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Fostering Hope and Closing the Academic Gap: An Examination of College Retention for African-American and Latino Students who Participate in the Louis Stokes Alliance Minority Participation Program (Learning Community) While Enrolled in a Predominately White Institution

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Fostering Hope and Closing the Academic Gap:
An Examination of College Retention for African-American and Latino Students Who
Participate in the Louis Stokes Alliance Minority Participation Program (Learning
Community) While Enrolled in a Predominately White Institution

by

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

Doctor of Education
in
Educational Leadership: Curriculum and Instruction

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Abstract

Colleges are struggling to retain students of color at four-year academic institutions (Kuh, 2005). The result is that while African-American and Latino students are entering college, fewer successfully complete their programs of study and obtain an undergraduate degree (ACE, 2006). For this reason, institutions are establishing supportive learning communities to not only recruit, but to retain this population. Learning communities have become welcoming places in the academy, and are designed to help students succeed in college by providing a formative, integrated academic experience that builds strength, perspective, and commitment.

Employing Vincent Tinto's (1975) student integration theory as a conceptual framework, this qualitative case study examined the relationship between student participation in a learning community, college persistence, and college retention. This research addressed the experiences of eight students of color who participated in the Louis Stokes Alliance Minority Participation (LSAMP) learning community program. Participant experiences were gathered through the administration of demographic questionnaires, in-depth interviews, a focus group, and a non-participant observation.

The findings of this research study revealed that college persistence and retention is a function of four strategies, all of which are incorporated into the Louis Stokes Alliance Minority Participation Program: (a) Social Integration; strengthened connections amongst students of color and between students, faculty and staff (b) Academic

preparedness; making sure students of color have the resources and skills needed in order to be academically successful (c) Group identity; helping students overcome feelings of isolation that are common on large college campuses (d) Providing both an academic and social atmosphere where students can succeed. The implications of this study assert that learning communities have a profound impact on positive student outcomes for both African-American and Latino students who attend predominately white institutions.

Dedication

This dissertation is dedicated to the memory of my phenomenal grandmother, Irene Gulley. She helped to instill in me the true spirit of commitment and strength. Without her servitude, laughter and resilience, I wouldn't have considered obtaining this degree.

Thanks Granny, I dedicate this achievement to you. You will be forever missed.

Acknowledgements

To God be the Glory, thank you Lord for giving me strength to push forward, and to not look back. Thank You Lord for a wonderful and supportive husband, Gary Hollands. Gary, thank you for loving me unconditionally and in all ways possible, now we can say we have a Doctor in the family! To my children, Gary Hollands III, Keziah & Kyese Hollands and my nieces Xairiya Kates, Asharee Reed, and Amaria Keyes, thanks for being my inspiration and reminding me that it is not important to become a woman of success, but a woman with value and virtue. I am blessed to have wonderful parents, Evelyn Jean Gulley and John Washington. I appreciate your unwavering support in my personal and professional endeavors, thanks for never questioning the road in which I choose to travel.

Throughout this journey, I persisted through the collective effort of numerous exceptional people, to whom I am grateful, and to whom I will also share this achievement with; Johnknesha Washington, Raymesha Bilbo, Charles R. Bell, Tasha Wheatt-Delancy, Parish Ford-Stephen, Tamika Jones, Darline Hill, Erica Henderson, Sharon Gary-Smith, Eunice Ivory, Noelle Wiggins, Rene Tucker, Stephanie Stokamer, Desire Jones, and Runette Bostic. Thanks for being my cheerleaders, your words of kindness, encouragement, edits, and excitement, have motivated me to push forward.

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Finally, I am thankful for each one of my dissertation participants, for whom this work was made possible. Thank you for your unequivocal willingness to share your lived experiences with me. It is my hope that your journeys will inform our knowledge regarding how to better serve African-American and Latino students in a way that promotes success in higher education for those who will follow in your footsteps.

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CHAPTER I

INTRODUCTION

Background

Higher education plays a pivotal role in achieving economic success. For that reason, establishing educational environments that promote college student achievement is essential in our society. College graduates on average earn almost a million dollars more over the course of their working lives than those with only a high school diploma (Pennington, 2004). Although the demand for a postsecondary education has increased over the past decade, beyond college enrollment, some students are not earning degrees at the same rate as others (Kezar, 2005).

Nationwide, college enrollment and retention rates vary amongst students of color and their white peers. The National Center for Education found that Asian/Pacific Islanders have the highest six-year college graduation rate at 67%, followed by whites at 60%, Latinos at 49%, African Americans at 42%, and American Indians/Alaska Natives at 40% (2009). As demographic shifts occur in the United States, with an increase in minority populations, retention and progress toward completion of undergraduate degrees among students of color will receive more attention in higher education.

Historically, educational attainment levels have consistently been lower for African Americans, Hispanics, and American Indians than for whites and Asians (American Council on Education, 2003). In the year 2000, only 11% of Hispanics and 17% of African-Americans in the U.S. population age 25 and older had attained at least a bachelor's degree, compared with 28% of whites and 44% of Asians (Swail, Redd, & Perna, 2003).

Because educational institutions are plagued with this issue of college persistence and retention for students of color, many colleges and universities are implementing learning communities as a possible solution to address the graduation disparities affecting these students. A learning community is a group of people who share common values and beliefs and are actively engaged in learning together from each other (Lenning & Ebbers, 1999). Learning communities can take the four generic following forms:

- Curricular learning communities are made up of students co-enrolled in two or more courses (often from different disciplines) that are linked by a common theme.
- Classroom learning communities treat the classroom as the locus of community building by featuring cooperative learning techniques and group process learning activities as integrating pedagogical approaches.
- Residential learning communities organize on-campus living arrangements so that students taking two or more common courses live in close physical proximity, which increases the opportunities for out-of-class interactions and supplementary learning opportunities.
- Student-type learning communities are designed for academically underprepared students, historically underrepresented students, students with disabilities, and students with similar academic interests such as those majoring in math, science, technology, and engineering (Lenning & Ebbers, 1999).

The goal of a learning community is to advance the collective knowledge of the group and the individual knowledge of the student. The overarching benefit of a learning community is that there is a culture of learning in which every student is involved in a collective effort of understanding (Scardamalia & Bereiter, 1994).

In addition, learning communities have been designed to help students overcome feelings of isolation that are common on large campuses, encourage a sense of group identity, and strengthen connections between various college experiences (Astin 1993).

Studies indicate that learning communities can be effective in promoting and improving student academic achievement, social integration, involvement, school satisfaction, and retention (Avens and Zelle 1992; Borden and Rooney 1998; Buckner 1977; Hill 1985; Lacy 1978; Levine and Tompkins 1996; Matthews et al. 1996). For example, African-American students who participate in learning communities “are academically more successful and fare better emotionally when they have operated in a setting where their sense of identity has been affirmed” (Jackson, 2007, p.xiv). Hence, many colleges and universities use learning communities with students in an effort to promote their academic success and to build community support.

Purpose Statement

While research has been conducted about the effectiveness of learning communities in general, there is limited research about the effectiveness of minority specific learning community programs designed for students of color attending predominantly white institutions. Therefore, this study explored the contributing factors of student participation in a learning community, college persistence, and college retention. The study examined the lived experiences of African-American and Latino students on a predominately white institution (PWI) who participated in the Louis Stokes Alliance Minority Participation (LSAMP) learning community program. LSAMP is aimed at increasing the quality and quantity of students successfully completing science, technology, engineering and mathematics (STEM) baccalaureate degree programs. The programs goals are to increase the number of students interested in, academically qualified for and matriculated into programs of graduate study. LSAMP supports sustained and comprehensive approaches that facilitate achievement of the long-term goal

of increasing the number of students who earn doctorates in STEM fields, particularly those from populations underrepresented in the STEM fields. These goals are accomplished by incorporating active and collaborative learning activities, promoting involvement in complementary academic and social activities that extend beyond the classroom.

Thus, this study sought to understand students of color lived experiences while examining how the LSAMP learning community influenced or impeded their social and academic persistence on the predominately white college campus. The research question guiding this study is the following: What are the experiences that contribute to persistence, defined as continuing toward degree completion, for students of color who participate in a minority specific learning community while attending a predominately white institution?

Significance

Academic institutions cannot escape the reality that society has become increasingly diverse. As the cultural and linguistic diversity of the United States grows, so does the cultural and linguistic diversity of our schools. In 1995, 35% of American school children were students of color. If current demographic trends continue, by 2020, students of color will make up 46% of the nation's school age population (Miller, 1995). The demographic changes will have an immeasurable impact on the existing educational practices of teachers and teacher preparation programs (Price, 2001). Academic institutions must have teachers who have an understanding of and appreciation for diversity as well as teachers who have an understanding of the socio-cultural realities that

affect education in diverse settings.

The demographic profile of students attending post-secondary education in the United States is continuing to change as well. As Rendon & Hope, (1996) state, schools in California, Texas and New Mexico are becoming “minority majority” states (Rendon & Hope, 1996, as cited in Lardner 2003). For example, in California, more than 30% of children in public schools are members of minority groups, over ninety languages are spoken in Los Angeles, and in 1996, over half of the freshman class at the University of California-Berkeley were minority students (Rendon & Hope, 1996 as cited in Lardner, 2003). With these statistics, colleges across the country are not only making efforts to recruit students but also to retain students of color. As a result, academic institutions are investing in developing learning communities for that purpose alone (Lardner, 2003). For example, the University of Berkeley, California intentionally recruited Latino/Chicano students for a post graduate program. In a face to face interview with one of the Latino/Chicano graduates of that program, Esperanza De la Vega, now a college professor; shared the personal value and importance of minority specific learning community programs for students of color.

In the interview with Professor Esperanza De la Vega, she explained that she participated in a learning community that was intentionally created for Latino/Chicano students enrolled in a doctoral program in California. As a Latina woman, raised in Los Angeles California, Professor De la Vega attended colleges in the state of Oregon as well as in the Bay area. She understood what it meant to participate in a learning environment with members who spoke her native language, understood the barriers for Latino/Chicano

students, and acknowledged the importance of culture and community while navigating a graduate school experience. Professor De la Vega explains,

"The dean in our department at UC Berkeley met with all of the Latino students in the graduate program. He invited us to dinner, provided additional social and academic support for the six of us. He assigned us a small dinky office with a file cabinet for us to meet in to study, socialize and build our community of support. We were like a familia. As a result, we ended up meeting outside of our dinky office in a coffee shop; we called our space the Chisme Corner, which means to gossip. Soon we found ourselves clustered around a table for lunch and coffee, realizing that we had inadvertently created a community that wrapped us like a warm blanket. We found that we needed each other in our university environment which functioned in a traditional mode of scientific detachment. In this environment, we found ourselves mentoring and supporting one another with classroom resources, sharing personal stories and successes. We came to this norm of bringing different perspectives of what it meant to be in a community of practice, we were learning the practice of being academics. We also discovered that as a community of practice, we were as Wenger (1998) states “. . . a force to be reckoned with, for better or for worse” (p. 85), able to bring new perspectives and authenticity to the discussion of social justice in our graduate level class discussions.” If I didn’t have the support of my other Latina sisters, I would have felt so isolated and alone (De la Vega, 2011).”

To enhance the Latino/Chicano student chance of successfully completing their educational program, it was essential to the dean of the school, who also identified as Latino, to facilitate the student’s transition to the next level of higher education. The dean not only provided students with a physical space to study and invited them to dinner, but he provided them with emotional and psychological skills and knowledge needed as they moved into the new social setting (Van Maanen, 1984, p. 211). The socialization process on the college campus can occur in forms as simple (and probably ineffective) as providing half day or full day orientations for new students. But for Professor De la Vega and other Chicano students, the dean provided them with an ongoing orientation, an outlet to navigate

the new social setting, and helped students acclimate to the university. Among the most successful programs are those that take into account the socioeconomic and cultural backgrounds and life experiences that students of color bring with them to the academic environment (Laden, 1994). As a result, the emergence and development of the Chisme Corner, a community of practice that began in graduate school for six Latina women, eight years later finds members still involved in social justice work in the field of education as researchers and university professors.

Deciding to attend college is an eventful point in all students' lives, as they pursue an education. College can take students into an academic environment that may be different from what they have known all of their lives or what their previous experiences have been (Zwerling & London, 1993). For Professor De la Vega, it was the first time in her academic experience where she was intentionally placed with other Latino students who were bi-cultural and bi-lingual, plus had the same or similar experiences while attending college. The transition from their known world to the unknown academic world was difficult and not always pleasant. However, when students are welcomed and feel included by the university, universities can influence student socialization experiences, as well as, increase their persistence toward obtaining a college degree.

Personal Journey

My interest in how and why students of color successfully graduate from predominately white institutions while being underrepresented on the college campus is directly linked to my own personal journey as an African-American. For me, a quality

education was a far-fetched illusion. As a teenager, I grew up in an environment where inter-generational poverty, incarceration, and death were the norm. I found it difficult to have high hopes and academic aspirations, or to see beyond my day to day circumstances. I was raised in Richmond California, an urban area with a reputation as one of the toughest and most violent cities in the San Francisco Bay area. Labeled as a trouble maker, I became a leader of African-American youth who were never expected to make it out of the “hood,” or attend college. However, the death of two of my best friends caused me to focus on my athletic talents, and brought me to the realization that an education was my first priority; the ticket for me to escape my life circumstances. While many student-athletes tried to maintain a 2.0 to be eligible to participate in sports, I began striving beyond that, it didn’t matter that I felt isolated without a “caring” educational system, and with parents who didn’t understand how it would all come together, but I refused to believe that the tough streets of Richmond were all that I had to look forward to, or all that I would know for the rest of my life.

Like many urban areas across the nation, Richmond is plagued with numerous social and academic problems including inadequate school funding, overcrowded classrooms, and low income families who struggle to advocate for an equitable education for their children. Despite these circumstances, there are many students who are committed to obtaining high-school diplomas and college degrees despite the institutional barriers. These are students with good intentions and aspirations but for many reasons are not graduating from postsecondary institutions at the same rate as their white peers according to NCES (2009) statistics.

In 1995, I accepted a full athletic scholarship in track to the University of Oregon in Eugene. Sports in Eugene, Oregon are focused on the Oregon Ducks, and as a young adult, I admired the athletic facility and support of the local community. However, as an African-American, there were several experiences that I did not consider or account for prior to accepting a scholarship to the college. Many of my experiences that I did not consider were the following:

- a. What hair salon or person would be able to French braid, perm, or flat iron my hair?
- b. Where and what type of church could I attend, and be surrounded by other African-Americans, and a choir who could speak to my heart and my soul spiritually?
- c. What grocery store could I purchase items such as Grits or Hog-head cheese?
- d. Whom would I confide in if I was struggling with being the only African-American student in a small or large classroom?
- e. Who could I speak to if and when none of the curriculum resonated with my experiences culturally?
- f. What teacher or professor would be able to understand my cultural perspectives and help me to articulate my thoughts and feelings in a passionate manner without being portrayed as angry or upset?

To say the least, my experiences of attending a predominately white institution came with many challenges. Additionally, I was not prepared for the academic rigor of being in a college classroom, and I most certainly was not prepared for the lack of ethnic communities in Eugene and on the college campus. Nonetheless, I engaged with other African-American students, and I built relationships with. Connecting and seeing other African-American students persisting toward an undergraduate degree inherently helped me to cope with the demands of life on a predominately white institution, as well as, helped me to cope with and negotiate many of my above experiences. Several authors

have theorized that the more communal African-American student may be more likely to draw from the support of other African-Americans on campus or in the surrounding community, thereby uniting with community members in the face of adversity rather than withdrawing in isolation or engaging in self-blame for not being integrated into the college community (Thompson & Fretz 1991).

Consequently, while attending the University of Oregon as a student-athlete, I resided in the University Inn which was a dormitory where student-athletes were intentionally placed together in a residential learning community. Thus, I was surrounded by and with other motivated African-American student-athletes who became an additional support system as well. As a result, I graduated with a B.A. in Sociology and later pursued a Master's degree in Social Work. I truly believe that without the additional support of other ambitious and motivated student-athletes, and a supportive student-athlete academic department, I would have dropped out of college completely.

African-American students who can find a balance between the white college community and the African-American experiences, possess negotiation skills that allow us to adapt to the environment with the realization that both perspectives are necessary in order to understand how to persist and graduate from a predominately white institution (Thompson & Fretz, 1991). Overall, my own personal journey of graduating from two predominately white institutions, and the stories of other students of color pushed me to take a further look into learning communities that were intentionally designed to increase college retention and college persistence for students of color in higher education. Additionally, I was intrigued to learn more about the Louis Stokes Alliance Minority

Participation Program and student's triumphs, struggles, and their personal desires to successfully persist toward obtaining an undergraduate degree while attending a predominately white institution.

Key Terms & Concepts

Before proceeding, I will provide readers with definitions of several key terms and concepts used throughout this study:

- African Americans are citizens or residents of the United States who have origins in African ancestry. (Encyclopedia, 2009). For the purposes of this study this term is favored because it recognizes the African ancestry of all Americans with African heritage, whether they immigrated from Kenya or are descents from slaves brought to America in the 1500s. I personally prefer this term because it is empowering, and respectful to my own ethnic heritage.
- “Latino/as” are students with origins in the Hispanic countries of Latin America or Spain; this group encompasses distinct sub-groups by national origin and race, with ancestries from all continents represented (Encyclopedia, 2010).
- “Students of color” refers to students of African and Latino descent who are often socially defined as “minorities” and may become targets of prejudice, stereotyping, and discrimination (Rendón, Garcia, & Person, 2004).
- The term “college persistence” will refer to a student's postsecondary education continuation behavior that leads to graduation.
- College retention is an institutional measure to retain students in college until completion of a degree and is the measure of the proportion of students who remain enrolled at the same institution from year to year (Hagedorn, 2004).
- Four-year institutions are colleges or universities that award at least a bachelor's degree. Colleges and universities will be used interchangeably with the term higher educational institutions.
- Learning communities exists in several forms on college campuses. Please refer to the definition in the introduction section.
- Predominately White Institutions (PWIs) are colleges and universities that have a majority of white students enrolled in and attending the institution.
- LSAMP refers to the Louis Stokes Alliance Minority Participation Program.

Chapter II: Literature Review

Section I

Today, many years of research exist about students of color and college persistence and retention. However, gaps still remain as to why students of color are not graduating at the same rates as whites and Asians from predominately white institutions. The purpose of the literature review was to provide a context for the gap and the research study completed, to substantiate its rationale, and to guide its design. In order to examine the impact of learning communities amongst African-American and Latino students attending a predominately white institution, I conducted a review of relevant literature in the field of post-secondary education.

The literature review is divided into four sections. The first section provides a context for the research study. It explores the definition of college retention, persistence, and provides insight about STEM education reform in the United States, and it addresses the implications of diversity on the college campus. It also provides relevant information about the retention of students of color and faculty of color on the college community. The second section of the literature review discusses the conceptual framework that guided this study, as well as, discusses issues relevant to retention models, and the cultural concerns of Tinto's student retention model. The third section of the literature review provides a context for studying the experiences of African-American and Latino students attending predominately white institutions in the following three dimensions; (a) Student Engagement (b) Students of Color Persistence and Retention (c) College Campus Climate. The last section of the literature review discusses the origins, theoretical

underpinnings of learning communities, and provides an historical overview of the types of learning communities, areas of growth for learning communities and the benefits for students, and faculty who participate. This section of the literature review also aligns principles of collaboration, and stages of community development with theoretical knowledge of learning community principals. It highlights key opportunities for partnering and focusing on educational efforts to assure tangible and sustainable impact on student persistence and retention in higher education. Because this study focused on a learning community designed for underrepresented students majoring in science, technology, engineering and math who participate in the Louis Stokes Alliance Minority Participation Program (LSAMP), it was important to situate the pedagogical learning model within the context of Vincent Tinto college student retention model. Tinto states, “there appears to be an important link between learning and persistence that arises from the interplay of involvement and the quality of student effort toward college graduation (Tinto, 1993 pg. 55).”

Defining Retention and Persistence

Many researchers have found that the terms, persistence and retention, are utilized and interpreted differently across educational institutions. According to Seidman’s (2005) metaanalysis of retention research, there are four basic definitions that include; (1) students remaining in a specific course, (2) in a specific program, (3) remaining at one institution over time, and (4) in the educational system entirely. However, Seidman’s third definition referring to remaining at one institution over time is characterized as “the ability of a particular college or university to successfully graduate the students that

initially enroll at that institution,” however, this has been the most challenging for higher educational institutions to predict.

