations from society. Examples provided by students included: don't listen to others; make a goal to prove the doubters wrong; don't settle – go for more; and, know that just because others say you can't – you can.

Successful Latina/o students at PLCC responded to cultural barriers by using pragmatic, supportive, and persuasive actions in addition to anticipatory knowledge. Latina/o students used pragmatic actions to deal with undocumented legal status. These pragmatic strategies included applying for scholarships; finding resources for undocumented students; and, looking for ways to become documented.

Latina/o students also felt the need to pay it forward and used supportive actions to help others who are facing cultural barriers such as discrimination. These actions included taking time to educate, inform others of resources, and offering support to those being put down.

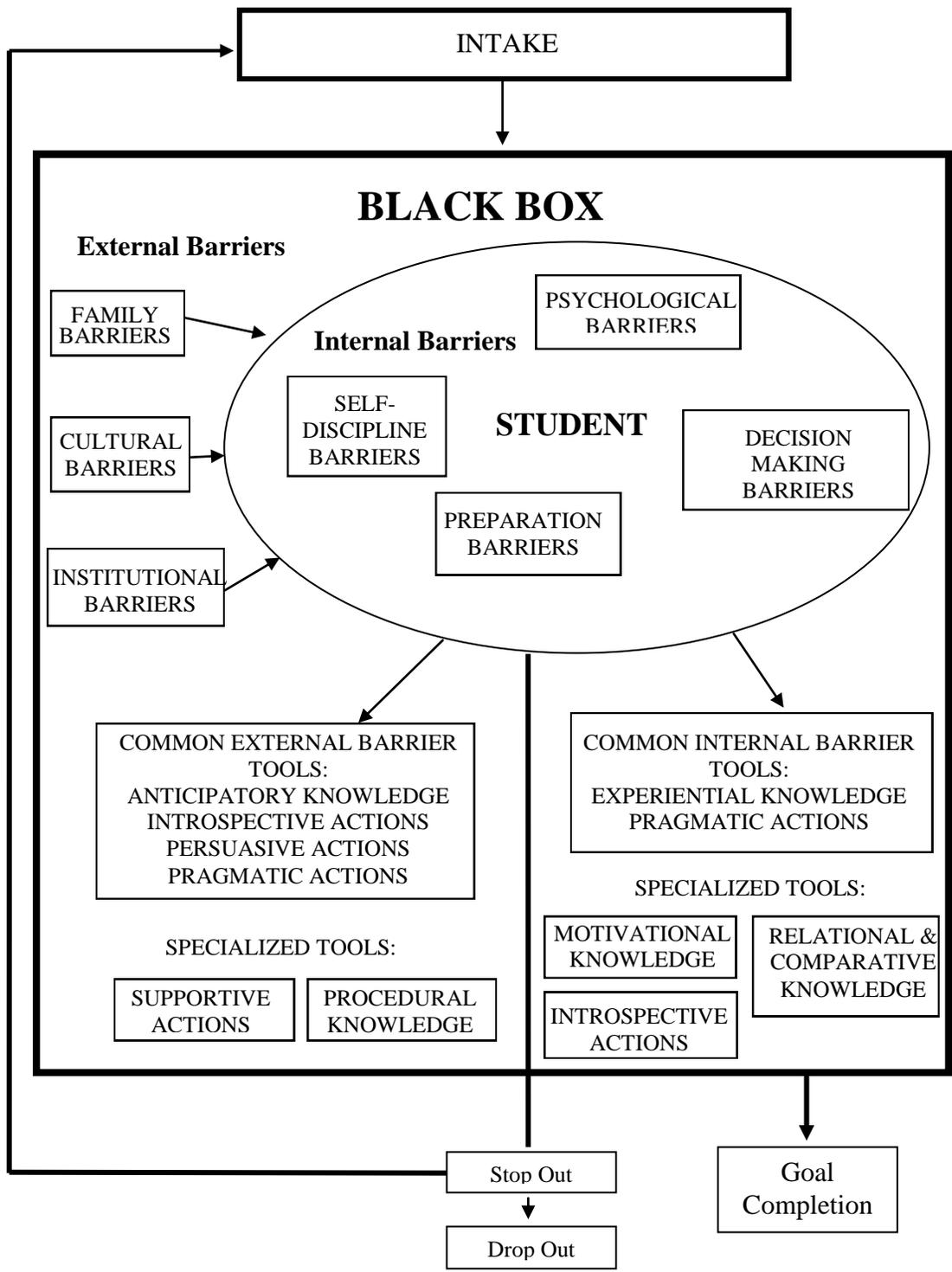
PLCC Latina/o students also utilized persuasive actions to counter cultural barriers. Such persuasive actions included: getting your voice out there politically and proving others wrong.