In contrast to Seidman’s definition, Hagadorn (2005) argues that *persistence* is sometimes used in place of *retention*; and suggests caution in using the words interchangeably. Seidman’s (2005) retention analysis notes that the two concepts are independent from one another stating that “institutions retain while students persist” (p. 92). In essence, a student has the control or power to persist and it is their persistence that determines the retention rate of an institution.

Tinto further explains that when students socially integrate into a college community, their institutional commitment increases, while ultimately reducing the likelihood of them dropping out. Tinto believes that if students do not have sufficient social interactions or are not congruent with the institutions’ values, they are more likely to depart from the academic institution (Tinto, 1993). Moreover, retention is related to the student’s ability and actions to become involved actors in the institution (Tinto, 1987). Therefore, a student's ability to commit to an academic institution may vary, in fact, for students of color institutional commitment may also differ amongst institutions and programs.

In summary, retention of students in higher education is a well researched area. Scholars such as Tinto have developed theories that explain why students persist and depart from college. There is a wealth of scholarly research about retention for freshman and sophomore college students and their undergraduate experience. For the purposes of this investigation, retention will refer to whether or not a student remains at this

predominately white institution. College persistence will refer to a student's postsecondary education continuation behavior that leads to graduation.

STEM Education Reform

Recent research has shown that low participation and performance in science, technology, engineering and mathematics (STEM) fields by United States (U.S.) citizens are widely recognized as problems with substantial economic, political, and social ramifications (Carter, 2011). Kuenzi states, "the number of students attaining STEM postsecondary degrees in the U.S. more than doubled between 1960 and 2000; however, as a proportion of degrees in all fields, STEM degree awards have stagnated during this period. In the 2002-2003 academic year, more than 2.5 million degrees were awarded by postsecondary institutions in the United States. That year, STEM degrees comprised 14.6% of associate degrees, 16.7% of baccalaureate degrees, 12.9% of master's degrees, and 34.8% of doctoral degrees (p. 11, 2008)." Additionally, Carter (2011) shares that the national attention received may be attributed to a variety of areas ranging from education to employment:

- U.S. K-16 students lag in math and science achievement as compared to other leading countries, such as Singapore, China, Korea and Japan (Carter, 2011).
- U.S. engineering degrees declined by 6% from 1990 to 2002 while those awarded in Asia (China, India, Japan, South Korea and Taiwan) nearly doubled (Carter, 2011).
- Only 35% of Ph.D. granted in the U.S. in the sciences are awarded to U.S. citizens (Carter, 2011).

- Nearly 60% of U.S. Patent and Trademark Office applications filed in cutting edge technology fields, such as information technology, originate in Asia (Carter, 2011).

Moreover, research indicates that low participation and performance in science, technology, engineering and mathematics has become an increasingly severe issue for African-Americans and Latino students (Griffith, 2010). Though Latinos and African Americans represent, respectively, 15% and 13% of the U.S. population, these groups are disproportionately underrepresented in their attainment of STEM bachelor's, master's, and doctorate degrees and in their participation in the STEM workforce (U.S. Census, 2007). Specifically, Latinos and African Americans hold only 3.4% and 4.4% respectively of science and engineering jobs (as cited in Carter, 2011). As a result, of these devastating statistics, many initiatives have been established to increase participation among underrepresented populations in STEM majors and addressing our nations' social equity problems of low performance by U.S. citizens (Carter, 2011). For example, the federal government, universities and colleges, have developed programs to provide opportunities for all students to pursue STEM education and occupations. Similarly, additional steps have also been taken to increase the numbers of women, minorities, and students from disadvantaged backgrounds in the STEM fields. These efforts include providing additional academic and research opportunities in science, technology, engineering and math fields (GAO, 2005).

Due to the national emphasis on the STEM fields of study in higher education, STEM departments must become attuned to the education literature that addresses effective teaching methodologies (Espinosa, 2011). Espinosa explains, "They would be

further wise to familiarize themselves with the foundations of feminist and multicultural pedagogy. After all, it is well established that, in order to reach national STEM goals—and to approach equity in these fields—we must successfully educate more women and underrepresented minority students in the STEM disciplines (2011)." She further emphasizes the following:

"If we are to act on the national charge of educating many more young minds for STEM careers, then higher education must be poised to receive not just more students, but more diverse students. Despite increased interest in STEM by underrepresented populations, there are great degree completion gaps in need of closing. It is thus critical that colleges and universities proactively receive STEM majors with the most conducive learning environment possible. We know what those environments consist of; now it's time to act (2011)."

Additionally, funding increases for research, development, and STEM education reform for K-12, undergraduate and graduate levels, have allowed colleges to apply for federal grant funding for specific programs such as LSAMP.

Therefore, it is in the best interest of college institutions to invest in learning communities and seek grant funding opportunities like LSAMP for students of color. As mentioned previously, a learning community is a group of people who share common values and beliefs and are actively engaged in learning together from each other (Lenning & Ebbers, 1999). Because student-type learning communities are designed for targeted groups, such as historically underrepresented students, and students with similar academic interests such as students majoring in math, science and engineering (Lenning & Ebbers, 1999), the Louis Stokes Alliance Minority Participation Program fits this pedagogical model of a learning community.

Diversity and Learning Communities

The concept of “diversity” and its implications has become a major topic in higher education. Many departments and students discuss the impact of underrepresented communities within the student body and faculty; all have identified strategies to improve the recruitment and retention efforts of students, staff, and faculty members of color. At the same time, some scholars have enriched their work by cultivating knowledge about the lived experiences of people of color by discussing their historical perspectives and adding them into the educational curriculum. Additionally, there is a body of knowledge that has been shaped about pedagogical practices that help traditional majority students develop multicultural competencies and perspectives of histories other than their own (Lardner, 2003). While diversity can be defined in many ways, the objective of this research study is to support those practices that increase the presence and improve the academic success of students of color—in particular, African American and Latino students-attending predominately white institutions.

Increasing diversity in higher education can take multiple forms. Learning communities build on college integration, and are designed to be inclusive and welcoming of students into the academy. As such, learning communities also help students to be engaged as well as become academically successful. As stated by Lardner (2003), “the curriculum developed for learning communities, focuses on issues that matter in the world, can readily include multiple world views and histories, and learning communities can also become places where teachers develop powerful pedagogical strategies that support the learning of all students (pg.4).” Lardner further explains that

there are three central elements for approaching diversity through learning communities and these include: (a) Designing learning communities for particular groups of students (b) Using learning communities as sites for curriculum transformation (c) Developing pedagogical practices that support diverse learners. These three elements are at the core of connecting learning community structures with the rich work of diversity that continues on college campuses (Lardner, 2003).

Retention of Students and Faculty of Color

Some colleges and universities are engaging in efforts to increase the diversity and multiculturalism within their college campus communities (Turner, Gonzalez & Wood, 2008). Their goal is to recruit students and faculty of color as a way to prove and measure their institutions' ability to build communities of diverse learners and teachers who will thrive and teach one another (Bollinger, 2007).

Many colleges and universities have learned that diversity among the student body and faculty of a college or university is not only beneficial to the institution itself but also to the population of students and faculty that it serves (Smith, 1989). Researchers believe diversity among students and faculty enhances an institution through enrollment growth, allows for greater fund availability, increases support services, and gives more institutional prestige as well as, favorable publicity (Owens, Reis & Hall, 1994). As an African-American student attending a predominately white institution, having the ability to engage with faculty of color provided me with an additional academic and social support network that broadened the range of the curriculum to include authors who were African-American and Latino. Having faculty of

color as professors also increased opportunities for me to collaborate and engage in classroom dialogue with professors who understood the challenges, barriers and successes of people of color.

Simultaneously, recruitment and retention of faculty of color may also allow (or “support”) faculty from the majority culture to improve their interracial relations and change their attitudes concerning people of different racial and ethnic backgrounds (Owens, Reis, & Hall, 1994). For faculty of color, working at institutions with diverse students can help them feel more comfortable with the academic and social culture of their campuses and more satisfied with their professions (Antonio, 2003). Therefore, the impact of providing both an academic and social atmosphere where both students and faculty can succeed is vital to the college persistence for students of color, as well as, can lead to retention of faculty of color in higher educational institutions. But, “One of the great challenges faced by U.S. institutions of higher learning is the engagement and full utilization of the population’s talent” (Massachusetts Institute of Technology, 2010, p.1). Despite years of diversity policies and practices, the least successful of all the diversity initiatives on campuses are those in the area of faculty diversity (Smith, Turner, Osei-Kofi & Richards, 2004). The increase of the presence of faculty of color on college and university campuses continues to be slow (Antonio, 2003); and a thorough examination of both quantitative and qualitative data by Turner, Myers and Creswell (1999) reveals continued underrepresentation of faculty of color in the nation’s colleges and universities.

According to the statistics recently released by the U. S. Department of Education (2008), faculty of color make up only 17% of the 1.3 million faculty members in the nation’s degree-granting colleges and universities. The latest statistics from the U. S.

Department of Education (2008) also indicate that four fifths of the faculty in the nation's degree-granting colleges and universities are white, with 43% being white males and 36% being white females. Of the 17% faculty of color in the academy, 7% are Asian, 6% are African-American, 4% are Hispanic, and 1% are American Indian.

Chang, Altbach and Lomotey (2005) report that the efforts for recruitment and retention of underrepresented faculty have generally been met with little success, and faculty of color are still severely underrepresented in the academy. Research indicates that there are many factors involved in the successful recruitment and retention of faculty of color in higher education. Turner, Myers, and Creswell (1999) state that faculty of color's love for teaching, and their sense of accomplishment, the supportive administrative leadership, mentoring relationships, collegiality, and interaction with other faculty and students of color are all positively contributed to the successful recruitment and retention of faculty of color in higher educational institutions. Retaining students of color and faculty of color in predominantly white colleges and universities has been an enduring problem since the civil rights movement opened up the college doors to students not previously found in significant numbers in higher education (Fleming, 2007). For example, many new students were labeled nontraditional because they did not fit the traditional picture of college students. These included students who were first-generation-older, female, racially and ethnically diverse, disabled, and from low-income households, as well as those labeled "academically underprepared" (Kuh 2004 as cited in Fleming, 2007). High attrition rates for these students finally led higher education institutions to employ various strategies to increase student retention and completion rates. One strategy employed was to hire faculty of color who could mentor non-

traditional students; however, challenges for both faculty and students of color were troubling. For example, faculty of color experienced racism and were often chosen for committees that needed diverse representation which meant that they had less time or no time to mentor students of color. James F. Bonilla, a Latino faculty member in a predominantly white institution states, “It means being on the fringe of a white academic culture that still sees the ‘other’ as guest at best and intruder at worst” (Stanly, 2007 p. 69). These efforts of increasing both faculty of color and students of color currently continue as institutions seek more effective ways to provide positive learning experiences and increase retention rates for students, especially those from racial and ethnic backgrounds.

Section II

Tinto’s Student Integration Theory

A vast array of research studies have focused on student retention in higher education. Educational researchers such as Vincent Tinto have created well documented and supported theories of retention. In 1975, Vincent Tinto developed a student integration model linking environmental climates to student success. Tinto's model of 1975 has become a foundation for most research regarding college student departure. The model supports the role of student involvement in positive educational environments for college students. It emphasizes the need to better understand the relationship between student involvement in learning and the impact that involvement has on student college persistence. Involvement with one's peers and with the faculty, both inside and outside the classroom, is itself positively related to the quality of student effort and in turn to both learning and persistence (Tinto, 1993, p. 71).” Tinto argued that learning is linked to

persistence, “the more students learn, the more likely they will persist (Tinto, 1993, p. 131).” For this reason, the conceptual framework utilized to guide this dissertation was informed by Vincent Tinto’s (1975) student retention model. A review of literature revealed that while there are other models about college persistence and graduation, his model differs from other models because it provides a dynamic, interactive view of the lived experiences of students in the institutional culture. Tinto argued that student’s backgrounds coupled with their academic and social integration, influences college retention (Tinto, 1987).

Tinto’s student integration model is also based on Emile Durkheim theory of suicide as well as Spady’s (1971) model on the student dropout process. Spady elaborated on Durkheim’s conclusions and subsequently outlined the presumed role that the social structure played in the retention process (Kuh, 2005). Later, Tinto borrowed from Spady’s and Durkheim’s conclusions, adapted their work and developed his own theory. As Tinto (1975) notes, Durkheim’s (1961) theory of suicide is one of the more interesting parallels to student departure. Durkheim described four different behavioral reasons for suicide: altruistic, anomic, fatalistic, and egotistical. He further explained the following:

- (a) Altruistic departure occurs when members of institutional subcultures hold beliefs that promote dropout, as existed in this country in the late 1960’s when many students left college as a form of protest.
- (b) Anomic response is a response to the breakdown of norms resulting from a temporary societal chaos. This type of departure may result from “disruptive forces on campus that undermine the daily operation of the institution and undercut the normal bonds which tie individuals to it.

(c) A fatalistic departure occurs if an individual becomes oppressed under the structure of institutional bureaucracy.

(d) Egotistical departure occurs when individuals fail to become integrated and establish membership within community or society.

According to Kemper and Gow (1989), Tinto believed egotistical suicide is the most relevant to student persistence. They further explained because "it is indicative of people who become isolated from society's communities because of an inability to integrate and establish membership" (p.278). Durkheim suggests (1961) that suicide could occur if two forms of integration were not present, social integration and values integration. Social integration occurs when the individual is able to form personal relationships with other members of their society, and values integration occurs when an individual is able to find commonalities with the values of the new community (Durkheim, 1961). Tinto (1975) argues that dropout rates amongst students are more likely to occur when students are unable to establish membership into their institutions' social network, or who are unable to persist beyond their personal beliefs and norms from that of the institutions beliefs and norms.

Tinto (1987) theorizes that social integration increases student institutional commitment, while ultimately reducing the likelihood of college student drop out. Retention is related to the student's ability and actions to become involved actors in the institution (Tinto, 1987). Tinto believes that if students do not have sufficient social interactions or are not congruent with the institutions' values, they are more likely to depart from the academic institution (Maggio, White, Molstad & Kher, 2005). In particular, the degree that students are successful in their pursuits determines the degree

that they are committed to their career, educational goals, as well as, to the institution. Researchers, such as Pascarella, Terenzini, and Wolfe (1986) referred to “a person-environment fit” as the model’s conceptual core (p. 156). Tinto suggests that in order to retain students, there must be frequent involvement on campus and off campus, quality contact with peers and faculty, as well as, an individualized connection to the values of the institution (1975).

According to Tinto (1993), the stronger the educational goal and institutional commitment, the more likely the student will graduate. The literature above presents an association between student academic achievement and institutional missions. Tinto's model suggests that student's who leave college, also withdraw from society and it's like committing suicide (Tinto, 1975). The process of becoming socially and academically integrated into the fabric of the institution has been found to be instrumental in the success of student persistence and college graduation.

General Issues with Retention Models

There is a dearth of information on the effectiveness of retention models for students of color. Bourne-Bowie (2000) notes that student retention theories gained prominence between 1950 and 1970 and formed the basis of student development practices in the 1980s and 1990s (Fleming, 2007). However, the traditional student development models are mostly based on Eurocentric worldviews and have repeatedly failed to adequately address the needs of nontraditional students, including those of African heritage and other students of color (Bourne-Bowie, 2000 as cited in Fleming, 2007). Additionally, Guiffrida (2006) explains that there are limitations to many of the retention studies and theories. He objects to Tinto's (1993) assertion that students have to

disassociate themselves from their past associations to be able to be drawn into an institution's academic and social environment in order to successfully remain in college. Clearly this is not true for all students, some students of African and Latino decent utilize their family and social relationships with their communities as a form of motivation, to help them persist toward earning a college degree. These communities include racial or ethnic student clubs, student-type learning communities, and extended relatives external to the college community. In fact, in his review of studies conducted with students of color, Guiffrida argues there are a number of authors who have concluded that minority students "greatly benefit from the support of families, friends, and other members of their home communities" (p. 457), and that disconnection from their culture and past associations are not beneficial. He argues that further research should be conducted with students of color, and that the goal of administrators should not be to integrate students but to connect students with creating relationships with a supportive college community. Research models such as the one created by Vincent Tinto cannot be applied to all students. Guiffrida suggests that Tinto (1975) should consider moving away from perspectives that emphasize student adaptation to a majority culture to one that encourages colleges and universities to affirm diverse student cultures and connections.

Cultural Issues with Tinto's Integration Theory

Many theorists such as Guiffrida (2006) and Tierney (1999) have critiqued Tinto's student retention model from a cultural perspective and do not think that it is applicable to students of color who attend PWIs. Tierney (1999) argues that Tinto's (1975) model views college as an initiation ritual with success being dependent upon a students' ability to engage and integrate on the college campus. Furthermore, Tierney (1999) also

believes that Durkheim's model of suicide and withdrawal is culturally unfair to students of color. Since Tinto's (1975) model suggests that students must break away from their previous communities in order to integrate socially into the college, for students of color, they will be committing cultural suicide (Tierney, 1999). Tatum (1997) describes the need for these students to have other students of color to associate with as a method of coping with an unfamiliar or uncomfortable environment on and off the college campus.

Many students of color who attend predominately white institutions do not believe that PWI's are welcoming and inclusive institutions that promote diversity. Therefore, many cannot successfully adapt socially and academically, thus forcing them to depart from the institution (Tierney, 1999). Hurtado and colleagues (1999) discuss feelings of a chronic role strain creating self-doubt of students of color academic ability, intelligence, capability, and preparation to succeed in college, all leading to the inability to connect with the university. Jones (2001) posits that these feelings lead to a lack of satisfaction with their college experience and are the main reasons why students of color attending PWI's are less likely to persist and persevere to graduation.

Guiffrada (2006) has also suggested that Tinto (1975) theory include a cross-cultural perspective. In applying a cross-cultural perspective, Guiffrada (2006) believes that students of color will not have to give up their collectivist values by separating from their previous backgrounds to become socially integrated into the college environment. Guiffrida suggests that students of color rely on the support of their families, friends and other members of their communities to keep them motivated about staying in school. To illustrate, Lee, London & Brown (2010) found that American Indian/American Native self-identity is greatly intermingled with their culturally defined family and tribal

community. Such an understanding of this relationship became a fundamental theoretical basis for the Family Education Model (FEM) put forth by HeavyRunner and DeCelles. They also found that “replicating the extended family structure within the college culture enhanced the student’s sense of belonging which led to higher retention rates” (as cited in Lee, London & Brown p. 29). Furthermore, Guiffrida suggests that Tinto’s (1975) model consider moving away from perspectives that emphasize student adaptation to a majority culture that encourages colleges and universities to affirm diverse student cultures and connections.

As a counter to the assumption of academic and social integration, Rendón, Jablomo, and Nora suggests that students of color can successfully navigate predominantly white institutions by way of bi-culturation (cited in Swail, Redd, & Perna, 2003). Bi-culturation simply means students “live simultaneous lives in two cultures and in two realities” (p. 49 cited in Swail, Redd, and Perna, 2003). Troy Duster describes a similar phenomenon as “dual competency” in that “students must be competent in their own culture plus the culture of the institution” (cited in Swail, 2003 p. 49) in order to successfully navigate white colleges as a minority student.

My purpose in utilizing Tinto’s model was to examine how it could be employed as a framework for the LSAMP learning community, and for students who are least likely to persist and graduate from predominately white institutions. And, because this study examined the relationship between student participation in a learning community program, college persistence, and college retention, it was important to utilize a framework that guided the influences of learning communities with undergraduate student’s academic achievement and retention rates. Although there is some disagreement

about how to best operationalize various components of the Tinto model, most agree that for students to succeed in college, they must learn to negotiate foreign environments and interact effectively with strangers (Kuh & Love 2000).

Section III

Engagement, Persistence & Climate

As discussed earlier, the most noted scholarship that informs learning communities is exemplified by a theoretical framework developed by Vincent Tinto. Tinto posits that “interactions among different individuals within the academic and social systems of the institution lead people of different characteristics to withdraw from that institution prior to degree completion (Price, 2005).” To understand Tinto’s theory further, this next section of the literature review will focus on three dimensions: (a) Student Engagement (b) Students of color Persistence and Retention (c) College Campus Climate.

Student Engagement

Students of color, legally defined as ethnic minority students including African American, American Indian/Alaskan Native, Latino students enrolled in U.S. colleges, continue to report experiencing few collegiate environments built on their own cultural rhythms (Chavez, 2007). Ibarra (2002) found that students describe having to negotiate environments that are inconsistent with their own ways of learning, cultural norms, and personal priorities. This cultural norming, appropriate for a few ethnic groups, originated in Germany and England and was imported as a collegiate model to serve wealthy, Caucasian American, protestant, males in the U.S. (Rich, 1993 as cited in Chavez 2007). Strange (2000, p. 21 as cited in Chavez 2007) describes the basis for this phenomenon of

educational environments remaining culturally incongruent to specific populations, he shares, “An environment inhabited mostly by individuals of one characteristic or type is said to be highly differentiated and consistent. This would be the case with a class where all students share the same major or a residence hall where residents are of the same gender.” An environment dominated by a single and consistent type accentuates its own characteristics over time (Astin, 1985); attracting, satisfying, and retaining individuals who share the dominant features. The quality of anyone’s experience is therefore a function of his or her congruence or degree of fit with the dominant group. An individual placed in an incompatible environment is less likely to be reinforced for preferred behaviors, values, attitudes, and expectations. The likelihood of that person’s leaving the environment is increased (Chávez, 2007).

Researchers such as Tinto (1997), arguably suggests student engagement and building classroom communities still matters, and is considered essential for student success. Weaver and Qi (2005) state that achieving success in eliciting student engagement in the classroom is a daunting task for some college instructors. Kumar (2006) research suggests that “students may also experience dissonance when the cultural values, beliefs, and norms of their home contexts are incongruent with the schools’ cultural values and norms (p. 245).” For students of color, this incongruence between their home and academic experiences can impact their performance in the classroom (Booker, 2006; Caruthers, 2007), thus lead to lack of student engagement, participation, and class or college drop out.

Students of Color Persistence & Retention

Researchers agree that integrating students of color into the college campus is important, but students of color experience academic challenges that create stressors that also impact their college persistence (Loo & Rolison, 1986; Lopez, 2005; Malaney, 1991; Smedley, Myers, & Harrell, 1993). Smedley, Myers, and Harrell (1993) measured the impact of stress on academic persistence. They found that Latino students for example, reported the highest mean scores on an academic stress measure. This measure included the following: a) Doubts about ability to succeed; b) Feeling less intelligent or capable than others; c) Academic background being inadequate. Lopez (2005) conducted an longitudinal study with first year Latino students, and surveyed them two weeks upon entering college and then again two weeks into their second quarter, he found that academic achievement stress was ranked first both times. As a result, academic achievement stress was the only stressors found to be “significantly and inversely associated with achievement” as measured by GPA (Smedley, Myers, & Harrell, 1993, p. 445).

Researchers such as Loo and Rolison (1986) examined socio-cultural alienation and academic satisfaction. They found that 77% of African-American and Latino students reported alienation due to their racial composition, experienced an unwelcoming campus climate, and had more academic difficulties than white students on predominately white institutions. In a longitudinal study, Malaney (1991) found that white freshman students reported their classes as difficult but their stress level declined nearly 70% as the year progressed. But, other students of color found difficulties in their classes and stress level increased by 4%. Overall, these studies revealed that students of color

experienced a higher level of academic stress, and felt that they faced more difficulties than their white peers.

Additionally, a majority of the research on minority student retention is in a four-year undergraduate setting. In a study of 799 freshmen (97 minority and 702 non-minorities) at a Midwest university, Eimers and Pike (1997) found that the intent to persist at an institution is not different between minority (Hispanic, African American, and Native American) and nonminority students (Caucasian). However, the factors that affect the intent to persist are different between groups. Those factors that are significantly different between minority and nonminority students are that minority students had lower levels of entering academic ability, encouragement, social and academic integration, perceived quality of education, overall commitment to the institution, and higher levels of faculty and student interactions. However, the higher levels of faculty and student interactions did not translate to better relations since Eimers and Pike found that minority students also had higher amounts of perceived discrimination than nonminority students.

In other studies relating to student persistence and retention in higher education, Lavin and Crook (1990) examined ethnic differences in long-term educational attainment and found that minority students demonstrated less academic success all along the way and were far more likely than whites to leave college without any degree. Their particular study also revealed that only 50% of African-American and Latino students earned any credential, and many did not persist to college at all.

College Campus Climate

Racial tension resurfaced in the late 1980s and 1990s on college campuses in the United States, with students protesting about the inequalities at PWIs (Lewis et al., 2000). This tension began in the 1960s, with African-American students stereotyped by their white peers and faculty (Cabrera et al., 1999; Davis et al., 2004; Farley, 2002; Holmes et al., 2001; Lewis et al.). As a result, still today, stereotypical views and unwelcoming campus climates create hardships for students of color at PWIs. Literature suggests that for students of color, views about race are important in their social and academic persistence. Castellanos and Gloria (2007) suggest persistence is impacted by psychological (i.e. personal beliefs, attitudes, and perceptions), social (i.e. networks, connection, role models, mentors), and cultural (i.e. values validation, meaningfulness) factors. Several studies found that for students of color, persistence was impacted by negative experiences on predominately white institutions, these included; socio-cultural alienation, racism, discrimination, and low numbers of students of color (Bordes & Arrendondo, 2005; Gloria, et al., 2005; Attinasi, 1989; Loo & Rolison, 1986). Additionally, racial identity has been cited as a major factor for students of color social adjustment, daily functioning, behaviors, as well as, in academic outcomes in predominantly white institutions (Mitchell & Dell, 1992).

Just (1999) argues that racial climate influences almost every aspect of the college experience for students of color, and may be the cause of academic and social marginalization. Loo and Rolison (1986) found that students of color attending PWIs experienced significantly greater social alienation than white students. They further explained that 37% of African-American and Latino students reported social isolation on campus, and 25% did not feel integrated. When asked if the college student environment

reflected their views, 40% of minority students reported “a little or not at all.” While all students had thoughts of dropping out of college, white students cited academic reasons only and students of color cited both academic and socio-cultural alienation.

This issue of racial identity and its implication for students of color have been a controversial issue in the educational literature. Some individuals believe that identities which de-emphasize group/cultural identification are most facilitative of educational success for students (Fordham, 1988; Fleming, 1984; Hughes, 1987), while others assert that group affiliation and awareness can play a protective and enhancing role in students’ educational experiences (Baldwin, Brown & Rackley, 1990; Phinney, 1990; Taub & McEwen, 1992; Taylor, 1994 as cited in Chavous 2000). Consistent with these studies, a review of the literature revealed that prior and current academic experiences must be considered to support the retention of students of color attending predominately white institutions from social integration through their academic success. One way to help students of color navigate the terrains of predominately white institutions is through learning communities.

Section IV

Learning Communities

There is an abundance of theoretical and empirical literature exploring the concept and development of learning communities for students. This literature uniformly assumes that when a cluster of students join together as a group, they will share different perspectives, thoughts, and interests. As a result, students will help one another with homework, class assignments, peer motivation, and thus the academic environment becomes a supportive community of learning in which students persist toward graduation.

As an example, there were several positive outcomes for Dickson College as a direct result of creating a learning community on the college campus. In their institution, they developed a strategic plan to engage students in a more useful direct educational experience. Through their efforts, they linked related seminars, and their students lived together, and participated in out of classroom programs such as field trips and dinner discussions (Staub & Finley, 2009). Staub and Finley state, “Their learning communities encouraged students to explore topics such as sustainability, global awareness, social justice, and examine the relevance in their own lives.” Because of their experiences in the learning community, students actively modified their behavior in residence hall features to achieve greater environmental sustainability (Staub & Finley, 2009). As an overall outcome, students who were engaged in the community reported the following: (a) Deeper connections to the academic material (b) Stronger faculty and student relationships (c) Increased campus involvement (d) Reported lower levels of alcohol consumption and (e) More engagement in the overall academic campus (Staub & Finley, 2009).

Since this study focused on the efficacy of learning communities for African-American and Latino students attending a predominately white institution, research from community colleges were included in this review when the characteristics of the student population studied matched those of four year college students, when the learning communities studied were designed for underrepresented students, or when the results appeared relevant to the experiences of African-American, Native and Latino students.

Theoretical Foundations of Learning Communities

Many universities use the learning community model with first-year college students in an effort to promote academic success and to build a supportive network community (Tinto, 2001). These communities are designed to help students overcome feelings of isolation, encourage a sense of group identity, and strengthen connections between various college experiences (Astin, 1993). To illustrate, the University of Oregon selected a cohort of 25-30 students who attended large lectures with 200-300 other students. As a cohort, 25-30 students met after each lecture for discussion groups led by a graduate student or upperclassman. As a result, they established peer-support networks, and created a learning community that was inclusive and safe (Tinto, 2001).

The learning community models were initially designed in 1932 and influenced by both the work of John Dewey and Alexander Meiklejohn. These scholars transformed the educational system by calling attention to the diverse needs and experiences of students. Dewey's work presented his philosophy of education as a democratic process in which people come together to communicate their ideas, explore, and learn together.

A recent book on learning communities and reform of undergraduate education cites Dewey's student-centered learning and active learning models as the root of experiential and cooperative learning embedded in the learning communities of the twenty-first century. Dewey believed that the process of active-engaged learning where individuals participate in solving problems, building relationships and exploring issues as a group, can result in an increased interest in the subject matter as well as in the class (Dewey, 1997). Dewey emphasized the individuality of students and promoted student-centered learning. He insisted that a student and the curriculum are two sides of the same coin. Accordingly, Dewey says, "The spirit of inquiry and evolution of knowledge in

humanity as a whole can be viewed comparably to the curiosity and development of every student that has grown to mature” (1997 p. 46). This implies that when educators help students connect their personal lives to classroom curriculum, students can perhaps examine potential solutions in their own lives and in society. He also insisted that teachers become experimental and intentional in their teaching efforts, and become familiar with their students so that their teaching and learning build upon the individuality of each student.

The earliest learning community cited throughout the literature is credited to the educational theorist Alexander Micklejohn (Smith, MacGregor, Matthews, & Gabelnick, 2004; Gabelnick, MacGregor, Matthews, & Smith, 1990; Tinto, 2003). A former dean at Brown University and president of Amherst College, Meiklejohn, started the Experimental College at the University of Wisconsin in 1927. He wrote extensively about the fragmentation of learning and the increased specialization of academic disciplines; specifically, he argued that the German research university model that was ascending in the United States would undermine the social responsibility of higher education to provide general education to a broader cross-section of society (Price, 2005).

Micklejohn's insights into the fundamental importance of structure, curricular coherence and community are what make him a central figure in learning community history. Like John Dewey, Micklejohn believed that critical thinking and democratic engagement goes beyond students just reading a book. In his review, students must be part of an educational experience that fosters engagement and academic exploration outside of the classroom (Meiklejohn, 1932).

During Micklejohn's tenure at the University of Wisconsin, he established the first learning community, called the Experimental College, which lasted from 1927 to 1932. It consisted of a full-time, two-year residential lower-division program based on in-depth study of the "great books." In the learning community, Micklejohn focused on the principles of integrated learning and all aspects of a diverse curriculum. His pedagogical approach was intended to foster relationships between and among faculty and students quite distinct from the traditional structure of a college education.

Though the learning community did not last long, it was considered a successful experiment in that it challenged many traditional higher education processes and procedures. It also produced an insightful guide for future learning communities (Smith, et al. 1990). Micklejohn's short lived learning community prompted one of his former student, Joseph Tussman to explore another form of a learning community while at the University of California at Berkeley from 1965 to 1969 (Smith, MacGregor, Matthews, & Gabelnick, 2004; Gabelnick, MacGregor, Matthews, & Smith, 1990; Tinto, 2003). Tussman felt that college programs should be team-taught and interdisciplinary which would promote a sense of community among its members (Smith, et al, 1990.). Hence, the learning community concept was seen as a stepping stone to actively engage students in a college classroom.

In 1970, Evergreen State College, an alternative college in the state of Washington, established another learning community based entirely on "yearlong coordinated programs that would be full-time, team-taught and organized around interdisciplinary themes (Smith, et al., 1990)." They hired staff with clear expectations. They identified specific roles for staff and identified reward systems specifically

designed to support the interdisciplinary curriculum of the learning communities (Smith, et al., 1990). With this innovative idea of team teaching, the university was able to rearrange the curricular time and space of both students and faculty to foster community, coherence and connections among courses, and more sustained intellectual interaction between students, between students and teachers, and between teachers. It was the only college that was organizationally different from other institutions of the time because of their interdisciplinary themed learning communities.

Types of Learning Communities

Designing and implementing effective learning communities can be a challenge for academic institutions. However, if implemented effectively, students and colleges both will benefit. In a research study conducted by Barefoot et al. (2000), she found that most colleges and universities are taking steps to improve the first-year experience for their new college students; Barefoot argues that the efforts that are being made are not always being done in an organized and coordinated manner. Although according to Vincent Tinto, “there is no one specific type of successful implementation strategy (1993, p.148). Barefoot disagrees and states, “the key to implementing learning communities is to facilitate cross-functional communication and create a coherent and meaningful college experience (2005, p.60).”

Learning communities exist in several forms on college campuses. Tinto (1998) describes modern learning communities as a block-scheduling or co-registration process that is designed so that students intentionally enroll in courses together. The goal of co-enrolling students (in two or more) courses together ensures that students will have frequent contact, build relationships with one another and spend time in engaging with

common curricular activities. This generally occurs when a set number of students (20-30) register for two or more courses, forming a study group (Price, 2005). Many of these learning communities are planned around a specific theme such as social justice to assure a shared curriculum with a deeper level of learning (Tinto, 1998). Many of these experiences are even more powerful in terms of learning outcomes when faculty members teaching the common courses structure assignments that require students to apply what they are studying in one course to other courses and assignments. Taken together, these features strengthen the social and intellectual connections between students which, in turn, helps build a sense of community among participants (Gabelnick, MacGregor, Matthews, & Smith, 1990).

Tinto states that all learning communities have two primary responsibilities in common: shared knowledge and shared knowing. Shared knowledge means the opportunity for students to share as a community of learners. Shared knowing includes the opportunity for students to get to know each other intimately while also learning the material together as a group (Tinto, 1998). Simply stated, one process is more intimate and requires more engagement than the other.

Although, several learning communities have common academic and social features, the ultimate goal is to retain students through college graduation. Other learning communities as described by Price (2005) include cohorts in large lecture courses, team-taught programs, subjects/classes and residence-based programs. The cohorts in large course model breaks up students into smaller study groups led by graduate students or older student mentors. The team taught model is designed for faculty members to co-

create the curriculum around two or more courses with a common theme or interdisciplinary approaches (Price, 2005).

An example of a residence-based learning community is the Global Village at Colorado State University. This residential learning community is designed for students to interact with foreign students who have not lived in the U.S. for a significant portion of their lives. The Village (learning community) mission is to engage a community of learners in the exchange of ideas, and grow together in their understanding of themselves and cultural differences in a residential environment. Through their residential living experience, students participate in a small peer group to help them make the adjustment to their college campus by sharing their passion for exploring the world through ideas, classes, programs, and life experiences.

In this manner, residential learning communities are associated with greater social interaction with peers and extracurricular involvement, increase college persistence, increase graduation rates, and greater gains in critical thinking and reading comprehension (Pascarella, Terenzini, & Blimling, 1994). In like manner, Pike, Schroeder and Berry (1997) also concluded that membership in a residential learning community enhances overall involvement in educationally purposeful activities, which in turn, directly and positively affects indicators of student success.

Overall, learning communities are intentionally designed to enhance student-lives through the use of various types of student models. For instance, the team taught model is designed to encourage students to connect ideas to and from different disciplines (course-work) through formal, on-site academic support. Linking of students in two or more courses offers ongoing social interactions with the same groups for an extended period of

time (MacGregor, 1991). The intended purpose is for students to become members of a community of learners focused on academic material that allows them to further develop their identity and to discover their voice. In this process, students are able to integrate their self-view of what they are learning into their world view to enhance their academic and social experiences.

Challenges with Learning Communities

There are indeed areas of growth for theoretical and practical improvements on the topic of learning communities. Though not addressed as extensively throughout the literature, researchers have identified and documented challenges with community social isolation, cliques, interpersonal conflict and numerous faculty issues. Researchers like Jaffee (2004) found that because learning community participants spend a significant amount of time together, they become intentionally isolated from other students on campus. Hence, they do not socially or academically engage with older, mature, students and they do not venture outside of their comfort zones to establish other friendships or pursue outside interests (Talbert & Boyles, 2005).

In addition, Jaffee (2004) found that although cohort groups can be positive, they can also have a negative effect on new incoming students and faculty. For example, some students may utilize their cohort group as an opportunity to divide the class, complain throughout the course, and cause conflict in the classroom. This type of commotion can impede the collaborative learning that learning communities encourage, plus lead to the lack of communication and misinformation in the group. Moreover, faculty issues also arise within the learning community structure. Of the faculty who willingly participate in learning community instruction, complaints of students who are disrespectful, rude,

disruptive and immature abound because of the aforementioned cliques and cohort group issues (Jaffee, 2004). Collaboration with one or more outside faculty person can also take additional time outside of their structured teaching hours, and be seen as cumbersome (Mendelson, 2006).

Benefits & Strengths of Learning Communities

Retention programs for students of color stress the importance of academic and social integration. Derby and Watson (2006) found that social integration is pivotal to student's decisions to remain in college. As such, learning communities are designed to help students transition to the college community. They assist students in the following areas:

- a. Create a sense of community that develops learners through active learning with students and staff.
- b. Help students create a higher level of critical thinking and problem solving
- c. Enhance student develop through social supports with students and staff
- d. Increase opportunities to discuss racial concerns with cohort members and staff
- e. Allow for opportunity to build relationships with staff and faculty members.

The concept of integration into the academic and social life of a college community does not require that all students of color be provided with separate and differentiated academic and social settings (Tinto, 1987). However, there are academic and social benefits for academically under prepared and historically underrepresented students in learning communities such as; (a) It pushes professors to address classroom culture and effective learning for students of color (b) Professors develop tools to build effective cross-racial teacher-student relationships (c) An enriched social life can occur

for students of color (d) It can help students overcome feelings of isolation and strengthen connections (Smith, 1991).

There are also benefits for faculty and staff who teach learning community courses. Teaching a learning community cohort allows professors to cultivate a renewed interest in teaching and learning, plus increases professional and personal development (Smith, 1991). Specifically, for faculty of color who are involved in a learning community alongside of students of color, they help students to feel more comfortable with the academic and social culture of their campuses (Antonio, 2003). As a result, retention increases for students participating in a learning community as well as, there is an increase of work satisfaction for faculty of color (Antonio, 2003).

Most of the research on learning communities focused on collaborative and experiential approaches to the curricula. In my search, revealed The National Learning Communities Project monograph series that summarizes assessment research on learning communities. This monograph series, published by the Washington Center for Improving the Quality of Undergraduate Education and the American Association for Higher Education, reviewed 32 formal research studies and 119 single-institution assessment reports.

One of the major assessment reports in the monograph was developed by Barbara Oertel. In her work, she identified critical characteristics of learning community programs. Oertel researched seventeen learning community practitioners and programs throughout the U.S. and generated a list of seventy-nine characteristics. From this list, there were five characteristics of learning communities identified that were critical in the success of effective learning communities, they were the following: (a) Curricula must be

integrated and interdisciplinary (b) Faculty collaboration and participation must be integral in all facets of the program (c) Learning needs to be collaborative and active (d) On-going assessments and dialogue about students' progress need to occur (e) The learning community program mission must be aligned to the institution's mission (Taylor, Moore, MacGregor, and Lindblad 2003).