PLCC Black Box Model of Latina/o Student Success

A glimpse of how Latina/o student success occurs within PLCC's black box can be developed from the expertise and experience of successful Latinas/os. Figure 2 provides a graphical representation of how the barriers, knowledge to address the barriers, and actions

FIGURE 2

PLCC BLACK BOX MODEL OF LATINA/O STUDENT SUCCESS



Latina/o students take to overcome the barriers occurs for Latina/o students at PLCC. After intake into PLCC, students experience external and internal barriers. External barriers categories for Latina/o students at PLCC were family, cultural, and institutional barriers. Internal barriers were psychological, decision making, self-discipline, and preparation. If students don't address the external and internal barriers they face, they will stop out or drop out from PLCC. Latina/o students who stop out might decide to return to college or decide to leave college altogether. Information from successful Latina/o students at PLCC showed that there were sets of tools they use to overcome the internal and external barriers that they face. There were common sets of knowledge and action tools that successful Latina/o used in the midst of internal barriers. PLCC successful Latina/o students employed experiential knowledge and pragmatic actions when faced with internal barriers. There were also specialized tools that were only used to address one of the internal barrier categories. For example, motivational knowledge was only used to address psychological barriers and introspective actions were only taken when self-discipline barriers occurred. There were also common tools and specialized tools used by successful Latina/o students at PLCC to respond to the external barriers that they face. The common set of tools used by successful Latina/o students to overcome external barriers (family, cultural, and institutional barriers) were anticipatory knowledge, introspective actions, persuasive actions, and pragmatic actions. Specialized tools were also used for specific external barriers. Supportive actions, for example, were used in the midst of cultural barriers. And, procedural knowledge was needed to address institutional barriers. Successful Latina/o students who use the tool sets of knowledge and actions to overcome barriers will have goal completion. For the participants of this study, goal completion was to transfer to a four-year university.

Summary

This chapter reveals the knowledge and actions successful Latina/o students at PLCC used to overcome the barriers they experienced. Such information is useful in determining how student success occurs for Latina/o students at PLCC. Padilla describes student success as occurring within a black box – a space that is hard to observe or measure. Successful Latina/o students suggest that many pieces of knowledge and several actions occurring within the PLCC student success black box in response to barriers. The types of knowledge that successful Latina/o students describe fit into five broad taxonomies: Experiential, motivational, anticipatory, relational and comparative, and procedural knowledge. Actions the successful Latina/o students employed fit into the following taxonomies: Introspective, strategic, pragmatic, persuasive and supportive. Introspective actions or internal strategies needed to overcome barriers have not been a part of prior research on college student success. Descriptions of the knowledge and actions needed as well as a model show what combination of knowledge and actions are needed to address each barrier category described in the study. The black box model of Latina/o student success suggests that students who possess the right knowledge tools and action tools to overcome the barriers they experience will reach goal completion while the students who do not will stop out or drop out from college. The next chapter will discuss conclusions, recommendations, and suggestions for future research.

Chapter 6

Conclusions, Recommendations, and Suggestions for Future Research

Introduction

There is a dearth of information regarding Latino/a student success at institutions emerging as Hispanic-Serving Institutions. Possibly this lack of information is due to the difficulty researchers have had addressing what Padilla (2009) label a black box. Given seemingly similar factors prior to college, it is hard to determine why some Latina/o students succeed and others do not reach their college goal. Padilla advocated the exploration of student success within the black box by determining the barriers successful students faced and their strategies to overcome these barriers. This case study examined the barriers that 27 successful Latinas/os at Pipe Lake Community College (PLCC) experienced and the knowledge needed and actions taken to overcome their barriers. Through this examination, categories of internal (psychological, decision making, self-discipline, and preparation) and external barriers (family, institutional, and cultural) were found. Latina/o students at PLCC used sets of knowledge tools and action tools depending upon the barrier that they were facing. This chapter discusses conclusions, implications and suggestions for future research.

Conclusions

Pipe Lake Community College staff perceived what is going on inside the “black box” differently from the successful students. While both PLCC Latina/o students and PLCC staff identified similar family and psychological barriers, they had different viewpoints on other barriers. Staff focused on institutional, preparation and resource barriers that Latina/o students faced.

PLCC's successful Latina/o students did not see money directly as a barrier. Rather it was seen by successful Latina/o students as an issue within the framework of other barriers such as lack of family support or being undocumented. Student participants were trying to find scholarships and work so that family would be supportive of college by working to address the cost. In contrast PLCC staff are oversimplifying when they see money as the predominate barrier facing Latina/o students at PLCC.

Students also identified more decision making and self-discipline barriers than staff. It is possible that it is easier for staff to identify environmental barriers over the internal barriers students face. PLCC staff responses centered on institutional shortcomings as a source of barriers while successful Latina/o students had a more internal, personal ownership of the barriers they faced.

There was also a perception difference with regard to preparation between staff and successful Latina/o students. The successful Latina/o students only identified being undecided as a preparation barrier while staff identified six other barriers relating to preparation (poor high school preparation, not being prepared for the transition to college, remediation, lack of awareness, lack of campus connection, and study skills). While both PLCC Latina/o students and PLCC staff identified similar family and psychological barriers, they had different viewpoints on other barriers. Staff focused on institutional, preparation and resource barriers that Latina/o students faced. PLCC's successful Latina/o students did not see money directly as a barrier. Rather it was seen as an issue within the framework of other barriers such as lack of family support or being undocumented. Student participants were trying to find scholarships and work so that family would be supportive of college by working to address the cost. In contrast PLCC staff saw money the predominate barrier facing Latina/o students at PLCC. Students also

identified more decision making and self-discipline barriers than staff. It is possible that it is easier for staff to identify environmental barriers over the internal barriers students face.

While both PLCC Latina/o students and PLCC staff identified similar family and psychological barriers, they had different viewpoints on other barriers. Staff focused on institutional, preparation and resource barriers that Latina/o students faced. PLCC's successful Latina/o students did not see money directly as a barrier. Rather it was seen as an issue within the framework of other barriers such as lack of family support or being undocumented. Student participants were trying to find scholarships and work so that family would be supportive of college by working to address the cost. In contrast PLCC staff saw money the predominate barrier facing Latina/o students at PLCC. Students also identified more decision making and self-discipline barriers than staff. It is possible that it is easier for staff to identify environmental barriers over the internal barriers students face.

While both PLCC Latina/o students and PLCC staff identified similar family and psychological barriers, they had different viewpoints on other barriers. Staff focused on institutional, preparation and resource barriers that Latina/o students faced. PLCC's successful Latina/o students did not see money directly as a barrier. Rather it was seen as an issue within the framework of other barriers such as lack of family support or being undocumented. Student participants were trying to find scholarships and work so that family would be supportive of college by working to address the cost. In contrast PLCC staff saw money the predominate barrier facing Latina/o students at PLCC. Students also identified more decision making and self-discipline barriers than staff. It is possible that it is easier for staff to identify environmental barriers over the internal barriers students face.

PLCC Latina/o students used some types of information and action strategies more frequently than others to address the barriers that they face. For example, gaining experiential knowledge was important in managing half of the barrier categories that Latina/o students' experience. Results indicate that successful students sought experiential knowledge, like learning from negative past experiences, to manage the barrier categories that were more self-imposed - psychological, decision making, self-discipline, and preparation barriers. PLCC Latinas/os possessed anticipatory knowledge to prepare themselves for barrier categories that occurred in their environment: Cultural, family, and institutional barriers. For example, PLCC students attempted to minimize interacting with people they knew who were not supportive of their education. In terms of actions, PLCC Latinas/os utilized persuasive actions in response to environmental barriers like culture, family and institutional barriers. One interesting persuasive strategy was having another respected community member or family member show their support for their education to their parents. Latina/o students at PLCC used pragmatic actions, like question asking, in response to all of their barriers. The majority of barriers Latina/o students faced were dealt with by strategic actions that Latina/o students employed to mitigate the barrier. One such strategic action was to avoid going home until their homework was completed to avoid interruptions.

Other types of knowledge and actions were found to be used in response to a specific barrier category and were not used to address any other barriers. Relational and comparative knowledge was only used to address self-discipline barriers. For example, PLCC Latina/o students used relational and comparative knowledge to judge which relationships would support their education and ending the ones that threatened their success. Procedural knowledge was only needed to address institutional barriers. One of the quickest ways Latina/o students learned

how to overcome institutional barriers was by establishing a relationship with a PLCC staff member such as a counselor. These staff members could then help them through a problem or address a problem on their behalf. Taking supportive actions were only used by PLCC Latinas/os to address cultural barriers. Successful PLCC Latina/o students recognized they were role models and were driven to support the other Latina/o students seeking a college education.

Successful Latina/o students at PLCC were very introspective with their knowledge and actions to overcome the barriers that they experienced. Reflecting on their future dreams and the long-term purpose of their education was an important introspective action. There was an internal drive or internal locus of control that successful Latina/o students at PLCC had that helped them deal with the psychological, family, and self-discipline barriers they experienced. Participants were quick to accept responsibility for their education. Prior action taxonomies developed employing a similar student success approach, as this case study, have not included introspective actions.

PLCC's successful Latina/o students felt fortunate that they were able to participate in federal grant programs. It was very clear that they felt that Latina/o student success at PLCC was dependent upon whether Latina/o students were able to participate in these programs or not. Participants mentioned examples of where they were accepted into a grant program but their friends were not. When asked what happened to their friends, the answer was that they had dropped out. This was particularly true for undocumented Latina/o students in particular at PLCC. They do not qualify to participate in federal grant programs and do not have the same access to wrap around educational support services provided to other underserved, underrepresented populations at PLCC. Being undocumented was one of the greatest barriers facing successful Latina/o students at PLCC. Even if a student was documented, the

undocumented status of one of their family members or a peer made an impact on successful PLCC Latina/o students.

Recommendations

Participants discussed feeling like Latinas/os are put in a box of low expectations. One example that really stands out from this study is the ESL program at one of the local high schools where curriculum was designed with the assumption that the students would not be interested in or capable of attending college. This study suggests that emerging HSI's need to go deeper and try to be an influencing factor on their feeder high schools. Lack of information, judging whether a student is college material or not, poor advising are all barriers successful Latinas/os at PLCC identified. PLCC should persistently address how to resolve these issues with its high school partners. PLCC needs to raise awareness of and battle the cultural-bound assumptions of its feeder institutions.