Another example in the monograph is a qualitative research study conducted by Patricia Russo (1995). Russo interviewed seventy students enrolled in an interdisciplinary, team-taught coordinated studies program in a university setting. In the study, there were three specific areas that learning communities needed to address: (a) Students' struggles to attend college (b) Student participation in the classroom (c) Understanding an unfamiliar paradigm for learning that valued student knowledge construction. As such, Russo's research helped students build bridges across disciplines, with peers, and helped students to establish a connection with their classroom experiences. As a result, in these successful learning communities, research showed that students who participated had higher rates of retention than their peers who did not participate, and students reported higher levels of college satisfaction as well. Of the considerations mentioned above, the next section of the literature review will discuss the importance of collaboration, partnership, and the stages of community development that can affect the outcome of a successful learning community on a university campus.

Collaboration, Partnerships and Shared Community

In order for learning communities to be effective, they must be collaborative, include cooperation, and or partnership among students, faculty and the academic institution. These goals must be accomplished by working together to build and create

new knowledge according to Watkins and Marsick (1999), who further explain that, “learning helps people to create and manage knowledge that builds a system’s intellectual capital” (1999, p. 81). However, if “weak” forms of collaboration occur, such as threaded discussion of assigned topics, which are generally easier to sustain than stronger forms that require true negotiation, management, and decision-making, it may allow a learning community to remain stagnant and unproductive. But, stronger discussions and forms of collaboration may test a group's coherence, and if the group is successful in their work, bonds are strengthened and a true sense of connection and community will be established (Wilson, Ludwig-Hardman, Thornam, Dunlap, 2004).

While there are multiple tasks that can be undertaken by an individual, “collaboration is called when an individual’s charm, charisma, authority, or expertise just aren’t enough to get the job done” (Schrage, 1990, p. 6 as cited in Kilpatrick, et al., 2003). While successful communication is seen as being essential to many human endeavors, according to Schrage (1990), collaboration is a far more powerful tool for use when working within teams or groups. Schrage defines “the act of collaboration [as] an act of shared creation and/or shared discovery” (1990, p. 6 as cited in Kilpatrick, et al., 2003). To truly collaborate in a learning community model, it requires a high level of cognitive involvement by participants, as well as, a preparedness by students to contribute to the creation of a shared understanding (Schrage, 1990 as cited in Kilpatrick, et al., 2003).

Strong collaboration and partnerships are critical in a larger community striving toward a shared vision or goal (Senge, 2000). “The sense of shared community requires that the participants be sympathetic to the ideas around which the group is based; even if they disagree, there needs to be some fundamental common ground” (Donath, 1999, p.

31). Respectfully, when members of a learning community share goals, there is a greater desire to participate in activities and to contribute to the group's purpose because there is a greater understanding of what the expectations may entail (Wilson, 2001).

Stages of Community Development

Learning communities do not form because a group of individuals are just gathered together. There are several stages of development that a group must experience in order to become successful. In the beginning, the university emphasis is usually on technical issues such as: recruiting and registering students, getting the support of constituents for the new innovation, and designing the curriculum. Later on, questions turn to more complex issues about program setting, design, and impact (Smith, 2007). Nevertheless, a process must be developed to include building authentic peer to peer relationships, and relationships between students and professors. Building relationships amongst a group of people requires patience, time, college resources, and leadership. Research conducted by Scott Peck (1987), found that building a community takes four stages. These stages include the following:

a. Pseudo-community: People generally begin in this stage. They avoid any differences or being very personal or anything controversial. In this stage, people are not vulnerable. Pseudo-community is important to the overall process because it builds safety, trust and respect.

b. Chaos: This is a period of chaos in the group. It is a time when the people in the community realize that differences cannot simply be ignored. Chaos looks counterproductive but it is the first genuine step towards community building.

c. Emptiness: At this stage, people learn to empty themselves of those ego related factors. Emptiness is a time when people tell personal stories about themselves and their lived experiences.

d. True community: Community is a state of people being at ease with one another, accepting of differences, similarities, and their lived experiences. It is a feeling of wholeness, of oneness, of knowing acceptance for just who they are including their faults and challenges. In this stage, there is a level of tacit understanding. People are able to relate to each other's feelings and experiences.

Summary of Literature Review

Today, many years of research exist about students of color and college persistence and retention. However, gaps still remain and students of color are not graduating at the same rates as whites and Asians from predominately white institutions. This review of the literature provided an overview of learning community models, academic and social integration of students of color, theories of student integration by Tinto, and the experiences of students of color attending PWIs and their academic persistence. In the literature review, several identifiers were found.

- a. Students of color experience an increase of academic stress not experienced by white students.
- b. Students of color group identifications and ideological beliefs about race are related to college performance, as well as, feelings of belonging in their college environments and self perceptions of academic and social competence in their college setting.
- c. Learning Communities are effective for student retention.
- d. Students of color are more likely to excel in institutional environments that are culturally diverse, inclusive, and integrate culturally relevant pedagogy.

- e. Developing community collaboration, partnerships and shared community vision are essential to the development of effective and efficient learning environments for students.

As such, the researcher sought to gain a better understanding of the college experiences of African-American and Latino college students. It was important to investigate the reasons for college dropout, and what coping mechanisms and support systems students utilize to persist toward earning a college degree. This investigation must start with an examination of their pursuit to college followed by an inspection of the students transition, persistence, and sense of community on the college campus that may ultimately explain their college outcomes. Chapter III discusses the overall research design, research participants, the research site, reduction methods and data collected.

Chapter III: Methodology

A greater understanding of the pedagogical effectiveness of the LSAMP learning community programs for students of color is necessary in order to effectively address college persistence and retention on predominately white institutions. To date, research about learning communities in general has provided some broad indications of effective use for testing out new curricular approaches and strategies for strengthening teaching and learning, but the details of pedagogy are largely unexplored as it relates to retention programs that are designed for students of color attending predominately white institutions. Further, most research focuses on general learning communities, but not on minority designed learning community programs such as the Louis Stokes Alliance Minority Participation Program. This chapter lays out a methodology for investigation of

the pedagogical elements in the LSAMP learning community program that contribute to college persistence and college retention for African-American and Latino students.

The purpose of this study was to explore the contributing factors of student participation in a learning community, college persistence, and college retention. The study explored the lived experiences of African-American and Latino students on a predominately white institution (PWI) who participated in the LSAMP learning community program. Additionally, the study sought to understand how student participation in a minority specific learning community influenced or impeded their social and academic persistence on the college campus. This study sought to answer the following overarching research question: What are the experiences that contribute to persistence, defined as continuing toward degree completion, for students of color who participate in a minority specific learning community while attending a predominately white institution?

The Research Approach

This qualitative case study (Merriam, 1998) was framed utilizing Tinto's student integration theory (1987). Tinto's theory described the relationship between student characteristics and the educational expectations, as well as, the characteristics of an academic institution. Students' background characteristics as seen by Tinto were important predictors of persistence because they helped determine how a student interacted with an institution's social and academic systems, and subsequently become integrated into it (Tinto, 1987). Therefore, this study sought to explore the experiences of students of color who attend a predominately white institution, and participate in a

LSAMP learning community program. To understand the students lived experiences, the study collected data in the participant's natural setting, the learning community, which is where human behavior occurred (Creswell, 2003). The goal of a qualitative case study was to understand the student's experiences from their own point of view. The participants offered stories about their college experiences, and as a researcher, I was interested in understanding the meaning students constructed, that is, how they made sense of their world and the experiences they have in the world (Merriam, 1998). Because there are multiple realities represented in any participant perspective, the participants provided insights into their college experiences which included interview questions such as;

- a. As a student of color, what is it like being a student at a predominately white college?
- b. What have been your experiences with the LSAMP program?
- c. What cultural or family experiences bring you strength and help you cope in this environment?
- d. What personal beliefs do you hold that help you continue toward earning your Bachelor's degree?

Researchers such as McMillian (2008), believes that participant perspective is useful in providing an understanding of the phenomenon being investigated. To gain a better understanding and perspective from students, I gathered information about how their participation in the LSAMP program shaped their view of the phenomenon (Marshall & Rossman, 1999). Phenomenology explores the intentional relationship between persons and situations, and discloses the essences, or structures, of meaning immanent in human experiences (Giorgi, 1997). It was my goal to convey the essence or

structure of a phenomenon from the perspectives of African-American and Latino students who have experienced the phenomena.

A qualitative case study was selected for this research study because it allowed the researcher to build a holistic picture of the phenomenon of the LSAMP learning community program being studied. Utilizing qualitative methods for this study was instrumental in identifying and characterizing the multifaceted organizational dynamics of the LSAMP learning community program that influences student outcomes and student interactions. Therefore, this approach best achieved the purpose for researching college retention for students of color. It allowed for a deeper interpretative understanding of the participants' lived experiences, and allowed me to examine the concept of a learning community as a tool for academic retention. Because this study involved human action, a historical view of student lives, and the ideologies held by students of color, I interpreted how their experiences in the LSAMP learning community program led to the ultimate goal of college persistence and retention.

Case Study

This qualitative case study was an approach that facilitated the exploration of a phenomenon within its context using a variety of data sources (Baxter, 2008) such as; three in-depth interviews, one focus group, demographic questionnaires, and one non-participant observation. It was important to identify multiple data sources in order to insure that the issue was not explored through one lens, but rather a variety of lenses which allowed for multiple facets of the phenomenon to be revealed and understood (Baxter, 2008).

This research study was also an exploration of a case within a bounded system, which involved collecting data from multiple sources and reporting to include a group, community and individuals (Creswell, 2007). There are several examples of the use of case study methodologies in the literature, these include; exploratory, explanatory, and descriptive case studies. In exploratory case studies, fieldwork, and data collection may be undertaken prior to definition of the research questions and hypotheses (Stake, 1995). This type of study has been considered as a prelude to some social research and the framework of the study must be created ahead of time (Stake, 1995). However, explanatory cases such as this one are suitable for conducting causal studies (Stake, 1995), and they attempt to analyze or explain why or how something happens or happened (Gillet, 2012). Furthermore, a descriptive case study requires that the investigator begin with a descriptive theory, and obtain information on the particular features of an issue (Tellis, 1997).

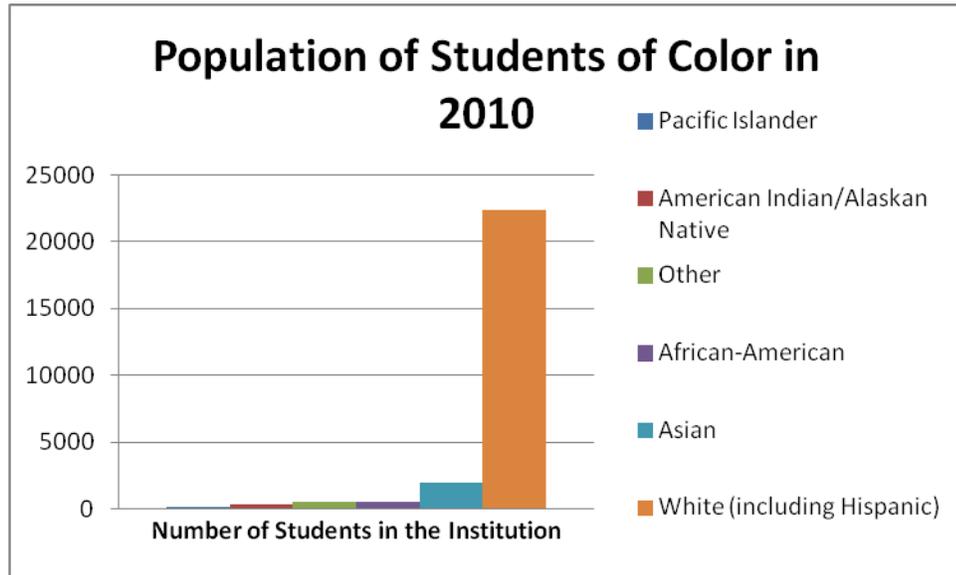
According to Yin (1994), case studies can either be single or multiple-case designs. Single cases such as this one can be utilized to confirm or challenge a theory, or to represent a unique case. Because case studies are multi-perspective analyses (Zonabend, 1992), this specific case under investigation incorporated the views of the students of color as well as, hopefully provided students with a voice to address their concerns and highlight their accomplishments. This study lends itself to a case study design, and in this study, the program or community that was analyzed is a single unit of study, the Louis Stokes Alliance Minority Participation Program. Specifically, students of color who identify as African-American and Latino who participate in the LSAMP

learning community program are the special case of interest. Description of this case was developed based on the data collected and the data was analyzed and clustered by themes.

The Research Setting

The four year academic institution chosen for this study is the largest university of the state university system, and is located in a large urban area in the Pacific Northwest. It is centralized in a major metropolitan area and has a student enrollment of 27, 972 for the school year of 2009 – 2010 (PWI, 2010). This institution was selected as the research site because the university is deeply committed to creating a community for students through multicultural programming in an environment conducive to enhancing student success through collaborative cultural, educational and social experiences. Therefore, I intentionally selected this institution whose mission is to provide structured support services to student populations whose access, retention, academic success, and graduation rates are most challenged by historical and contemporary inequities (PWI, 2010). The university student racial/ethnic demographics are below in Table 1.

Table 1: Students of Color Population at the PWI in year 2010



The Research Participants

The participants were all full-time undergraduate students in a public institution at the same predominately white college located in the Pacific Northwest, and were participants in the Louis Stokes Alliances Minority Participation Program (LSAMP). LSAMP seeks to build capacity for retention within institutions with minority populations underrepresented within science, technology, engineering, and mathematics (STEM) professions. The underlying premise of the program is to support students socially and academically as well as help students successfully obtain a bachelor's degree and further their education in a masters or doctorate program.

There were eight undergraduate students who participated in this study. All of the participants were recruited from the LSAMP learning community program. My aim was to invite ten students to participate in the research study, however, a total of eight

students volunteered to participate. From the eight participants, three students volunteered to participate for the in-depth interviews. These numbers were small enough to allow for in-depth interviews and yet large enough to provide rich data to develop credible common themes and allow for individual variations (Polkinghorne, 1989) throughout the research study.

A homogeneous sample (Patton, 2001) of eight students of color was used to gather information for this study. It was important to identify a small sample group of students who were similar in terms of backgrounds, majors, and cultural identities. I utilized the LSAMP program criteria for participation requirements which included the following: (a) Students must be from an ethnic, racial, or linguistic community (b) Students must be enrolled in school (c) Students must be majoring in science, technology, engineering, or mathematics.

All participants were undergraduate students and varied in gender, ethnicity, and years in college (Freshman-Junior) and all participants were between the age of 19 and 38. Homogeneous sampling (Patton, 2001) was favored in this study because it maximized the discovery of a subset of a population, students of color in the LSAMP learning community, and with a small number of research participants it helped me to better understand student of color perceptions, problems, needs, behaviors and contexts, which are the main justification for a qualitative audience research (Patton, 2001). Additionally, it was particularly helpful for conducting the focus groups, because the students were familiar with one another because of their active participation in the LSAMP learning community, I believe that they were generally more comfortable sharing their thoughts

and ideas with other individuals in the group because of their similar lived experiences. Although, homogenous sampling (Shaw, 1999) did not produce a sample that was representative of a larger population, it highlighted the relationship between the participation of students of color in the LSAMP learning community program, college persistence and college retention of students attending a PWI.

Access to the participants occurred through the invitation of the LSAMP program director. I provided the director with a brief autobiography, the research consent form, an overview of the research study, and information about learning communities. I asked the director to distribute the information to potential participants through the e-mail list serve and I asked her to add me to the e-mail as well. In the content of the e-mail, I introduced myself and provided an overview of the research study, I asked students to contact me directly if they were interested in participating in the study. Unfortunately, students did not respond to me or the director. As a researcher, I realized that I needed to rethink and strategize again about the most efficient and effective approaches to obtain participants for this study. Consequently, I asked the director if the graduate assistants from the program could further assist me with recruiting participants for the study. With the help of the graduate assistants, we arranged a time for me to meet with students directly following their LSAMP learning community meeting. In so doing, we sent a doodle calendar to the learning community participants to arrange a convenient time for both their meeting and the focus group to occur. Along with the doodle calendar, students were sent a brief description of the research study and the consent forms. This was in fact a successful strategy, the focus group was scheduled directly after their learning

community meeting, and eight students participated in the ninety minute focus group. As a result, from that group of eight students, three students volunteered to participate in the sixty minute in-depth interviews. The non-participant observation occurred for ninety minutes in length several weeks following, and all of the same focus group members participated in that as well.

The research participants in the study ranged in age, gender, demographics and years in college. The in-depth interviews consisted of three students who identified as African-American and Latino. The focus group and non-participant observation consisted of eight students who also identified as African-American, Latino, Mexican and Asian. There were three males and five females.

Table II provides each of the participant's demographic information, as learned through the demographic questionnaire. The participants are identified here according to their pseudonyms. By compiling their questionnaires, I learned that from the eight participants who self-reported their grade point averages, their average grade point average was 3.37. The similarities that resulted from the demographic questionnaires are as follows: (a) All participants belonged to at least two student organizations outside of the LSAMP learning community (b) Seven of the eight participants would like to persist beyond their undergraduate degrees (c) Seven out of the eight participants attend the LSAMP program when they have an academic challenge or personal problem at school (d) Seven out of eight participants seek out faculty members for guidance and support (e) Seven out of the eight participants are first-generation college students (f) Six of the eight

students were born in the US (g) six of the eight participants have thought about taking time off from school or transferring to another college due to financial stress.

Table 2: Demographic Results from Questionnaire

Name:	Phelis	Keisha	Douglas	Sasha	Kimmy	Marco	Joe	Stella
Major(s) minor	Science	Biology	Engineering	Speech & Hearing	General Science	Mechanical engineering	Environ-Engineering	Environ-Science
GPA	3.2	3.79	2.67	3.75	3.6	3.3	3.72	3
Age	19	20	38	21	23	19	20	23
Participate in two supportive college programs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
First to attend college in your	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Would you recommend this college to students of color	Yes, LSAMP makes the campus welcoming for students of color	Yes, with recommendation of working with support services for students of color	Yes, but with caution of potential differential treatment	Yes, and our campus has more diversity than other white colleges in the state	Yes, but with caution & excitement	Yes, but there is a lack of diversity within engineering	Yes	Yes
Born in the US	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Self-Identified race/culture	African-American	Asian	African-American	Latino	African-American	Hispanic	Latino	Latino
Highest degree hope to obtain	Bachelors	PH.D./M.D	PH.D	Doctorate	Doctorate	Masters	Masters	Masters

Data Collection

Data collection and interpretation occurred throughout the research study. Data was collected through three face-to-face interviews, one focus group, one non-participant observation and a one page demographic questionnaire.

Like many qualitative studies, I served as the primary instrument when collecting and analyzing the data. Each one-on-one interview took approximately sixty minutes and participants were given the option to choose somewhere in the community to meet, but all three of them chose the LSAMP facility on campus. Both the focus group and non-participant observation also took approximately 90min as well. Three in-depth interviews, one focus group, one non-participant observation and demographic questionnaires were all conducted in a medium size space on campus. When the participants arrived for their interviews, each of the participants re-read the consent form that they previously completed in the focus group. I asked each of them if they wanted to change any information from their already completed demographic questionnaire (see Appendix A) no one needed to make any necessary changes. The demographic questionnaire allowed me to gain additional information about the participants, such as their native language, grade point averages, age, majors, etc.

The transcriptions, focus group session, the interviews, the non-participant observation, and demographic questionnaires were analyzed for significant statements and emerging themes related to how students of color experienced the LSAMP learning

community program. Significant statements are sentences that highlight an understanding of how participants experience the phenomenon. These statements were clustered into themes. I searched for meanings and essences of experience rather than measurements and explanations (a description of what the participants experienced in the learning community, the “what”). I obtained descriptions of experiences through first-person accounts in informal and formal conversations and interviews (a description of the context that influenced how participants experienced learning communities, the “how” (Moustakas, 1994 p. 21). All of these accounts were written based on information gathered from the focus group session, the interviews, field notes, demographic questionnaire and a non-participant observation.

Additionally, research materials were stored on a secure network. To maintain confidentiality observations and interviews were coded and I am the only individual who has access to the code list. Protocols and data were also kept at a secure place by the researcher, and all documents will be destroyed once the research study has been completed. When the information from this study is shared in articles or presentations, the name of university will be altered with pseudonyms to protect identities. I shared with the participants that their participation in this research study was completely voluntary, and that they could choose to withdraw at any time without penalty as well.