Emerging HSIs like PLCC should develop strategies that can address multiple barriers and take advantage of common types of knowledge and action strategies that successful Latinas/os used. One idea would be for PLCC to develop a mentoring program for all Latina/o students. Having a mentor could address institutional barriers by providing Latina/o students with more experiential and procedural knowledge and the mentor can also provide them with pragmatic actions to discover the resources needed to overcome preparation barriers such as being undecided.

It was surprising the amount of social media that successful Latina/o students use at PLCC. It would be a mistake to assume that these students do not have access to this technology. PLCC should use of social media to provide information to and to check-in with

Latina/o students. PLCC successful Latinas/os were well networked with each other through Facebook and text messages.

While the grant programs have been a resource that some Latina/o students have been able to access, PLCC needs to explore opportunities to institutionalize the successes and staff within the program. It is hard to think that Latina/o success may be dependent on whether a student gets accepted into one of these programs or not. More successful Latinas/os and other students will be created by expanding the student success culture created in this programs campus wide.

Many of the barriers of successful Latina/o students occur within themselves such as self-discipline and decision-making or are caused by forces external to PLCC such as family and cultural barriers. Knowledge and actions in response to barriers are often sought through sources external to PLCC, primarily through family. PLCC needs to acknowledge the duality of family support as a barrier for some successful Latina/o students and as a major strategy for addressing barriers for other Latina/o students. Having a parent services program as suggested by Gilroy (2010) would assist PLCC in its response to Latina/o students' needs.

Suggestions for Future Research

It was evident from the successful Latina/o students that their families and their own internal mind set were key factors in overcoming challenges while attending PLCC. What is largely unclear is the role and importance of PLCC as an institution on Latina/o student success. Bensimon (2007) argues that little research has been done on the impact of practioners on student success. What is the effect of institutional staff on Latina/o student success?

The students who participated in this case study were privileged to be a participant in one or more grants. Their knowledge and actions in the midst of barriers may differ from other

Latina/o students who do not participate in grant programs facing due to the quality and amount of campus support they receive. Differences in perceptions of barriers among staff at PLCC and successful Latina/o students might be attributed to the actions of grant program staff to mitigate institutional barriers such as financial aid processing for their students. Future student success research should consider different campus cultural enclaves that exist within populations of students of color.

PLCC should further research institutional barriers its Latina/o students experience prior to attendance in the K-12 systems feeding into the college. Participants expressed almost the same characteristics of institutional abuse that Gonzalez, Stoner, and Jovel (2003) found: staff being emotionally discouraging; counselors providing inaccurate; incomplete or no information; and, limiting access to opportunities for college based on inaccurate assumptions and perceptions of Latina/o students' abilities.

Little research has indicated technology, specifically social media, as a barrier for Latina/o students. It was clear from the tandem focus groups in this case study that time devoted to social media was a habitual barrier that many successful students were struggling to deal with. More research on the effects of social media on Latina/o student success is needed.

Summary

As PLCC emerges as a Hispanic Serving Institution, it will need to become aware of the unique challenges facing its Latina/o population. Engaging Latina/o parents, dealing with institutional barriers in the K-12 system, and addressing the barriers facing undocumented students are major challenges.

Successful Latina/o students demonstrated the importance of introspective action taking in light of psychological, family and self-discipline barriers. This has not been a prior

characteristic of student success taxonomies developed around action-taking by successful students in response to barriers.

REFERENCES

- Aguire, J. (2009). Increasing Latino/a representation in math and science: An insider's look. *Harvard Educational Review*, 79(4), 697-702.
- Alfonso, M. (2006). Hispanic educational attainment in sub-baccalaureate programs. In C.L. Horn, S.M. Flores, & G. Orfield, (Eds.), *New Directions for Community Colleges*, 133, 17-25., doi:10.1002/cc.224
- Arbona, C. and Nora, A. (2007). The influence of academic and environmental factors on Hispanic college degree attainment. *The Review of Higher Education*, 30(3), 247-269. doi:10.1353/rhe.2007.0001
- Attinasi, L.C., Jr. (1989). Getting in: Mexican Americans' perceptions of university attendance and implications for freshman year persistence. *Journal of Higher Education*. 60(3), 247-277.
- Barker, K.S. (2009). Student success in a high-minority high school. In R.V. Padilla, (Ed.), *Student success modeling: Elementary school to college*, 96-133, Sterling, VA: Stylus.
- Becerra, D. (2010). Differences in perceptions of barriers to college enrollment and the completion of a degree among Latinos in the United States. *Journal of Hispanic Higher Education*, 9(2), 187-201. doi:10.1177/1538192709359051
- Bensimon, E.M. (2007). The underestimated significance of practitioner knowledge in the scholarship of student success. *The Review of Higher Education*, 30(4), 441-469.
- Braxton, J.M. & Lien, L.A. (2000). The viability of academic integration as a central construct in Tinto's interactionalist theory of college student departure. In, J.M. Braxton, (Ed.) *Reworking the Student Departure Puzzle*, 11-28, Nashville, TN: Vanderbilt University Press.

- Campa, B. (2010). Critical resilience, schooling processes, and the academic success of Mexican Americans in a community college. *Hispanic Journal of Behavioral Sciences*, 32(3), 429-455. doi:10.1177/0739986310369322
- Cejda, B. D. & Rhodes, J. H. (2004). Through the pipeline: The role of faculty in promoting associate degree completion among Hispanic students. *Community College Journal of Research and Practice*, 28, 249 – 262. doi:10.1080/10668920490256435
- Chapa, J., & De la Rosa, B. (2004). Latino population growth, socioeconomic and demographic characteristics, and implications for educational attainment. *Education and Urban Society*, 36(2), 130-149.
doi: 10.1177/0013124503261320
- Cofer, J. & Somers, P. (2000). Within-year persistence of students at two-year colleges. *Community College Journal of Research and Practice*, 24(10), 785 – 807.
doi:10.1080/10668920050179808
- Contreras, F. (2009). Sin papeles y rompiendo barreras: Latino students and the challenges of persisting in college. *Harvard Educational Review*, 79(4), 610-631.
- Creswell, J.W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Delpit, L. (2006). *Other people's children: Cultural conflict in the classroom* (2nd ed.). New York, NY: The New Press.
- Evans, B. C. (2004). Application of the caring curriculum to education of Hispanic/Latino and American Indian nursing students. *Journal of Nursing Education*, 43(5), 219-228.
- Gilroy, M. (2010). Tools for success in recruiting retaining Hispanic students. *The Hispanic Outlook in Higher Education*, 20(15), 32-35.

- Gloria, A.M. Castellanos, J. & Orozco, V. (2005). Perceived educational barriers, cultural fit, coping responses, and psychological well-being of Latina undergraduates. *Hispanic Journal of Behavioral Sciences*, 27(2), 161-183. doi:10.1177/0739986305275097
- Gonzalez, K.P., Stoner, C., & Jovel, J.E. (2003). Examining the role of social capital in access to college for Latinas: Toward a college opportunity framework. *Journal of Hispanic Higher Education*, 2(1), 146-170.
- Hagedorn, L.S., Chi, W.Y., Cepeda, R.M., & McLain, M. (2007). An investigation of critical mass: The role of Latino representation in the success of urban community college students. *Research in Higher Education*, 48(1), 73-91.
doi: 10.1080/10668920050179808doi:10.1007/s11162-006-9024-5
- Harmon, P. & King, D. (1985). *Expert systems: Artificial intelligence in business*. New York, NY: Wiley.
- Hernandez, J.C. (2000). Understanding the retention of Latino college students. *Journal of College Student Development*, 41(6), 575-584.
- Jalomo, R.E., Jr. (1995). Latino students in transition: An analysis of the first year experience in community college (Doctoral dissertation). Retrieved from Dissertations & Theses: A&I.(Publication No. AAT 9539566).
- KewalRamani, A., Gilbertson, L., Fox, M., and Provasnik, S. (2007). *Status and trends in the education of racial and ethnic minorities* (NCES 2007-039). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, D.C.
- Kraemer, B.A. (1997). The academic and social integration of Hispanic students into college. *The Review of Higher Education*, 20(2), 163-179.

- LeSure-Lester, G.E. (2003-2004). Effects of coping styles on college persistence decisions among Latino students in two year colleges. *Journal of College Student Retention*, 5(1), 11-22.
- Lopez, M.A. (2007). Examining dimensions of Latina/o college student success: An analysis of individual persistence and success. (Doctoral dissertation). Retrieved from Dissertations & Theses: A&I. (Publication No. AAT 3278192).
- Marti, C.N. (2008). Latent postsecondary persistence pathways: Educational pathways in American two-year colleges. *Research in Higher Education*, 49, 317-336.
doi:10.1007/s11162-007-9083-2
- Martinez, M. & Fernandez, E. (2004). Latinos at community colleges. In A.M. Ortiz, (Ed.), *Addressing the unique needs of Latino American students, New Directions for Student Services*, 105, 51-62, San Francisco, CA: Jossey-Bass.
- Marshall, C. & Rossman, G.B. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage.
- Miller, M. (2009). Student success in elementary school. In R.V. Padilla, (Ed.), *Student success modeling: Elementary school to college*, 46-95, Sterling, VA: Stylus.
- Morales, E. E. (2008). Academic resilience in retrospect: Following up a decade later. *Journal of Hispanic Higher Education*, 7(3), 228-248. doi:10.1177/1538192708317119
- Napoli, A.R. & Wortman, P.M. (1998). Psychosocial factors related to retention and early departure of two-year community college students. *Research in Higher Education*, 39(4), 419-455.