Focus Group

I conducted a 90-minute focus group consisted of eight undergraduate STEM students of color. This focus group produced information that helped the researcher develop a broad and deep understanding of students of color and their own college persistence. The

focus group also gave students an opportunity to express their individual and collective thoughts about positive learning, social outcomes, and support of culturally specific and responsive programs on campus. The focus group was a free-flowing environment with a preplanned script, and set goals for information needed to be gathered (Please see appendix C for the focus group guideline). The sample interview questions were as follows:

- a. How does participating in LSAMP help and promote your academic and social needs?
- b. What retention programs and services, if any, have assisted you?
- c. How do you define the term retention?
- d. How did you learn about retention programs and services offered by your institution?

The focus group questions asked were critical to allowing students to openly discuss their personal experiences in the classroom, in LSAMP and on the college campus. As I worked toward establishing a relationship and a trustworthy environment, I began discussing my personal experience attending a predominately white institution, and my personal experiences participating in a learning community while attending college. Our conversation in the beginning was causal, and it led to students asking me more about the overall research study and its potential impact on the college campus. Additionally, the focus group was audio-taped, and students chose a name other their own to be used during the discussion, to insure that their anonymity was maintained throughout the entire study.

In-depth Interviews

The focus group, in-depth interviews, non-participant observations, and demographic questionnaires were all completed on university property, in the LSAMP facility. To investigate the phenomena further, it was important to identify how and what the experiences were for a student of color majoring in science, technology, engineering and mathematics (STEM) and enrolled in a predominately white institution. Therefore, I gathered information and perceptions through inductive qualitative methods such as in-depth interviews. In-depth interviews rely on a single primary method for gathering data (Marshall & Rossman, 1999), and in this case, they were useful for obtaining the story behind the lived experiences of students of color on a college campus where they are the minority. For example, I asked the following questions:

- a. As a student of color, what is it like being a student at a predominately white college majoring in a field where there are very few or no students who identify as a student of color in your classes?
- b. If you had to name the top stressors you experience, what would they be? How do you deal with them?
- c. Despite these stressors and challenges, are you making progress toward completing your degree? What experiences help you as you work toward your bachelor degree?
- d. What have been your experiences with the LSAMP program on campus?
- e. What cultural or family experiences bring you strength and help you cope with being at this school?
- f. What personal beliefs do you hold that help you continue toward your Bachelors' degree?

These questions also examined individual stressors and challenges about stereotypes that affect students of color, and sought information about how they dealt with such stressors and challenges. As a researcher, my interview questions were designed to empower students to construct their own stories and make personal meaning of their

experiences (Casey, 1995). One of the goals of the in-depth interviews was to understand the complexities of college persistence for students of color in a culturally specific learning community while pursuing an undergraduate degree at a predominately white institution (please see Appendix D for the interview guide).

Non-participant Observation

In all instances, qualitative observational research involves formulating a thoughtful and well-understood relationship between the researcher and research participants (Connelly & Clandinin, 1990). Therefore, for this study, I conducted one 90min non-participant observation in the student's learning community that occurs twice a month. The observation provided me with a means of seeing the LSAMP program dynamically, and allowed me to learn about student views as expressed actively within the college campus realm, rather than passively in response to an interview, focus group and a demographic questionnaire. As an observer, I kept field notes which included both descriptive and reflective notes in separate categories. The descriptive notes included the layout of the LSAMP facility, what specifically occurred, and the topic from each presenter, and several direct quotes from the participants. The reflective notes included information about my experiences, hunches, assumptions, and strengths of the LSAMP learning community. The purpose of the field notes were to document my observations and study how students of color communicated and behaved together in an environment that was designed specifically for them to feel empowered and to have a voice.

As a non-participant observer, I kept my distance, remained unobtrusive, and took extensive field notes on aspects relevant to college persistence and retention for students

of color. I recorded the group interactions and behaviors as objectively as possible and produced detailed field notes about the following: a.) event/activity of observation b.) location, c.) date and time of observation and length of observation. Observing students of color in their actual learning community led to a deeper understanding rather than a focus group and interviews alone. Non-participant observations can provide knowledge of the context in which events occur, and enabled the researcher to see things that participants themselves were not aware of, or that they were unwilling to discuss in their interview (Patton, 2002) or in the focus group.

In the observational meeting, students discussed and planned for the LSAMP retreat which their university hosted in July, 2011. My role was to observe from a distance; however, due to the nature of the group meeting and breakout sessions, I wandered from small group to small group to listen to planning goals, objectives, and specific workshops for the retreat. This observation provided me a descriptive frame into the nature of student led behavior, small group interactions, and co-facilitated discussions while planning for a large event. I paid close attention to how students interacted with one another through laughs, constructive criticism, and discussion. Additionally, because I conducted the focus group first, it allowed me to build a rapport with students which in turn, helped to foster trust and facilitated an understanding between me and the students of color in their learning community.

Data Analysis, Management and Interpretation

According to Fred Ericson, one of the most highly recognized writers in the field of qualitative research, the most distinctive characteristic of qualitative inquiry is its

emphasis on interpretation (Stake, 1995). Qualitative researchers who design case studies do not confine interpretation to the identification of variables (Stake, 1995 pg. 9) but rather emphasize the overall pattern of variables within a case. As stated by Creswell (1998) case study data analysis generally involves an iterative, spiraling, or cyclical process that proceeds from more general to more specific observations. Data analysis may begin informally during interviews or observations and continue during transcription, when recurring themes, patterns, and categories become evident (Creswell, 1998). As a researcher, I relied on a combination of direct interpretation and categorical aggregation (Stake, 1995). In this process, I separated the data and then put it back together (Creswell, 2007 p. 163). For example, while analyzing the interview questions, I organized the data by questions and looked across the respondent's answers, and identified consistencies and themes. In employing this method, "other categories emerged as I worked through other data sources as well. In so doing, my analysis and reflections on the data progressed (McMillan and Schumacher 1997 p. 34).

Furthermore, in order to answer the research questions and form an in-depth understanding of the central phenomenon, I employed the advice by Creswell (2008) by utilizing direct quotes from participants that captured their feelings and thoughts about their experiences. In the finding and themes section of the study, I provide a detail account about individual experiences, and emphasized multiple perspectives from various students of color. Throughout the data analysis process, I looked for informal patterns and emerging concepts, such as repetitive words or ideas that were coded and aggregated together. In the beginning of the process, it was difficult to code and identify themes

because I had an enormous amount of data. I simplified this process later by creating a short list of tentative codes of a few words and symbols. I began with ten categories, and I continued to review and re-review the data. I narrowed down the codes further, I narrowed down the themes and sub-themes further as well, and grouped many of them together (Wolcott, 1994). The initial list of themes changed as I continued to analyze the data, this is called iterative process (Powell, 2003). As a researcher, I redefined some of the themes and sub-themes to accommodate data that did not fit into the initial identified categories (Powell, 2003).

Creswell (2008) suggests that researchers add rigor and insight to their research study by layering or interconnecting themes during qualitative data analysis. He further explains that layering themes builds on the idea of major and minor themes but organizes the themes into layers from basic elementary themes to more sophisticated ones. As themes and patterns emerged from the data, relevant quotations from each interview, focus group, non-participation observation, and field notes were categorized within those themes. As mentioned earlier, field notes and reflective thoughts were maintained throughout the research study. I coded the data directly from the interview transcriptions, field notes, demographic questionnaires with symbols such as stars, words, asterisk, hearts, arrows, different color highlighters, different color paper, different color markers, descriptive words) and organized the information into themes on paper. I created a cheat sheet of what the symbols, words, and highlighted colors meant in order to help me remember when I returned to the data to review again. I did not utilize a computerized system. Additionally, I captured the data by using major headings and subheadings

throughout the analysis (Wolcott, 1994) and I made a table, and a chart which helped me to organize the chunks of data into themes and sub-themes.

Moreover, a transcriptionist who had no prior knowledge of the research or the participants in the research transcribed all of the interviews and the focus group. After all of the transcripts were received, I read through each one on one interview and focus group while listening to the audio recordings at the same time to verify the accuracy of the transcriptions. Any blank areas from the transcriptions were filled in at that time. During the analysis period, it was essential for me to read through each transcript four times in order to gain a clearer understanding of each of the participants perspectives. Once, I gained an understanding of their perspective, I highlighted quotes and repetitive words that stood out with each participant. I utilized word repetitions in order to identify the salient themes for the research. From there, I grouped words, phrases and quotes and clustered them into ideas for specific themes; themes that were not similar were highlighted with different colored markers. With a visual road map in front of me, I was able to clearly read the similar themes and contrasting themes. In this process, I was able to connect the stories with the lived experiences of the LSAMP students of color persisting toward an undergraduate degree attending a predominately white college. The four themes were: From a high school diploma to a college degree, A Sense of Belonging, Surprise, Surprise, and Navigating the college terrain. The overall data collection timeframe began in June 2011 through December of 2011.

Table 3: Research Design Data Collection Time Frame

Data Method and Date	Data Analysis time frame
Focus group & questionnaires were completed on the first day of collecting data-June 7 th , 2011.	June 7 th -December 31st = Six months
In-depth interviews were completed after the focus group from June 15 th -June 20 th , 2011.	June 15 th -December 31st = Six months
Non-participant observation occurred after the in-depth interviews-June 28 th , 2011.	June 28 th -December 31st = Six months

Accuracy, Trustworthiness & Soundness of the Study

It has proved fruitful to "cross-check" information and conclusions through the use of multiple procedures of sources such as; face to face interviews, focus groups, non-participant observations, and demographic questionnaires. When the different procedures or sources are in agreement you have "corroboration (Johnson, 1997)."

Qualitative studies need criteria against which the soundness of the study can be assessed. Lincoln & Guba (1985) suggest four criteria's: conformability, credibility, dependability, and transferability. It is important that researchers be aware that alternative explanations may exist, and this awareness can help assure conformability (Marshall & Rossman, 1999). As such, it was important for me to gather multiple procedures to support the data collected in an attempt to locate the most plausible patterns

in the research study. McMillan and Schumacher (1997) contend, “A pattern becomes an explanation only when alternative patterns do not offer reasonable explanations central to the research problem (p 525).” In this study, explanations were presented in the most plausible way with clear, succinct and supportive data linked amongst categories and themes.

To insure accuracy and trustworthiness of the study, participants were given a copy of their individualized interview transcript for their comments, edits and feedback. Focus group members were also given a copy of the focus group transcripts. The feedback and discussion of the interpretations and conclusions with the actual participants and for verification and insight were helpful and enlightening for both participants and this researcher.

The study required that I make adjustments if needed for the interpretations to fit the context of the study. Dependability required that I remained flexible and was able to make changes in the study, and demonstrated that my findings were accurate from the researcher viewpoint, the participants or the readers (Creswell, 2003). As such, searching for alternative explanations, negative instances, utilizing member-checking, and enhancing the creditability of the study resulted in a much stronger, clearer, accurate report that supported the complex web of findings throughout the research study.

Limitations of the study

Though this study will make a valuable contribution to the field of learning communities for STEM students of color, as well as, to the effectiveness of specially designed learning community programs such as LSAMP for students attending

predominately white institutions, it is not without limitations. The researcher suggests three limitations of the research study. The first limitation is that all of the students who participated were of varying years in college from freshman to seniors, causing some inconsistencies with various college experiences at the Institution. The second limitation is that I only collected data from a targeted learning community that consisted of all students in the science, technology, engineering and math majors. Collecting the data from this population of students potentially only addressed college persistence and retention of STEM students of color attending a predominately white institution in the Pacific Northwest. The third limitation is that, I did not focus the study primarily on students of color as STEM majors, giving attention to this specifically population and their experiences primarily as STEM students would bring light to challenges and barriers that they may experience specifically in the STEM fields.

Chapter summary

In this previous chapter, I provided the research design and methodology, information about the research setting and participants, as well as, a detailed account of the management and interpretation. This study examined the stories and experiences of STEM students of color attending a predominately white institution in the Pacific Northwest, who also participate in the Louis Stokes Alliance Minority Participation Program. This specific program is aimed at increasing the quality and quantity of students of color successfully completing STEM baccalaureate degree programs. In addition to the overall LSAMP learning community experiences, the students' peer interactions and continued academic persistence toward a college degree are of interest.

These experiences, as indicated in the research questions, were explored and analyzed through a qualitative case study design. From this case study perspective, I was able to develop naturalistic generations that could be possibly applied to a population of cases (Creswell, 2007). The interview, non-participation observation, the demographic questionnaire, and the focus group data were analyzed and organized by clustered themes.

Moving forward

Chapter III provided an explanation of how the research was planned and conducted. In this next chapter, I present the findings from the study, introducing the themes and sub-themes that emerged from the focus group, face to face interviews, and non-participant observation.

Chapter IV: Results & Findings

The study investigated students of color and their lived experiences as participants in the Louis Stokes Alliance Minority Participation Program while attending a predominately white institution. The study was to gain insight about the impact of intentional minority specific programs geared toward increasing college persistence and retention for African American and Latino students in higher education. The findings of this case study indicated that the persistence of students of color attending a predominately white institution was influenced by their social and academic integration through their participation in the LSAMP program. Findings reveal that students of color who persist at the institution, exhibited positive academic, social and family values that help them to pursue earning a bachelor's degree.

Low student college persistence and college retention continues to capture the attention of colleges. Models of college retention, like Tinto's (1987) provide a catalyst to help academic institutions and organizations retain students in college until graduation. Tinto's (1987) model focuses on the many interactions among members of the institution, and includes background characteristics and motivational factors that encourage a student to either stay at the institution or depart from an institution. As students of color may be faced with persistence obstacles that impede their ability to stay and earn a college degree, by documenting their experiences, the better we can understand the factors needed to retain them until successful completion of earning a college degree. This study investigated strategies students employed toward earning a college degree. This is critical because it helped to shape how students persist, and avoid dropping out of college. Four consistent themes emerged to include; From a high school diploma to a college

degree, Navigating the college terrain, Surprise, Surprise and A Sense of Belonging. The following findings presented below are in response to the research question: What are the experiences that contribute to persistence, defined as continuing toward degree completion, for students of color who participate in a minority specific learning community while attending a predominately white institution?

Additionally, the below information provides the clustered themes and sub-themes identified from the research study.

- From a high school diploma to a college degree: the participants discussed their personal and on-campus influences that helped them to persist toward obtaining a college degree.
 - Being the first in my family: participants discussed the importance of attending college and education being a priority in their families.
 - Persistence to completion: participants shared their motivation toward obtaining a college degree and supportive college programs.
- Navigating the college terrain: College retention on a predominately white institution.
 - Students discussed the challenges of being a first generation college student.
 - A mirror of me: participants shared the need to have students, professors and advisors from the same cultural communities.
 - The influence of participating in the Louis Stokes Alliance Minority Participation learning community program.
- Surprise, Surprise: the aspects of college life that surprised others that the participants were persisting toward earning a college degree.
 - The participants discussed student expressions and comments about their college ambition.

- What you see, is not what you get: students discussed stereotypical comments, and experiences on the college campus (classroom, faculty, staff).
- A Sense of Belonging: the aspects of how participating in a learning community increased students' self-esteem, and increased their motivation toward obtaining a college degree.
 - Self-motivation: the participant's further desire and purpose to obtain their college degree.
 - Building relationships: the participants highlighted the importance of being with peers and building relationships with professors who promote LSAMP. Students highlighted being connected and accepted.

Description of themes that emerged

This section will provide an in-depth description and overview of each of the themes and subthemes with actual voices of students of color who actively participate in the Louis Stokes Alliance Minority Participation Program, and are persisting toward obtaining their degree from a predominately white institution in the Pacific Northwest.

The first theme that emerged with several sub-themes is the following:

- Theme # 1: From a high school diploma to a college degree. The participants discussed their personal and on-campus influences that helped them to persist toward obtaining a college degree.
 - Being the first in my family: participants discussed the importance of attending college and that education is the first priority in their families.
 - Persistence to completion: participants shared their motivation toward obtaining a college degree and supportive college programs.

Many of the participants discussed the importance of attending college, and the value it could have in both their personal lives and in their families lives. The theme “From a High School Diploma to a College Degree” focuses on students who are the first in their families to attend college.

While obtaining a college degree can grant some students automatic social status, more opportunities for upward mobility, and access to the "American Dream" (Clark, 2003; Farrell, 2003), students in this study who come from non-college degreed families, were pushed to believe that an education is one thing that can never be taken from them, and earlier on many of them realized that in order to gain equal footing with their peers, a college degree is a must. Marco, an engineer major says,

“Knowing my family, grandparents, and parents, none of them have ever gone to college, or had a higher education, and just seeing all of the work that they're always having to do, is just constant and sometimes unbearable to watch. My parents have instilled in me the value of earning a college degree, education has always been first in my family despite what past teachers have speculated. My parents experiences alone have really made me want to help not only myself go up in society, but to also help them.”

Kimmy expresses,

“I don't think I understood the relevancy of going to college, I mean of course my parent's strongly encouraged me early on but until I was given a high school assignment by my economics teachers to look for a career and a job, it was important but not an actual value.....Everywhere I searched they asked for at least five years of experience and a degree. After that assignment, my parents continued to strongly encourage me to attend college, and I was really a believer.”

When asked, why you attended college to other participants, Joe, an environmental engineer major explains,

“I come from a huge family and on my mom’s side only two of my cousins have actually gotten a degree. On my dad's side no one has actually graduated from high school or gone to college or anything. Being the first, like I said, specifically, I guess I am trying to be kind of a role model and not only for my siblings but also for my family in general. Education, has always been a priority in our family, my parents made sure we did all of our school work first, studied secondly, then played last. Also at the same time I have seen the work that my parents does, laboring, laboring, back breaking work, that has been done over generations from my grandparents to where my parents are right now; it has been really just the manual labor and it's really hard on them. I feel like I have had the choice of going that path or doing another path, and they have helped me to see that perhaps trying another path for the family-toward a college degree, could have a greater impact on our family.”

Similarly, Douglas, a molecular biology major understood that a college education could have a large impact in his life, and he continues to be inspired and motivated by his family to push toward obtaining his degree. He shares,

“Just being a first generation student is one of the main motivators for me. I don’t myself have any children, but I do have nieces and nephews who look up to me and I feel like I’m sort of the leading the pack. I feel like I’m definitely leading my family in education. I want to set a good example for them, for my mother, everyone. I think it’s really important, my mother and my father both have high school diplomas and they actually had me when they were really young, they were basically kids, 19 years old, and they continued to instill in me that education was first. I just want to show people, everyone, my family primarily, and everyone who may have doubts that I’m able to do this, and that I can. Most importantly, I know that I can do it, and it has been tough. I didn’t choose the easiest major at all. So, being a first generation student is one thing, but as a first generation student majoring in engineering, it’s another. But I continue to stay motivated, and am working toward receiving my degree.”

Another participant shares,

“I feel like I can actually do this, actually get a degree and succeed. It’s harder to look at because neither of my parents went to college and I don’t have a role model that is a person of color, and none of my teachers are of any different ethnicity or race; they’re all white...but I come from a strong Hispanic culture with strong women. My mom is from El Salvador and I don’t know if it’s just my family but all the women in my family are strong and supportive...I feel like I’ve just gained so much strength and support

from them. I tell myself that I want something more than just a 9 to 5 office job, that's really what drives me to persist toward my degree. I don't want to work at Wal-Mart or retail, I look at that, and it's not that it's bad.... I just expect more out of myself, I expect challenges, and to me that's not a challenge at all. Anybody can get a job at Wal-Mart. I want a job that not everyone can get, I want to do something that not everyone can do.

Eight out of the eight students who participated in the study shared that their participation in the LSAMP learning community program has been essential toward their academic persistence in college because it has helped them with the following; goal setting, academic preparation, as well as, increased their self-motivation and self-determination to pursue their college degree. Students share,

“The director Dr. Sharon Willis has been really supportive in more ways than just academically, she helps with writing letters of recommendation, she helps sort things out financially or whatever and she continues to be really supportive.”

One student further explains,

“Other college supportive people and a program that has been helpful is Rosie Phillips at the Educational Opportunity Program. I'm telling you, there's been times when I've come into her office completely frustrated and almost to the point where I feel like quitting, and I'll leave her office feeling charged, like pumped, like alright I'm going to do this, thanks for talking to me for this hour. Without people like Rosalyn and Dr. Tran I would still be out there floundering.