- Nora, A. (1990). Campus-based aid programs as determinants of retention among Hispanic community college students. *The Journal of Higher Education*, 61(3), 312-331. doi: 10.2307/19822133
- Office of Management & Budget. (1997). Revisions to the standards for the classification of federal data on race and ethnicity. *Federal Register Notice October 30*. Retrieved from: http://www.whitehouse.gov/omb/fedreg_1997standards/.
- Pacuilla, H.S. (2003). Square watermelons and the unfolding matrix. *Arizona Education Review*, 1, 34 – 41.
- Padilla, R. V. (1991). Assessing heuristic knowledge to enhance college students' success. In G.D. Keller, J.R. Deneen, & R.J. Magallan, (Eds.). *Assessment and access*. (pp. 81 -92). Albany: State University of New York Press.
- Padilla, R.V. (1994). The unfolding matrix: a technique for qualitative data acquisition and analysis. In R.G. Burgess (Ed.), *Issues in Qualitative Research* (pp. 273 – 285). Greenwich, CT: JAI Press.
- Padilla, R.V. (1999). College student retention: Focus on success. *Journal of College Student Retention*, 1(2), 131-145.
- Padilla, R.V. (2009). *Student success modeling: Elementary school to college*. Sterling, VA: Stylus.
- Padilla, R.V. & Norton, G. (2009). Student success in a Hispanic serving university. In R.V. Padilla, (Ed.), *Student success modeling: Elementary school to college*, (pp. 158-178). Sterling, VA: Stylus.

- Padilla, R. V., Treviño, J., Gonzalez, K., & Treviño, J. (1997). Developing local models of minority student success in college. *Journal of College Student Development*, 38(2), 125-135.
- Pérez, P.A. & McDonough, P.M. (2008). Understanding Latina and Latino college choice: A social capital and chain migration analysis. *Journal of Hispanic Higher Education*, 7(3), 249 – 265. doi:10.1177/1538192708317620
- Person, A.E. & Rosenbaum, J.E. (2006). Chain enrollment and college enclaves: Benefits and drawbacks of Latino college students' enrollment decisions. In C.L.Horn, S.M. Flores, & G. Orfield (Eds.), *New Directions for Community Colleges*, 133, 51-60. doi: 10.1002/cc.227.
- Provasnik, S. and Planty, M. (2008). *Community Colleges: Special Supplement to the Condition of Education 2008* (NCES 2008-033). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, D.C.
- Rendón, L.I., Jalomo, R.E., & Nora, A. (2000). Theoretical considerations in the study of minority student retention in higher education. In J.M. Braxton (Ed.), *Reworking the Student Departure Puzzle*, 127-156, Nashville, TN: Vanderbilt University Press.
- Rendón, L.I. & Valadez, J. R. (1993). Qualitative indicators of Hispanic student transfer. *Community College Review*, 20(4), 27 - 38.
- Rossmann, G.B. & Rallis, S.F. (2003). *Learning in the field: An introduction to qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
- Santiago, D.A. & Andrade, S.J. (2010). *Emerging Hispanic-serving institutions (HSIs): Serving Latino students*. Washington, D.C.: Excelencia in Education.

- Saunders, M., & Serna, I. (2004). Making college happen: The college experiences of first-generation Latino students. *Journal of Hispanic Higher Education*, 3(2), 146-163. doi: 10.1177/1538192703262515
- Solis, E. (1995). Regression and path analysis models of Hispanic community college students' intent to persist. *Community College Review*, 23(3), 3 – 16.
- Sólorzano, D.G., Villalpando, O., & Oseguera, L. (2005). Educational inequities and Latina/o undergraduate students in the United States: A critical race analysis of their educational progress. *Journal of Hispanic Higher Education*, 3, 272-294. doi:10.1177/1538192705276550
- Tierney, W. (1992). An anthropological analysis of student participation in college. *Journal of Higher Education*, 63(6), 603 -618. doi: 10.2307/1982046
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: The University of Chicago Press.
- Tinto, V. (2006). Research and practice of student retention: What next? *Journal of College Student Retention*, 8(1), 1-19.
- Townsend, B.K., Donaldson, J., Wilson, T. (2005). Marginal or monumental? Visibility of community colleges in selected higher-education journals. *Community College Journal of Research and Practice*, 29, 123-135. doi: 10.1080/10668920590524265
- U.S. Census Bureau (2009). *Abstract of the United States: 2009*. Retrieved from <http://www.census.gov/prod/2008pubs/09statab/pop.pdf>.
- U.S. Census Bureau (2011). *The Hispanic Population: 2010*. Retrieved from <http://www.census.gov/2010census/data/>

- Vaughn, S., Schumm, J.S., & Sinagub, J. (1996). *Focus group interviews in education and psychology*. Thousand Oaks, CA: Sage.
- WICHE (2008). *Knocking at the college door: Projections of high school graduates by state and race/ethnicity 1992 – 2022*. Boulder, CO: Western Interstate Commission for Higher Education.
- Wirth, R.M. (2006). Student and advisor perspectives on student success in a community college in South Texas. (Doctoral dissertation). Retrieved from Dissertations & Theses: A&I.(Publication No. AAT 3217354).
- Wirth, R.M. & Padilla, R.V. (2008). College Student Success: A Qualitative Modeling Approach. *Community College Journal of Research and Practice*, 32, 688-711.
doi:10.1080/10668920701380942
- Zalaquett, C.P. (2006). Study of successful Latina/o students. *Journal of Hispanic Higher Education*, 5(1), 35 -47. doi:10.1177/1538192705282568
- Zalaquett, C.P & Lopez, A. D. (2006). Learning from the stories of successful undergraduate Latina/Latino students: The importance of mentoring. *Mentoring & Tutoring*, 14(3), 337-353.
- Zell, M.C. (2010). Achieving a college education: The psychological experiences of Latina/o community college students. *Journal of Hispanic Higher Education*, 9(2), 167-186. doi :10.1177/1538192709343102
- Zurita, M. (2004). Stopping out and persisting: Experiences of Latino undergraduates. *Journal of College Student Retention*, 6(3), 301-324.