Encouragement and support from parents and communities can have an immeasurable affect on a student's decision to attend college. In fact, Hossler and his colleagues (1999) found that strong encouragement and support from parents is the most significant factor affecting whether students aspire to and enroll in college, regardless of parents' level of education.

Theme #2: Navigating the college terrain. College retention on a predominately white institution.

- Students discussed the challenges of being a first generation college student.
- A mirror of me: participants shared the need to have students, professors and advisors from the same cultural communities.
- The influence of participating in the Louis Stokes Alliance Minority Participation learning community program

Six of the eight participants were the first to attend college within their immediate families. While first generation college students are a growing diverse student population in higher education, post-secondary institutions have become more concerned about their educational aspirations and educational attainments within the college environment (Kojaku, Nunez, and Malizio 1998). While many observers applaud the fact that access to higher education for first generation students has increased over the past two decades, and the gap in access between them and second generational students decreased, few have pointed out that the gap in the completion of four-year degrees has not decreased (Hutchings, 2008). In fact, Hutchings says, *“Indeed, it appears to have increased somewhat. That this is the case reflects a range of issues not the least of which is the well-documented, the lack of academic preparation which disproportionately impacts first generation college students (pg.2).”*

Although, education was first in many of my participant’s families, five out of the eight students in the study did not feel prepared for college. One focus group member shares,

“My biggest challenge attending college, I would say was not being prepared. I think high school did not prepare me for college at all. Being the first one in my family to come to college in the US, I had no idea what to expect, what it was like, or even in general what to look for. My cousins who have gone to college, attended in Mexico. And that is different. It is a completely different system. The way they do things over there is different. They told me not even to worry, but they had no idea. Being part of programs like LSAMP and student supportive services, have definitely helped me.”

Another participant, further explains,

“I felt pressured into attending college, just because nobody else in my family ever went to college and there was nowhere else to go but to go to college if I wanted to do something more with my life. So, college was the way to go, even if I didn't feel like I would be 100% prepared. I wasn't quite certain what to actually be prepared for though until now of course. I didn't take any prior college courses, I didn't really understand how independent I would be, and how if you don't turn in your work or go to class, that it was entirely up to you. I have must definitely matured since my freshman year, and I have become more responsible, which I was not prepared for..... I feel like if others in my household would have attended college, they would have been able to share the expectations.

For others like Sasha, a Speech & Hearing Science major, high school prepared her for college classes. While in High School, she took a lot of Advanced Placement courses, as well as, classes at a community college, which helped prepare her for college course work. However, she struggled with college resources on the campus. As with many other students in the research study, it was also difficult to find apartments or homes to reside in on the campus or in close proximity to the college. Students shared that it was also challenging to navigate study groups, and the location of computer labs. She further explains,

“I found it difficult when I first began attending, I didn't get a lot of help when I first started here, and so touring and knowing the

campus resources that are available to students, like the student center was helpful. When I actually joined LSAMP, they let me know about all the resources available to students living on campus, and especially the minority groups that would be an additional resource for me. Many of the minority clubs have their own touring group and study groups. For me, if I have people that look like me, and get together and study for difficult classes, it pushes all of us to succeed. From a student point of view, when you go to your advisor for assistance, it is and was not as helpful as actually studying with students who actually takes that class and gets a good grade. The peer to peer relationships and study groups have been much more helpful for me than talking to an advisor or the class professor.”

Today, many post-secondary institutions acknowledge some of the challenges that students of color may experience while attending predominately white institutions. Because of this reason, many are implementing academic and social learning environments that support and encourage student retention on their college campus. When I asked the students to define or describe student retention, one participant in the focus group says, *“It is the actual number of students left at the end of a class, or at graduation. For example, so, how many out of this freshman class that started here actually ended up graduating, that is looking at retention.”* Another student explains, *“The way that I think I have heard it is that you start out with so many students, or some quantity of something, and later when you look for outcomes or results, you end up with a smaller amount, or a certain amount that is usually less than or the same as what you initially began with.”*

In this study, all of the students would recommend attending this institution to other promising undergraduates. Five out of the eight students stated:

- Yes, but I would explain that there is a lack of diversity within engineering.

- Yes, and I believe our campus has more diversity than other traditionally white colleges in the state.
- Yes, but I would warn students of potential differential treatment if they are a student of color.
- Yes, and if they are a student of color, I would recommend students work with student support services, attend cultural clubs, apply for minority scholarships.
- Yes, diversity of students in LSAMP makes the campus welcoming.

When I asked the students, in your opinion, what factors are important to retaining students of color attending a predominately white institution? Students replied,

“I would say it is probably finding someone that they can relate to in a program, whether it is someone who has had similar struggles, or who knows someone who has had similar struggles... finding individuals who look like them or who have similar experiences I think makes them feel a little more open with them, and therefore maybe encourages them a little bit. It’s like, okay, this person has gone through some of the same stuff that I have gone through, and they’re succeeding. I can definitely do this.”

“I also think that finding someone with similar experiences, or cultural background, helps to build confidence....like you said, it gives you an idea of somebody else who has gone through that, like being the only student of color in class, or feeling like you are not as smart as others, or feeling like if you do ask a question, it will not be welcomed and that you might be frowned upon, again finding someone in your program like you can just build your confidence. If somebody else can do it, I can do it too. So that’s really important.”

“Finding mentors is also good, because you can relate to the students very easily, but when you get advice, you tend to look up to your mentor, and perhaps ask more challenging questions, and generally outside of the normal class work stuff....If many of us could have mentors, and advisors in our majors that were from our cultural communities that would be an absolute plus. Mentors, sometimes have more options for you, to help you out with what problem you have, because they have seen more students struggle through it, and many times have helped them to succeed.”

“I would also like to add, that having more students of color in many if not all of our majors would be good. I know that many of us are in challenging majors, but I recall in high school that many students of color were excited to learn about science, technology, engineering, and math. For many of us, we knew that those majors were avenues to making a lot of money, it was not in sociology, history or education. This school should advertise about STEM majors more, and attend high schools and speak about actual job opportunities for after college. This is truly an issue, because when I’m in a class, I look around and I mostly see predominately white faces in my classes...There have been a couple of males but it’s only been white males, I haven’t ever seen a male of color, or at least three of us all in the same class.”

There are numerous educational components of this specific predominately white institution that are intended to challenge, engage and motivate students for further studies. However, it is evident that in many disciplines, that these goals are not being achieved. It is essential for this institution to create an environment for students that nurture their skills, talents and abilities that includes other diverse perspectives and cultural voices in their classroom, and in their coursework. It is particularly important that this institution continues to provide supportive environments where students of color majoring in STEM disciplines can have a social and academic facility that allows students from diverse cultural communities to highlight their differences.

Stella, an environmental science major, emphasized the importance of the institution placing a high value on being from a different culture and of a different ethnicity. Her experiences as a transfer student from another predominately white institution was that there was not enough emphasis on culture or honoring differences at her previous school. *“Here, we have a multicultural center and LSAMP, and there’re all of these programs and all of these clubs that really say, “this is my culture, and I’m*

proud of it,” and so I feel people look to that and it’s really positive. To that end, people are not shy of saying what culture or where they come from, and that is really great.”

Retention programs for students of color stress the importance of academic and social integration. Research on college persistence finds that integration is pivotal to student’s decisions to remain in college (Derby & Watson 2006). While it can be difficult for students of color to navigate an unfamiliar academic and social environment, humans develop best in surroundings where they are valued, feel safe, accepted, and have social networks (Allen, 1992). All of the students, who participated in the study, actively participated in the Louis Stokes Alliance Minority Participation Program for at least one year. When I asked the students to identify and describe their experiences while attending this institution, seven out of the eight students shared that their participation in LSAMP has been at the top of the list. One student shares,

“I would say for me, I think it has definitely been LSAMP. I can recall my first term here; I struggled, and just began the term terribly. But, later I became involved here with LSAMP and it definitely did make a change in my grades. I felt a little bit more welcomed in the center compared to in the class, and I got to meet a little bit more people, who were from my cultural community and I got to kind of expand my network. Today, I’m not struggling as bad anymore and that makes it all better this term, better than my first experiences here for sure.”

Another student explains:

“For me, this year being a part of LSAMP has been the biggest and the most impactful while attending this school. Getting to know a lot more people and feeling a lot more welcomed in the school through my participation as an LSAMP student, has been great. My peers here, make me feel welcomed, and are very helpful....Being a part of LSAMP has definitely allowed me to know more people, know more staff, get more connections and just know more of what is happening on the college campus. As a collective group of students of color, when we come together we easily help one another, this is a large campus, and it is easy to be

easily confused, not understand what is going on here, and it is easy to be excluded and alone. LSAMP is most definitely the place to be apart of while attending this school.

Another student shares, *“Just simply being surrounded by other people like myself, students of color, and specifically in science and engineering, and those two elements together just really provides for a positive supportive environment.”*

Research suggests that students of color rely on one another to help them navigate the college environment during their earlier years in college (Williamson, 1999; D’Augelli & Hershberger, 1993; Rice & Alford, 1989; Thompson & Fretz, 1991). Their racial and ethnic make-up is an integral role in their academic and social development on college campuses where they are the minority. All of the participants discussed the importance of participating in the LSAMP learning community. Additionally, research outcomes from learning communities reveal benefits as diverse as economic prosperity (Adult Learning Australia, 2000; Yarnit, 2000) and improved student academic and social achievement (Calderwood, 2000; Gabelnick et al., 1990).

Theme #3 Surprise, Surprise. The aspects of bias and discrimination that occur on a PWI in the Pacific Northwest.

- The participants discussed student expressions and comments about their college ambition.
- What you see, is not what you get: students discussed stereotypical comments, and experiences on the college campus (classroom, faculty, staff).

Many educational institutions have continued to engage in ongoing conversations, and policy changes about implementation strategies to enroll, educate, and retain students from groups historically underrepresented in higher education: women, African Americans, Chicanos and Latinos, Native Americans, American-born students of Asian

ancestry, and immigrants (Levine and Associates, 1990). As these students pursue their undergraduate degrees at four year institutions, they feel that they are treated as unwelcomed outsiders, as they encounter subtle forms of bias (Cones, Noonan, and Janha, 1983.) The students who participated in this study, labeled this bias as “being visible but being invisible all at the same time.” Several students discussed subtle forms of discrimination that they personally experienced or one of their friends experienced. As Douglas explains, he initially ignored negative comments or statements; he was initially concerned with attending class, passing his courses and pushing toward earning his college degree. He shares,

“Then as I began to progress in academia, I no longer ignored the biases and I started to notice little things that were clearly a result of my being of color. Certain things that I would just let go and brush off and then other things that really would get to me. Basically the way I was treated by certain professors and instructors was very different than some of my white peers. For example, I was taking an advanced math course, and after the lecture, a group of us students went to the front to talk with the instructor, or to ask questions, which is normally done on campus. I was among other students waiting to speak to the professor. So one by one I watched the instructor laugh and smile and answer student questions and then when I walked up, he stopped, looked at me, and his facial expression immediately changed to very straight, and stern. He responded before I even asked, “what is it?” So situations like that, they sort of jar me and make me lose focus just for that moment, just enough for me to lose confidence in myself, lose confidence in the question that I had for this instructor. It’s situations and experiences like that, that make this school or particular classes uninviting and unwelcoming, as well as, really hard to learn sometimes. It sort of takes away the learning from the learning environment, and that’s just one of many examples. So those are the sort of things that I’ve found that I’ve had to contend with while here.”

Stella, has not experienced racial discrimination herself but discussed the experiences of one of her friends, *“He’s black but he’s experienced a lot here, just different things. He was just walking with one of his friends one time and somebody had*

called the cops on them and thought they were doing a drug deal or something like that because they were walking behind one of the dorm buildings here. Just random things like that. He gets discriminated a lot, I think. And other friends I've had have experienced this too."

When I asked the question, are there any stereotypes that others hold about you as a student of color, and if so, how does it affect you? Sasha, a Speech and Hearing major, expressed that white peers in her class are always surprised to see her pursuing a college degree, she states the following:

"They are always surprised I suppose, not intentionally, but unintentionally, you can tell, because of my accent and the way that I look, people aren't quite sure what I am, so when I let them know that I am Hispanic and that I am from a different culture, there is always that initial slight bit of surprise that I am here. When I let them know how far I am on the academic ladder, there is that little bit of surprise as well. I'm sure that affects me unconsciously, I suppose you could say. Every once in awhile it does feel like why is there that surprise? Should I not be here?"

Another student shares, *"People always say, you can't really succeed," or there's not really an opportunity for me to make a difference in my community. People say things like, why are you in college, and sometimes you internalize those things, and struggle? As a Hispanic woman, I have been asked, aren't you supposed to be doing labor or something or some kind of other work?"*

Keisha shares, *"I think I don't get it as much because I don't think that people actually know how I racially identify.....this can be a negative and a positive. Some people are just stupid, and make assumptions about all ethnic groups, I am working on calling people on their stuff because when I hear them, it is very offensive...I think*

professors do it when they don't acknowledge contributions of professionals of color especially in academia."

As reported by the Institute for the Study of Social Change (2003), students talk about subtle discrimination in certain facial expressions, in not being acknowledged, in how white students "take over a class" and speak past students of color, or how professors change their demeanor and facial expressions when speaking to students of color. Though often unwitting or inadvertent, such behaviors reinforce the students' sense of alienation and hinder their personal, academic, and professional development (Gross-Davis, 1999).

Theme #4: A Sense of Belonging. The aspects of how participating in a learning community increased students' self-esteem, and increased their motivation toward obtaining a college degree.

A number of the questions asked in each interview centered on the students' experiences in the Louis Stokes Alliance Minority Participation Program. I asked students to discuss the type of information or resources gained through LSAMP, to describe how participating in LSAMP helped and promoted their academic and social needs, and what they have accomplished academically, professionally and or socially as a result of their participation. In their responses, students focused on how and what they have accomplished while participating. As such, participants discussed aspects of how participating in a learning community increased their self-esteem, improved their grades,

as well as, encouraged on-campus participation. The theme Navigating the college terrain was split into two sub-themes:

- Self-motivation: the participant's further desire and purpose to obtain their college degree.
- Building relationships: the participants highlighted the importance of being with peers and building relationships with professors who promote LSAMP. Students highlighted being connected and accepted.

There is a growing body of research that believes that academic achievement is the product of a complex network of teacher-student relations, where the identity of successful and unsuccessful student is developing with high, moderate or low self-esteem level. Self-esteem is most often defined as a conscious cognitive-affective expression of self-evaluation (Maslow, 1943). In this study, most of the students discussed their experiences of not only being students of color attending a predominately white institution, but they also discussed their feelings of being isolated while attending a predominately white institution, and how this all changed for them when they began to participate in a minority specific learning community on a white college campus.

When describing and discussing student experiences in LSAMP, students shared how this community of learning promoted their self-esteem, development of personal, and social responsibility, which they believe contributed to better grades, improved social life and overall better student academic achievement. Keisha shares, *"I would have been so lost mentally, physically, and academically without LSAMP. In the beginning, I didn't know what to expect but they have surpassed whatever expectations I may have previously had, I have learned so much, and gained a level of academic rigor through tutoring and from the leadership that I didn't use to have."* Students discussed that

diverse, inclusive and welcoming professors is also necessary for their success and that giving hope for students and responsibility must become essential segments of educational curriculum as well.

One student shares,

“Professors are expected to be sensitive to the needs of all students who are at risk to being unsuccessful, and it is important to create an inclusive environment for students to learn, like in LSAMP. Believe it or not, LSAMP has helped me to build self-confidence as a student of color on this campus, and it has helped me improve my grades and increase my social interactions. For me, receiving encouragement helps me to study longer and harder. Attending social events that allow me the opportunity to meet professors who promote and LSAMP and STEM students has been a plus as well.”

Philis, a general science major, knows intimately the pressures that students of color face attending predominately white institutions, and she shared her experiences with the group.

She shared,

“I have felt so lonely on many occasions, I have felt socially invisible, and early on I understood that because I am a minority that I don't have the same social pool as others, therefore when I come into the LSAMP building or when I see staff on campus, I am proud to be a part of LSAMP. It feels good to receive positive feedback from staff here, as well as gain peer support. If the same models can be adapted or integrated into many of our classes, students who do not participate in LSAMP can also increase their self-esteem and feel competent about attending this college.”

Keisha, explains the following:

“For me understanding that I wasn't certain that I had all the needed skills to succeed in a college level, it was important for me to build relationships and build a community of supportive learners like myself who were maybe unsure of themselves as well. Because, I stand out in all of my classes, I feel singled out when I ask questions to both students and my professors, and it became really easy to isolate myself in many of those classes, but building a supportive network in LSAMP not only helped to build my self-esteem, but I also learned a lot about study skills and what I

can do to actually adapt to the class level reading and writing at the college level.” LSAMP actually offers seminar classes for this kind of thing, for one or two credits. You can take the class and you can learn about what skills you need to study, and for me LSAMP has beyond helped keep me motivated and Lorna believes in all of us to succeed and earn our degrees.”

When describing their experiences outside of the learning community environment, as mentioned earlier students often expressed that they felt visible but invisible all at the same time. One participant says, *Of course, I’m physically and visibly in class, and I stick out, but there is minimal to no acknowledgement that I am present or even knowledgeable about the subject matter.* In a later conversation, the student further explained that he does not believe that the professor ignores his contributions to the subject matter at hand, but that the professor does not reinforce, reframe or even invite further discussion about the same subject matter that is being discussed. He says, *“Perhaps I join the class discussion too late, and the professor is ready to move along on the agenda. I just feel like, there is a lack of engagement or involvement with the professor in this particular class, and most of the time the subject matters do not resonate with me, and when I attempt to connect them to my community and my experiences, I often feel like we just move forward on the agenda. For a student of color, this makes it really challenging to want to contribute to the classroom discussion, small group discussion or even ask for help if I need it.”*

Stella, shares *“I am working toward achieving my goal at obtaining my degree, it has not been easy, but I am motivated, disciplined, and have great support to continue toward obtaining it. My experiences, in LSAMP have most definitely contributed toward my positive self-esteem and motivation. “Generally, I don’t like asking for help, I’m such an independent person.....But, when I began to participate in LSAMP, Lorna*

reached out to me, and I don't know what it is about her and the leadership here, but that's the first time I ever really admitted I needed help. I don't know why I did it here, but it's just the atmosphere or something that kind of made me feel like it's okay to ask. My participation and commitment to LSAMP has definitely paid off. I have never felt invisible or ignored in LSAMP."

Students who participated in this research study believe that they will earn a college degree. Eight out of eight students identified the ability to navigate their High School environments but feels that many students of color who attend a predominately white institution could be much more successful if they participated in a learning community much like LSAMP. One student comments:

"I think that without LSAMP, I could of course be successful, but the college environment would be much more difficult to navigate. Being apart of LSAMP allows me to participate in an environment or community like family that natures me, supports me, and lifts me up. I see myself and experience living in like two worlds which some folks would say that I have dual citizenship. One world feels kind and loving, and the other is just there, you choose to go to one because you need to, not because you want to."

Summary

The purpose of this chapter provided the results of this investigation. The clustered themes detailed in this chapter provided a response to the study's research questions, as well as, insight into additional experiences common to many of the student participants. This particular group had many positive experiences participating in the LSAMP learning community. The following chapter discusses the link between my research findings and the conceptual framework utilized, as well as discusses the implications for policy, practice, and suggestions for further research.

Chapter V Discussion & Implications

In this next chapter, I discuss how Tinto model links with my research finding, I also provide a summary of highlights from the data collected, an analysis of the data and relevancy to the literature reviewed. Additionally, I also provide a review of summary of the research study, implications for policy and practice, and provide suggestions for further research in chapter five. The purpose of this study was to explore the contributing factors of student participation in a learning community, college persistence, and college retention. The study examined the lived experiences of African-American and Latino students on a predominately white institution who participated in the LSAMP learning community. Data gathered sought to answer the following research question: What are the experiences that contribute to persistence, defined as continuing toward degree completion, for students of color who participate in a minority specific learning community while attending a predominately white institution?

Linking findings with Tinto's model

Upon thorough examination of the literature and analysis of the data presented by the participants focus group, in-depth interviews, non-participation observation and demographic questionnaires, I was able to connect my overall key findings to Tinto's theory by letting the themes emerge and then returning to the theory and reflecting on it. Although in the literature review there is some disagreement about how to best operationalize various components of the Tinto's model, students in this research study are socially and academically integrated into the college campus through their LSAMP learning community, and therefore have decreased and minimized their college departure due to being integrated into the college community. As a result of student's social and

academic integration, African-American and Latino students are persisting toward obtaining an undergraduate degree.