APPENDIX A - PARTICIPANTS

<u>Student Name</u>	<u>Gender</u>	<u>Age</u>	<u>Quarters Attended</u>	<u>GPA</u>	<u>Major</u>
Manda	F	23	6	3.2	Business
Cruz	M	26	6	3.2	Chemical Eng.
Dante	M	20	6	2.7	Biology
Kim	F	20	6	2.9	Nursing
Chrissy	F	19	6	2.9	Nursing
Francisco	M	19	6	3.5	Elementary Ed.
Paul	M	19	6	3.4	Sport Mgt
Jessica	F	19	5	2.9	Social Work
Maria	F	19	6	2.9	Undecided
Vidal	M	19	4	3.1	Communication
Alberto	M	20	4	2.8	Business
Irma	F	19	4	2.8	Spanish
Pia	F	20	7	3.0	Social Work
Marco	M	20	4	3.6	Communication
Pedro	M	22	15	3.0	Mechanical Eng.
Norma	F	20	9	3.1	Political Science
Carla	F	22	10	3.1	Biology
Adán	M	22	12	3.4	Engineering
Eduardo	M	19	5	3.8	Biochemistry
Dora	F	20	5	3.6	Biochemistry
Ray	M	22	15	2.5	Electrical Eng.
Irene	F	18	6	3.5	Business
Evan	M	26	4	2.9	Engineering
David	M	20	6	3.2	Criminal Justice
Adam	M	19	6	2.8	Undecided
Isabel	F	20	9	3.1	Engineering
Kale	M	23	4	3.7	Architecture

<u>Staff Member</u>	<u>Gender</u>	<u>Age</u>	<u>Length of Service</u>
Raul	M	38	10 years
Emily	F	27	4 years
Ema	F	28	8 years
Juana	F	34	5 years
Lela	F	38	2 years
Fabio	M	45	6 years
Nicholas	M	28	3 years
Carlos	M	50	3 years

APPENDIX B - TANDEM GROUP PROTOCOL

Introduction

Welcome and thank you for participating in this focus group. I know that you are busy and really appreciate your time and contribution today. Your point of view is important.

Review Consent Form

- Purpose of the study

- Confidentiality

- Recording conversation

- Transcribed with pseudo names

- Your comments will not be attributed to you in the study

- Maintain confidentiality of others comments in the study

Collect Consent Forms

Guidelines

To assist with the transcription it is helpful to identify participant comments. Please state your first name prior to your comment. For example, if I asked, what are your plans after completing community college? Ex. "Derek -- I plan to transfer to a four year school"

When participating in the focus group today I want you to think about a successful student at this college, you do not necessarily have to respond for yourself, you can have someone else in mind. A successful student can be one who completed their degree or is making satisfactory progress towards a degree.

This is not a test. The questions should not be viewed in any way as having a right or wrong answers. There is no right or wrong responses. You are the experts. I want to know your perspective. Sometimes your perspective might be different from another participant and sometimes your might share the perspective of others. Either way, please let me know your perspective.

You do not have to speak in a particular order. When you have something to say, please say it.

Please don't speak while someone else is talking. I know it is tempting to jump in; I have trouble with that myself, but, please try to refrain from doing so.

Because peoples' perspectives differ, it is important that we respect each others' perspectives. Please state your perspective without making negative comments or put downs towards others.

I value your time. Our time together is limited. I may need to stop you and redirect our discussion for the sake of time.

Do you have any questions?

Questions

Think of a successful Latina/o student on this campus. What barriers/challenges must a Latina/o student overcome in order to be successful?

(As participants discuss barriers, list barriers on matrix)

For each barrier, ask participants, what knowledge is needed to overcome this barrier?

(As participants discuss knowledge needed to overcome each barrier - list the knowledge needed on the matrix)

For each barrier, ask participants, what actions do successful students need to take to overcome this barrier?

(As participants discuss actions needed to overcome each barrier - list the actions needed on the matrix)

What recommendations do you have for the institution to help Latina/o students overcome each barrier?

(As participants discuss suggestions needed to overcome each barrier - list the recommendations needed on the matrix)

Closing Statements

As we come to a close, I need to remind each of you that the audiotape of our session will be transcribed; you assigned false names will be used in this transcript so that you will remain anonymous, and then the tape will be destroyed.

I ask that you refrain from discussing the comments of group members and that you respect the right of each member to remain anonymous.

Are there any questions I can answer?

(This protocol was adapted from Vaughn, Schumm, & Sinagub 1996)

APPENDIX C - INTERVIEW PROTOCOL

Participant: _____ Code: _____

Location: _____ Date/Time: _____/_____/_____

Age: _____ Gender: _____ Length of service at CC: _____

Role: _____

Review Purpose of Project and Consent Form

Questions

Latina/o students that are successful, could you describe them for me?

Latina/o students that are unsuccessful, could you describe them for me?

What barriers or obstacles do Latina/o students face while pursuing their college education at this college?

What do Latina/o students need to know to be successful at this college?

What behaviors or actions do Latina/o students need to take to be successful at this college?

What recommendations to you have for this college to increase the number of successful Latina/o students?

What suggestions to Latina/o students that are contemplating a college education? (Zalaquett 2005)

Are there any questions I missed? Or any further comments you would like to make?

APPENDIX D - EXAMPLE OF UNFOLDING MATRIX

Barrier	Not Using Resources	Job
<p>Knowledge</p>	<ul style="list-style-type: none"> • You know what works for you (tutoring) • You also know what you need to progress (TRIO, MESA) Don't be afraid to ask questions • Know your own threshold for success • You can form study groups/use classmates as resources • Access family members who can relate/understand your experience (w/college) • Know school website • Know how to use Angel 	<ul style="list-style-type: none"> • Be smart about time management techniques • Maintain self motivation • Don't let life happen • Map things out. What are my options? Talk with manager...Look for flexible hours • Know your limits How much can you really work? • Don't let the money fool you. Don't sacrifice school for money • Your job shouldn't be stressful. Don't risk academics for it.
<p>Actions</p>	<ul style="list-style-type: none"> • Develop relationship with faculty • Actually go to /pursue the resource ex. Tutoring • Communicate with faculty & classmates • Continue to ask questions • Continue relationships with programs of support • Log on to Angel at least once a day 	<ul style="list-style-type: none"> • Set time for job and school work • Time management • Apply for work study. • Talk with employer—Can they work around your school schedule • Make school a priority • Let your boss be aware that you are in school. They will be more flexible. • Willing to quit a job that isn't sensitive to your needs
<p>Recommendations</p>	<ul style="list-style-type: none"> • Try to get more support information to students so they are aware (TRIO, MESA, CAMP) • Faculty can stay after class 15 minutes to answer questions • Have (encourage) students using resources to advertise the resource • Have a box where students can ask questions if they are shy. • For study groups, say on Thursday this econ study group is available in this classroom. 	<ul style="list-style-type: none"> • Making it easier for students to get a on campus job. • Put more job listing and fliers out • Put announcements online

APPENDIX E - BARRIERS

Chart 1 - Successful Latinas/os' Perspective on Barriers

Barrier Cluster	Barrier
Psychological	1.1 Lack of confidence
	1.2 Intimidated by others
	1.3 Lack of positive thinking
	1.4 Dealing with set backs
	1.5 Lack of motivation
	1.6 Not being ambitious
	1.7 Driven by money
	1.8 Not being self-driven
Family	1.9 Lack of family support
	1.10 False support
	1.11 Parent's college exposure
	1.12 Setting the example
	1.13 Providing for family
	1.14 Health issues
Decision Making	1.15 Trying to do it alone
	1.16 Overwhelming course load
	1.17 Not using resources
	1.18 Not wanting to take on debt
	1.19 Stopping out
	1.20 Needs vs. wants
Self-Discipline	1.21 Time management
	1.22 Getting off track
	1.23 Lack of focus
	1.24 Taking time to reflect
	1.25 Job
	1.26 Too involved
	1.27 Addiction to social networks
Institutional	1.28 Overall lack of information
	1.29 Not knowing where to start
	1.30 The image of college
	1.31 Counselors (high school)
Cultural	1.32 Undocumented legal status
	1.33 Having low standards/expectations
Preparation	1.34 Being undecided

Chart 2 - Staff Perspective on Latina/o Barriers

Barrier Category	Barrier
Psychological	2.1 Low self-esteem
	2.2 Disappointed by time spent on remedial classes
	2.3 Negative attitude
	2.4 Blaming external forces for negative events
	2.5 No drive
Family	2.6 Gender roles/expectations
	2.7 Translating for parents
	2.8 Family obligations
	2.9 Family doesn't understand college
	2.10 Lack of family support
Decision Making	2.11 Poor attendance
	2.12 Pregnant
	2.13 Stopping out
Self-Discipline	2.14 Job (s)
	2.15 Not allowing time in schedule to study
	2.16 Time management
Institutional	2.17 Financial aid
	2.18 Lack of information from high school
	2.19 Poor advising
	2.20 Institution not seeing its role in student success
	2.21 Lack of awareness of support programs
	2.22 Not seeing instructors in a support role
Cultural	2.23 Undocumented status/family legal status
	2.24 Looked down on because of their ethnicity
	2.25 Neighborhood culture
Resource	2.26 Money
	2.27 Childcare
	2.28 Lack of support group
Preparation	2.29 Poor high school preparation/performance
	2.30 Not prepared for transition to college
	2.31 Remediation
	2.32 Lack of awareness
	2.33 Lack of campus connection
	2.34 Study skills
	2.35 Undecided major/career