Because this study examined the relationship between student participation in a learning community, college persistence and retention, my study validated Tinto's theory about learning communities. He explains that learning communities are supportive environments that foster active participation and community that can lead to student retention (Tinto, 1987). Students that participated in this study shared that the LSAMP learning community has helped them to build relationships with peers and faculty members whom they would have not considered if they were not participants in the LSAMP program. Garnishing these positive relationships helped them to gain self-confidence, persist toward pursuing their undergraduate degrees, and promoted and supported their academic and social expectations. I also believe that like in my own experiences, students of color drew from the support of these individuals in the LSAMP learning community, and the surrounding campus community to unite with members in the face of adversity rather than withdrawing from the institution or engaging in self-isolation (Thompson & Fretz, 1991).

The findings in this part of the study support Vincent Tinto's (1993) student integration theory that student support is a condition that promotes student retention (Tinto, 2002). Tinto's research on student integration identified several types of support that promote retention, academic and social support. Academic support occurs through various components on a college campus such as tutoring, study hall, or academic supportive programs such learning communities, freshman interest groups or federally funded programs like TRIO. Offering college supportive programs in various forms of

mentoring, cultural centers or retention programs like LSAMP provides much needed support for individual students and a safe haven for groups of students who might otherwise find themselves out of place in a setting where they are a distinct minority (Tinto, 2002). The results of my study found that supportive college programs like LSAMP can serve as safe, inclusive and welcoming, environments that safely help students navigate the unfamiliar terrain of the university for students of color.

As the literature review further suggested, there are many persistence obstacles for students of color attending predominately white institutions. These obstacles that impede students of color from succeeding and cause academic and social marginalization (Just, 1999), must be reduced and eliminated. While Tinto's earlier model (1987) discusses that students would remain enrolled if they separated themselves from their family and their home community, my research findings did not support this theory. In fact, the LSAMP learning community was explicitly the students extended family and supportive community. One student shares, "*I live at LSAMP, some days we are even fed here, this is my family, we study together, eat together, challenge together, argue, laugh, cry, and I would sleep here if we had a better facility.*" However, findings of my study support Tinto's theory that the more students are academically and socially involved, the more likely are they to persist and graduate. The participants in my study confirmed the importance of both academic assistance and personal relationships with peers and faculty members. They acknowledged that through their active participation in LSAMP, some of them have attained mentors and professional internships specifically within the STEM fields. Additionally, they acknowledged that it was primarily through

their participation in the LSAMP learning community program that this occurred. A wide range of studies in a variety of settings and for a range of students have confirmed that the more frequently students engage with faculty, staff, and their peers, the more likely, other things being equally, that they will persist and graduate. Simply put involvement matters (Tinto, 2002).

Fostering student engagement and community are essential to student college success (Kuh & Kinzie, 2005; Schuh, & Whitt, 2005). Supportive learning environments and social communities such as LSAMP on college campuses can form to accomplish various purposes. It is through this type of learning community program that students experience A Sense of Belonging and receive the support needed for their long term success. Such affiliations can also provide identity anchors and serve as the impetus for practicing communication, critical thinking, leadership, as well as, cultural competency skills (PWI, 2010).

Summary of highlights from the data collected

The discussion in this section singles out some other highlights from what I have learned as a researcher from the focus group, the in-depth interviews and non-participant observation. As mentioned earlier in the research and methodology section, I completed several data collection methods in which served different purposes to address college persistence and college retention for African-American and Latino students attending a predominately white institution. To that end, it later became apparent that each method was useful in understanding the students lived experiences participating in the LSAMP learning community while attending a predominately white institution.

In my experience facilitating the focus group, I learned that students of color experiences with classroom curriculum and classroom interactions were often overlooked, and that classroom structures and pedagogical approaches were too limited. Students who felt this way shared that class is often boring and not interactive. Students who experienced the opposite discussed cooperative learning environments where they did feel as an equal participant in the class and felt collaboration between peers, active learning, and students in the classroom. However, the students who did not, did not think that they were empowered enough to confront the professor about curriculum or how his/her classroom environment was structured. As a result, these particular students reached out to faculty and staff within the LSAMP learning community to seek support and refuge when they felt unheard or didn't feel comfortable speaking to their professors.

Additionally, in the face to face interviews, I learned that several students felt that building relationships with faculty members prior to their participation in LSAMP was minimal and non-existent. Two out of the three students interviewed felt skeptical about asking for help, guidance or mentorship from faculty members. These students shared received the message that if people see that you are struggling or are in need of additional support, they should offer it, and not expect one to ask for it. They further explained that they didn't want to be perceived as students of color who couldn't make it without a hand up or hand out. Because, the focus group focused on the broader campus experiences, it didn't allow me to ask very detailed follow-up questions like the face to face interviews which again allowed me the opportunity to explore personal perceptions and campus climate experiences.

Furthermore, one of the highlights of the non-participant observation became apparent after reading my field notes and reflecting on my own experiences as well. From my observation, field notes and experience, the LSAMP learning community empowered students by allowing them to lead group discussions with their peers, and allowed them to provide constructive feedback to their peers in a supportive community. The LSAMP learning community supports Astins (1993) finding that the single most powerful influence on college students' cognitive and social development is their peers. "A large part of the impact of college is determined by the extent and content of one's interactions with major agents of socialization on campus, namely, faculty members and student peers" (Pascarella and Terenzini 1991, p. 620). Moreover, students' commitment in terms of persistence to the institution can be strengthened by intentionally creating a strong sense of belonging through peer development and social networking which in turn, is what the LSAMP learning community accomplishes for students.

Study Summary

In this section, I utilized the research question as a framework to guide the discussion of the main findings of this research study. The findings demonstrate how the research question challenged or support previous research in this area. The focus group, interviews, and non-participant observation offered insight into the experiences African-American and Latino participating in a learning community while attending a predominantly white institution. In particular, all of the data gathered provides administrators and practitioners an understanding of how and why college retention programs, specifically, learning communities positively influence the retention of college

student persistence for students of color. The analysis of the data collected identified multiple clustered themes: From a high school diploma to a college degree, Navigating the college terrain, Surprise, Surprise and A Sense of Belonging. The following section provides an overview of those themes.

From a high school diploma to a college degree

To understand the students' academic experiences on this predominately white institution, and in this LSAMP learning community program, it is important to understand their families' influences about them attending college, and their motivation to obtain an undergraduate degree in a STEM field. All of the participants in this research study attended college due to either immediate family or extended family influences, as well as, their own personal desires to do something different with their lives. Eight out of the eight students were pushed to believe and bought into the belief that obtaining a college degree is the best way to become financially successful in life, and as the Center at Georgetown estimates that by 2018, 63 percent of U.S. jobs will require some form of postsecondary education or training, it makes sense for these students to keep pressing toward obtaining their college degrees. Understanding that "The vast majority of new jobs require higher skills, and if you don't have a college degree, your chances of being in the middle class are visibly diminished (Merasotis, 2011)," students who create opportunities in which they can gain greater individual earning power, and increase their college attainment, can be a key driver for our nation's economy.

The theme suggested that having family and community support has a powerful influence on a student's college aspirations and completion toward their college degree. Additionally, the theme suggested that students personal desire and aspiration to become one of the first in their immediate families to obtain a college degree, helped students to seek out supportive college programs to enhance their academic, social networks and college goals. This finding is supported by the literature on family support and encouragement, both of which are among the strongest predictors of four-year college attendance. These two elements are the twin keys to maintaining college aspirations, sustaining motivation and academic achievement in high school, and actually enrolling in college (McDonough, 2004).

Navigating the college terrain

Retaining a student is fundamental to the ability of an institution to carry out its mission. A high rate of attrition which is the opposite of retention is not only a fiscal problem for educational institutions but a symbolic failure of an institutions ability to achieve its purpose, to help students obtain a college degree (National Center for Educational Statistics, 2001). Predominantly white institutions that enroll a relatively high percentage of African-American, Hispanic, or Native American students will likely have lower retention rates than similar institutions enrolling fewer students from these groups (National Center for Educational Statistics, 2001) and for the PWI's that do have lower retention rates, what are they doing to increase their retention for these particular students of color. This phenomenon helped to guide the research question: What are the experiences that contribute to persistence, defined as continuing toward degree

completion, for students of color who participate in a minority specific learning community while attending a predominately white institution?

For participants in this study, eight out of the eight students universally shared that their participation in LSAMP has increased their student engagement as well as their ability to be active learners and participate in their own education. One student shared, *“In the beginning, I didn’t understand what it meant to be involved or participate in my own learning, I thought that it meant just listen and complete the assignments, but in LSAMP the leaders really show and tell you what that actually means, since my participation in LSAMP, I am no longer a spectator in my classes, I literally ask questions, stay involved, and try my best to make sense of what I have heard and apply examples to my own world, even though that can be challenging.”* Learning communities seek to involve students both socially and intellectually in ways that promote cognitive development as well as, an appreciation for the many ways in which one's own knowing is enhanced when other voices are part of that learning experience (Tinto, 1997). Although, students in this learning community did not have blocked courses together, their sense of community and shared responsibility rang true through my non-participant observation, and their collaborative group work in the LSAMP program. Thus, their participation in LSAMP allowed participants to be mutually dependent on one another in some form or capacity and they became involved actors in the institution (Tinto, 1987) which is related to student college retention (Tinto, 1987). As such, this level of academic and social integration helped decrease dissonance among students of color which leads to lack of student engagement, participation and college drop out completely (Caruthers, 2007).

The theme suggested that there is a strong correlation between students of color participating in the LSAMP learning community program and their student engagement on a four-year predominately white institution. Therefore, the findings suggests that participating in a minority specific learning community is positively linked to student of color success, enhanced academic performance, integration of academic and social experiences, influential perceptions of the college environment, and self-motivation and determination since starting college. Additionally, students of color who experience or perceive negative racial campus climates typically have significantly less frequent interactions with faculty (Hurtado,1994). The results of this study indicated that race/ethnicity and perceptions of campus climate played an important role in students garnishing positive relationships with faculty through the LSAMP learning community, and such opportunities provided access to supportive faculty networks for students of color.

The findings are supported by and corroborate with previous research in this area about learning communities and student success. As suggested by Pike (2000) and his colleagues (Schroeder, & Berry, 1997), learning communities provide a fertile environment for student growth through engagement with other influential agents of socialization, such as peers and faculty members, and as a result, enhance student involvement, and class attendance, which in turn positively affects student academic and social success (Pike, 2000).

Surprise, Surprise

Most of the participants came to college due to the motivation of their family members and personal desire to earn a college degree. Seven out of the eight participants grew up with the awareness that attending college was an expectation in their family, but

none of them believed that they would experience discrimination or racism in the year 2011 in a college community. And, although earlier research studies conducted in the 1980's identified components such as; the lack of academic preparation, financial stress, living and learning college environments and the lack of faculty and staff interactions as factors that contribute to students of color dropping out of college, one theme common to all the identified factors, although not always stated or acknowledged, is institutional and individual racism (Walter, 1985). As Love states "...there has been little institutional recognition of white racism, little discussion of how it is manifested on campus, and little attention to how it affects students of color, even in the absence of overt intent to discriminate (29)."

Students of color in this study comprise of a small percentage of the total college population on this Pacific Northwest College. Eight out of the eight students chose this college for one of these specific reasons; location, financial aid, its relationship with other medical institutions, scholarships, and its college resources such as LSAMP. One student shares, *"I didn't know that it was as white as it is, until my sophomore year, but by actively participating in LSAMP, it is not that big of a difference because I know where to come when I am feeling a sence of disconnection from students of color.....that is what is good about the student clubs as well, I try my best to attend the cultural events that may occur sponsored by the cultural clubs."* African-American and Latino students who experience or perceive greater racial tension and hostility in their college environment, express lower levels of satisfaction and greater levels of isolation, and feel less identified with the college institution than do white students (Thompson & Fretz, 1991).

This theme also guided the research question: From the students perspective, what is the relationship between their participation in the LSAMP learning community, and their persistence and retention on a predominately white institution? This theme suggested that students intentionally sought to increase their participation on the college campus, and reached out to other students of color majoring in a STEM discipline to inform, and develop, special supportive networks with individuals whom they thought may have similar college experiences. This theme supports the literature that African American and Latino students place a high value on social bonding and group cohesiveness, this "communal value" orientation is the sentiment that "I am because we are and because we are, therefore, I am" (Boykins, 1994). It became apparent and critical for these eight students to develop strong relationships with peers, LSAMP staff, and faculty who could possibly offer support, guidance, and help to lead students to resources to help them such as internships, employment opportunities, and academic mentors. The LSAMP leadership staff, and other supportive faculty allowed students to negotiate the challenges of college with people who believe in them, are able to provide specific guidance about possible challenges they face, and are able to help them recover from a failure or disappointment.

Findings from the research study also demonstrate that learning communities sustain and increase student self-esteem and academic achievement in general. Building relationships with peers and faculty members improve student self-image in respect of academic abilities and social interactions. Positive feedback, peer support, frequent experience of learning achievement leads to increase in self-determination, motivation and feeling of competence.

A Sense of Belonging

Many students of color comprise of a small percentage of the total college population, and as a result, many of them find it difficult to interact with people who ethnically, racially, and linguistic identify as they do (Bourassa, 1991). Consequently, many students of color also experience varying degrees of college policies and activities that were created, developed, and instituted for and by white students and faculty. As such, these factors contribute to a sense of social alienation and "ethnic isolation" that is often more severely experienced by students of color than that of white students (Bourassa, 1991). Thus, integrating and adapting to a college environment, specifically a predominately white institution can be a challenge that students of color may face. Although, eight out of the eight students in this research study experienced some challenges navigating the terrains of the college community, all of them found their niche in the campus community by developing a social support network consisting of other students and faculty, who shared similar cultural backgrounds and supported them in their cultural identities.

The unique impact that college peers and faculty mentors have on students other is widely acknowledged and cited in the higher education literature (Astin, 1993). As mentioned earlier, college undergraduate peers have such an important impact on one another, and they are the single most source of influence on undergraduate student affective and cognitive growth and development during college (Astin, 1993). Furthermore, the frequency and quality of students' interactions with peers and positive faculty interactions and mentoring extends to a positive association with college student persistence (Pascarella & Terenzini, 2005; Tinto, 1993). In fact, students of color who

participated in the Louis Stokes Alliance Minority Participation learning community, also ,gained competencies in forming alliances and fostering collaboration between other students, college resources, staff, and amongst faculty in STEM disciplines. As a result, students garnished relationships and built formal and informal communication networks that promoted and supported their college expectations.

This particular theme also helped guide the research question; What are the experiences that contribute to persistence, defined as continuing toward degree completion, for students of color who participate in a minority specific learning community while attending a predominately white institution? This theme further suggested that students sought out the LSAMP learning community for a multitude of reasons such as; tutoring, social networking, academic encouragement, cultural connectedness, accountability, their welcoming and nurturing environment, promotion of self-esteem and development of personal and social responsibility, which contributes to better student academic achievement.

Implications for Policy and Practice

Based on this study, many implications for policy and practice have surfaced that respond to the initial intentions of this study detailed in chapter one. The students of color who participated in this study responded in a constructive and confident manner about the integration of the Louis Stokes Alliance Minority Participation learning community program on this campus. As such, implications of this study recommend the opportunity for other disciplines to implement the same type of learning communities for other students of color in a linked, integrated, and cooperative learning environment.

Implementing other types of learning community programs such as LSAMP for other disciplines will benefit the growing number of students of color in other fields.

The need for learning communities can be described as a pragmatic solution to increase graduation rates and college persistence for African-American and Latino students attending predominately white institutions. In the Pacific Northwest Region of the world, PWIs have improved an array of recruitment and retention efforts for students of color, however, the majority of students graduating with degrees from public universities in this region are white (COCC, 2010). Therefore, by implementing and integrating learning communities across disciplines in most of the predominately white institutions in this region, based on the results of this research study, students of color will experience the following;

- a. Connection with students, faculty, staff, and the University in a meaningful way
- b. A successful transition and acclimation to the University
- c. Show a greater rate of persistence (retention, time-to-degree)
- d. Achieve the articulated learning outcomes specified by departments or programs
- e. Increased awareness of departmental, college, and University resources
- f. Demonstrate the ability to be more academically self-sufficient
- g. Experience a higher level of satisfaction with the University experience

Educators and administrators could utilize minority specific learning communities as a framework for related goals. These goals could include critical pedagogy and improved curriculum that supports positive academic and social outcomes for students of

color where they are the minority. As a result, this would help to achieve the above demonstrated outcomes of a learning community.

Recommendations for further study

This research study consisted of a group of STEM students of color within a particular context. Within this context, I explored how this group of students navigated their lived experience on a predominately white institution while being the minority. I also examined if a college supportive retention program assisted them towards pursuing their academic and social goals. The context of this case, the Louis Stokes Alliance Minority Participation Program was essential to exploring the case. However, for future research, students of color could be studied in another context such as within their ethnic and racial communities alone. If separated and studied in racial/ethnic or linguistic communities such as Latino's with Latino's, African-Americans with African-Americans etc. a study in another context could provide in-depth insight into the cultural perspectives and considerations from those communities independently.

Additionally, this particularly study interviewed students who ranged in age, gender, as well as in years in class which allowed this researcher to gain a broad perspective of their experiences. However, because different years of college experiences and ages varied, it could be advantageous in a further research study to research students as juniors and seniors in college who actively participate in a minority specific retention program. This would allow for comparison and themes to emerge across a class year and might impact the types of themes and student perspectives that arise. Similarly, another group of participants in this study could be graduate students in STEM majors who attend this predominately white institution. Understanding that one of

the premises of the LSAMP program is to encourage and help undergraduates students persist toward earning a graduate degree, it would be unique to capture those students of color experiences in graduate school.

Conclusion

Learning communities are effective for student retention. Students of color are more likely to excel in institutional environments that are culturally diverse, inclusive, and integrate culturally relevant pedagogy. Central findings of this study concluded that the LSAMP learning community program can interrupt the dropout cycle of students of color who participate. Therefore, there is a strong relationship between student participation in a learning community, college persistence, and college retention. Thus, this study found that students' college persistence is directly linked to their academic and social integration on the college campus. The findings also revealed that college persistence and retention is a function of four strategies, all of which are incorporated into the Louis Stokes Alliance Minority Participation Program: (a) Social Integration; strengthened connections amongst students of color and between students, faculty and staff (b) academic preparedness; making sure students of color have the resources and skills needed in order to be academically successful (c) Group identity; helping students overcome feelings of isolation that are common on large college campuses and (d) Providing both an academic and social atmosphere where students can succeed.

These conclusions are the result of in-depth interviews, a focus group, a non-participant observation, and demographic questionnaires. It was important to utilize all

of these data methods in order to understand each individual and collective perspective through a qualitative case-study design.

This research study informs the literature related to college persistence, retention, STEM students, students of color attending predominately white institutions, learning communities, LSAMP, and diversity on college campuses for both faculty and students. The research to date addressing outcomes of learning has not focused LSAMP learning community programs, or students of color attending predominately white institutions. This study addresses that gap in literature and offers a qualitative case study analysis of LSAMP learning communities on a predominately white institution.

References

- Adan, A. & Felner, R.D. (1995). Ecological congruence and adaptation of minority youth during the transition to college. *Journal of Community Psychology*, 23, (3), 256-269.
- Allen, W.R. (1985). "Black Student, White Campus: Structural, Interpersonal, and Psychological Correlates of Success." *Journal of Negro Education* 54 (2), 134-47.
- Allen, W.R. (1988). Black students in U.S. higher education: Toward improved access, adjustment, and achievement. *Urban Review*, 20, 165-188.
- Antonio, A. (2003). Diverse student bodies, diverse faculties. *Academe*, 89(6), 14-17.
- Astin, A. W. (1993b). *What Matters in College? Four Critical Years Revisited* (1st Ed.). San Francisco: Jossey-Bass.
- Attinasi, L.C. (1989). Getting in: Mexican Americans' perceptions of university attendance and the implications for freshman year persistence. *Journal of Higher Education*, 60, 247-77.
- Avens, C., and R. Zolley. 1992. *QUANTA: An interdisciplinary learning community (Four studies)*. Daytona Beach: Daytona Beach Community College (ERIC Document Reproduction Service, ED349073).
- Baldwin, J.A., Brown, R. & Rackley, R. (1990). Some socio-behavioral correlates of African self-consciousness in African American college students. *The Journal of Black Psychology*, 17, (1), 1-17.
- Barefoot, B. O. (2000). The first-year experience: Are we making it any better? *About Campus*, 5, 12-18.
- Barrow, L., & Rouse, C. E. (2005). Does college still pay? *The Economists' Voice*, 4, 1-

9.

Bart-Johnston., Heidi. (2007). Data Triangulation: Using Multiple Methods To Estimate and Validate.

Baxter, P., Jack., S (2008) The Qualitative Report 13 (4). Study Design and Implementation for Novice Researchers.

Borden, V., & Rooney, P. (1998). Evaluating and assessing learning communities. *Metropolitan Universities*, 8(4), 73-88.

Bordes, V., & Arrendondo, P. (2005). Mentoring and 1st year Latina/o college students. *Journal of Hispanic Education*, 4, 114-133.

Bourassa, D.M. (1991). How White Students and Students of Color Organize and Interact on Campus. *New Directions for Student Services*, (56).

Bourne-Bowie, K. (2000). Retention depends on new models of student development. *Black Issues in Higher Education Reston*, 17(3), 96 99.

Boykins, A. W. (1994) Afrocultural expression and its implication for schooling.

Braxton, J. M., Sullivan, A. S., & Johnson, R. M. (1997). "Appraising Tinto's Theory of College Student Departure." In John C. Smart (ed.), *Higher Education: Handbook of Theory and Research*, 12. New York: Agathon Press.

Brower, A. A. & Detting, K. M. (1998, November/December). What is learning community? Toward a comprehensive model. *About campus*, 15-21.

Castellanos, J., & Gloria, A. M. (2007). Research considerations and theoretical application for best practices in higher education: Latina/o achieving success. *Journal of Hispanic Higher Education*, 6, 378-396.

Carter, F (2011). An Analysis of Scientific Self-Efficacy as a Benefit of Summer

Research Participation for Underrepresented Minorities in Science, Technology, Engineering, and Mathematics (STEM) Fields.

- Chávez, A. (2007). Islands of Empowerment: Facilitating Multicultural Learning Communities, 19, (3), 274-288. Retrieved from <http://www.isetl.org/ijtlhe/> ISSN 1812-9129 on October 16, 2010.
- Chavous, T.M. (2000). The relationships among racial identity, perceived ethnic fit, and organizational involvement for African American students at a predominantly White university. *Journal of Black Psychology*, 26, (1), 79-100.
- Cones, J. H., Janha, D., Noonan, J. F (1983). "Exploring Racial Assumptions with Faculty." In J. H. Cones, J. F. Noonan, and D. Janha (Eds.), *Teaching Minority Students*. New Directions for Teaching and Learning, (16). San Francisco: Jossey-Bass.
- Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, 19(5), 2-14.
- Creswell, J. W. (1994). *Research design: Qualitative & quantitative approaches*. Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2008). *Research Design: Qualitative & quantitative approaches*. Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Davis, J.E. (1995). College in Black and White: Campus environment and academic achievement of African American males. *Journal of Negro Education*, 63, (4), 620
- Davis, B. (1999). *Tools for Teaching*: University of California, Berkeley.

- Denscombe, M. (1998). *The Good Research Guide for small-scale social research projects*. Philadelphia: Open University Press.
- Dewey, J. (1997). *Democracy and Education: An Introduction to the Philosophy of Education*.
- D'Augelli, A., Hershberger, S. L. (1993). African American undergraduates on a Predominantly white campus: Academic factors, social networks, and campus climate. *The Journal of Negro Education*, 62(1), 67-81.
- Denzin, N. K. and Y. S. Lincoln (2003). *Collecting and interpreting qualitative materials*. Thousand Oaks, Calif., Sage.
- Donath, J. S. (1999). Identity deception in the virtual community. In M. Smith P. Kollock (Eds.).
- Durkheim, E. (1961). *Moral education: A study in the theory and application of the sociology of education*. New York: The Free Press in cyberspace (p. 29-59). London: Routledge.
- Columbia Encyclopedia* (2010). Retrieved November 6, 2001, from <http://www.columbia.com>
- Espinosa, L.L (2011). STEM Literacy Beyond STEM Occupations. Featured In *Diverse: Issues in Higher Education* . Retrieved on December 3rd, 2011 from www.ihep.org/stemwatch.
- Fleming, J. (1984). Blacks in college: A comparative study of students' success in Black

- and White institutions. San Francisco, CA: Jossey-Bass.
- Gabelnick, F., J. MacGregor, R.S. Matthews, & B.L. Smith. 1990. "Learning Communities: Creating Connections among Students, Faculty, and Disciplines." *New Directions for Teaching and Learning* 41 (Spring). San Francisco: Jossey-Bass.
- Gajda, D., Stanley, K., Jacob, R., (2008). Persistence and Involvement Reconsidered: A Phenomenology of African American College Men Who Make a Difference.
- Giorgi, A. (1997). The theory, practice, and evaluation of the phenomenological method as a qualitative research procedure. *Journal of Phenomenological Psychology*, 28(2), 235-260.
- Gloria, A.M., Castellanos, J., & Orozco, V. (2005). Perceived educational barriers, cultural fit, coping responses, and psychological well-being of Latina undergraduates. *Journal of Behavioral Sciences*, 27, 161-183.
- Grubb, W. N. (2002). Learning and earning in the middle, part I: National studies of pre baccalaureate education. *Economics of Education Review* (21) 299-321.
- Guiffrida, A. (2006). *Toward a Cultural Advancement of Tinto's Theory: The Review of Higher Education - Volume 29, Number 4*, pp. 451-472
- Hipps, J. A. (1993). *Trustworthiness and authenticity: Alternate ways to judge authentic assessments*.
- Holt, J. L., Mahowald, B. G., & DeVore, C. J. (2002). What helps students of color succeed? Resiliency factors for students enrolled in multicultural educators programs.

Hurtado, S. (1994). The institutional climate for talented Latino students.

Research in Higher Education, 35(1), 539-569.

Hurtado, S. (1999). Effects of college transition and perceptions of the campus racial climate on

Latino students' sense of belonging. *Sociology of Education*, 70, 324-345.

Irvine, J. J. (1992). Making teacher education culturally responsive. In M.E. Dilworth

(Ed.), *Diversity in teacher education: New expectations*, 79-82. San Francisco, CA: Jossey-Bass.

Jaffee, David (2004). "Learning Communities Can Be Cohesive—and Divisive."

Chronicle of Higher Education.

Johnson, B. R. (1997). Examining the validity structure of qualitative research. *Education*,

118(3), 282-292.

Jones, L., (2001). Examining the ethnic minority student experience at predominantly

white institutions: A case study. *Journal of Hispanic Higher Education*, 1(1), 19-39.

Just, H. D. (1999). Minority retention in predominantly white universities and colleges:

The importance of creating a good —fit. (ED 439 641).

Kember, D. & Gow, L. (1989). A model of student approaches to learning encompassing

ways to influence and change approaches. *Instructional Science*, (18) 263-288.

Kemple, J. J. (2008). Career academies: Long-term impacts on labor market outcomes,

educational attainment, and transitions to adulthood. New York: MDRC.

Kezar, A. (1999). Forward. In O. T. Lenning & L. H. Ebbers. *The powerful potential of*

learning communities: Improving education for the future (Vol. 26, pp. ix-xi).
Washington, D.C.: The George Washington University, Graduate School of Education
and Human Development.

Kezar, A. (2005) *Tools for a Time and Place: Phased Leadership Strategies to
Institutionalize a Diversity Agenda*. *The Review of Higher Education* - 30 (4),
413-439.

Kohn, L (1997). *Methods in Case Study Analysis: The Center for Studying Health
System Change Technical Publication 6* (2).

Kuh, G.D. & Kinzie, J. & Schuh, J.H. & Whitt, E. J. (2005). “Never let it rest: Lessons
about student success from high performing colleges and universities.”

Kuh, G. D. (2005). Student Engagement in the First Year of College. In *Challenging and
Supporting the First-Year Student: A Handbook for Improving the First Year of
College*, edited by M. L. Upcraft, J. N. Gardner, and B. O. Barefoot, 86-107. San
Francisco: Jossey-Bass.

Kumar., R (2006). Students’ experiences of home–school dissonance: The role of school
in academic culture and perceptions of classroom goal structures: *Educational
Psychology, 31, (3), 253-279*.

Lardner, E. D. (2003, Winter). *Approaching Diversity through Learning Communities*.

Lavin, D. E., and Crook, D. B. (1990). *Open Admissions and Its Outcomes: Ethnic*

- Differences in Long-Term Educational Attainment. *American Journal of Education*, 98(4), 389–425.
- Lee, Donlan & Brown (2010). American Indian/Alaskan Native Undergraduate Retention at Predominately white institutions: An Elaboration of Tinto's Theory of College Student Departure. *COLLEGE STUDENT RETENTION*, 12(3) 257-276.
- Lenning, O., & Ebbers, L. (1999). The powerful potential of learning communities: Improving education for the future. ASHE-ERIC higher education report 26, (6). Graduate School of Education and Human Development, George Washington University.
- Levine, J. H., and D. P. Tompkins. 1996. Making learning communities work: Seven lessons from Temple University. *AAHE Bulletin* 48 (10): 3-6.
- Loo, C.M., & Rolison, G. (1986). Alienation of ethnic minority students at a predominately white university. *Journal of Higher Education*, 57(1), 58-77.
- Lopez, D.J. (2005). Race-related stress and sociocultural orientation among Latino students during their transition in a predominately white, highly selective institution. *Journal of Hispanic Education*, 4, 354-365.
- Love, Barbara (1993). "Issues and Problems in the Retention of Black Students in Predominantly White Institutions of Higher Education." *Equity & Excellence in Education* 26 (1), 27-36.
- MacGregor, J. (1991). What differences do learning communities make? Washington Center news, 6, 4-9.
- Maggio, J.C., White, W.G., Molstad, S., & Kher, N. (2005, Winter). Pre-freshman

- summer programs' impact on student achievement and retention. *Journal of Developmental Education*, 29(2), 2-33.
- Malaney, G.D. (1991). *Academic and social expectations and experiences of first year students of color*. Paper presented at the Annual Meeting of the Association of Higher Education, Boston, MA, October 1991.
- Marcotte, D., Bailey, T., Borkoski, C., & Kienzl, G. S. (2005). The returns to education at community colleges: Evidence from the National Education Longitudinal Survey. *Educational Evaluation and Policy Analysis*, 27, 157-175.
- Marion, F. (1997). Phenomenography: A research approach to investigating different understandings of reality. In R. R. Sherman & R. B. Webb (Eds.), *Qualitative research in education: Focus and methods* (pp. 141-162). Philadelphia, PA: The Falmer Press.
- Matthews, R., & Smith, B. L. (1996). Learning communities. *Liberal Education* 82(3), 4-10. Retrieved October 27, 2010, from Ebsco Host database.
- McDonough, P (2004). College Choice and Diversity. *Diversity Digest* (8) 1.
- Mendelson, M. (2006). Confessions of a learning community coordinator. *Liberal Education* 92(3), 56-59. Retrieved October 27, 2010, from Ebsco Host database.
- Mitchell, S.L. & Dell, D.M. The relationship between Black students' racial identity attitude and participation in campus organizations. *Journal of College Student Development*, 33, (1), 39-43.
- Miles, Matthew B., and A. Huberman (1994), *Qualitative Data Analysis*, Newbury Park, CA: Sage Publications.
- Morgan, D.L. (1988). *Focus groups as qualitative research*. London: Sage.

- National Center for Public Policy and Higher Education. (2004). The educational pipeline: Big investment, big returns. San Jose, CA.
- National Center for Education Statistics (2009), "The Condition of Education 2009," Indicator 20, NCES 2009-081, Retrieved from http://nces.ed.gov/programs/coe/2009/pdf/6_2009.pdf on November 9th, 2010.
- National Center for Educational Statistics (2001), Retrieved from http://www.nces.ed.gov/programs/coe/2009/pdf/4_2001pdf on March 18, 2011.
- Nettles, M.T. (Ed.). (1988). Toward Black undergraduate student equality in American higher education. New York: Greenwood Press.
- Nettles, M.T. (1991). Racial similarities and differences in the predictors of college student achievement. In W.R. Allen, E. Epps & N.Z. Haniff (Eds.), *College in Black and White* 75-91. Albany, NY: State University of New York Press.
- Orfield G., P. Marin, & C.L. Horn (2003). Gender Inequality in the 50 States. Higher Education and the Color Line: College Access, Racial Equity, and Social Change, 59-82 in G. Cambridge: Harvard Education Press.
- Pascarella, E. T., and Terenzini, P. T. (1991). *How College Affects Students: Findings and Insights From Twenty-Years of Research* (1st ed.). San Francisco: Jossey-Bass Publishers.
- Pascarella, E. T., Terenzini, P. T., & Blimling, G. S. (1994). The impact of residential life on students. In Schroeder & P. Mable (Eds.). *Realizing the educational potential of residence halls* (pp. 22-52). San Francisco: Jossey-Bass.
- Pascarella, E.T. & Terenzini, Patrick T. (2005). *How College Affects Students:*

- A Third Decade of Research. Volume 2, Jossey-Bass.
- Patton, M.Q. (2001). *Qualitative Research & Evaluation Methods*. Thousand Oaks, CA: Sage Publications.
- Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods*. Thousand Oaks, CA: Sage Publications.
- Pavel, D. M., Skinner, R., Farris, E., Cahalan, M., Tippeconnic, J., & Stein, W. (1998). *American Indians and Alaska Natives in postsecondary education* (NCES 98-291). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Pennington, H. (2004). *Fast track to college: Increasing postsecondary success for all students*. Boston: Jobs for the Future. Retrieved on June, 2010, from <http://www.jff.org/jff/PDFDocuments/FastTrack.pdf>
- Phinney, J.S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin*, 108, (3), 499-514.
- Pike, G., R., Schroeder, C. C., & Berry, T. R. (1997). Enhancing the educational impact of Residence halls: The relationship between residential learning communities and first year college experiences and persistence. *Journal of college student development*, 38, 609-621.
- Predominately White Institution (2010). Retrieved from www.pdx.edu on November 21st, 2010.
- Price, D.V., and J.K. Wohlford. (2005). "Equity in Educational Attainment: Racial, Ethnic and movement. Paper presented at the Association of the American Colleges and Universities.

- Conference on Learning Communities, Providence, RI. Retrieved October 30, 2010, from <http://webport.cgc.maricopa.edu/published/1/ea/learning/collection/1/2/upload.pdf>
- Ramos, Y (2008). The Experiences of Latinas Attending Predominately White Colleges. Retrieved on November 18th from <http://Ebscohost>.
- Rendón, L. I., García, M. & Person, D. (2004). A call for transformation. In L.I. Rendón, M. García, & D. Person (Eds.), *Transforming the first-year experience for students of color* (38) 3-22. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Rice, M. F., Alford, B. C. (1989). A preliminary analysis of Black undergraduate students' perceptions of retention/attrition factors at a large, predominantly White, state research university in the south. *The Journal of Negro Education*, 58(1), 68-81.
- Sawyer, E. A. (2005). Online Learning Programs: Goals, Benefits, Problems and Communities of Practice.
- Senge, P. (2000). *Schools that Learn*. New York: Doubleday.
- Scardamalia, M., Bereiter, C., & Lamon, M. (1994). The CSILE project: Trying to bring the classroom into world 3. In K. McGilly (Ed.), *Classroom lessons: Integrating cognitive theory & classroom practice*. (pp.201-228). MA: MIT Press.
- Shaw, E. (1999) "A guide to the qualitative research process: evidence from a small firm study" *Qualitative Market Research: An International Journal*, 2 (2) 59 – 70.
- Smedley, B.D., Myers, H.F., & Harrell, S.P. (1993). Minority status stress and the college

- adjustment of ethnic minority freshmen. *The Journal of Higher Education*, 64(4), 434-452.
- Smith, B., MacGregor, R.S. Matthews, & F. Gabelnick. 2004. *Learning Communities: Reforming Undergraduate Education*. San Francisco: Jossey-Bass.
- Smith, B. (2007) How to Take a Fresh Look at Your Learning Community, *Student Affairs Leader*. Retrieved on January 25th from <http://www.facultyfocus.com/articles/learning-communities/learning-communities-key-elements-for-sustainability>.
- Spady, W. (1971) Dropouts from higher education: Toward an empirical model.
- Soy, S. (1997). *The case study as a research method*. Unpublished paper, University of Texas at Austin.
- Stake, R. (1995). *The art of case research*. Thousand Oaks, CA: Sage.
- Swail, Redd & Wade (2004). *A Framework for Success*. Retaining Minority Students in Higher Education 30, (2).
- Swail, Redd, & Perna, L.W. (2003). Retaining minority students in higher education: A framework for success. ASHE-ERIC Higher Education Report, 30,2.
- Taub, D.J. & McEwen, M.K. (1992). The relationship of racial identity attitudes to autonomy and mature interpersonal relationships in Black and White undergraduate women. *Journal of College Student Development*, 33, 439-446.
- Taylor, R. (1994). Risk and resilience: Contextual influences on the development of African-American adolescents. In *Educational resilience in inner-city America: Challenges and prospects* (pp. 119-130). Hillsdale, NJ: Lawrence Erlbaum Associates.

- Thompson, C. E., & Fretz, B.R. (1991). Predicting the adjustment of Black students at predominantly white institutions. *The Journal of Higher Education*, 62(4), 437-450.
- The Qualitative Report* (2003), 8 (4). Retrieved September 8th, 2011 from <http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf>
- Conference on Learning Communities, Providence, RI. Retrieved October 30, 2010, from <http://webport.cgc.maricopa.edu/published/1/ea/learning/collection/1/2/upload.pdf>
- Tinto, V. (1975). Dropouts from higher education: A theoretical synthesis of recent literature. *A Review of Educational Research*, 45, 89-125.
- Tinto, V., and Goodsell, A. (1993). *Freshman interest groups and the first year experience: Constructing student communities in a large university*. Paper presented at the annual meeting of the College Reading and Learning Association. Kansas City, MO. Retrieved from <http://www.mccneb.edu/tinto> on October 20th, 2010.
- Tinto, V., & Russo, P. (1994). Coordinated studies programs: Their effect on student involvement at a community college. *Community College Review* 22(2): 16-25.
- Tinto, V. (2003). Learning better together: the impact of learning communities on student success in higher education. Higher Education Monograph Series 2003-1. Higher Education Program, School of Education, Syracuse University, 1-8. Retrieved October 28, 2010, from http://www.mccneb.edu/tinto/Learning_Better_Together.pdf
- Tinto, V. (1987). Leaving college: rethinking the causes and cures of student attrition.

- Tinto, V. (1993). *Leaving College: Rethinking the Causes and Cures of Student Attrition* (2nd Ed.), The University of Chicago Press, Chicago.
- Tinto, V. (1997). Colleges as communities: Exploring the education character of student persistence. *Journal of Higher Education* 68(6): 599-623.
- Tinto, V. (1998). Colleges as communities: Taking research on student persistence seriously. *Review of Higher Education* 21(2): 167-177.
- Tinto, V. (2000). What we have learned about the impact of learning communities on students? *Assessment Update* 12(2): 1-2, 12.
- Tinto, V., and Love, A. G. (1995). *A Longitudinal Study of Learning Communities at LaGuardia Community College*, Office of Education Research and Improvement, Washington, DC.
- Tinto, V. (2002) Promoting Student Retention: Lessons Learned from the United States. Presented at the 11th Annual Conference of the European Access Network, Prato, Italy.
- Trow, M. (2001). From mass higher education to universal access. In P. G. Altbach, P. J. Gumport, & D. B. Johnstone (Eds.), *In defense of American higher education*, 110- 145. Baltimore: Johns Hopkins University Press.
- U.S. Department of Education (2006). National Center for Education Statistics
Retrieved From http://nces.ed.gov/programs/digest/d04/tables/dt04_387.asp on November 9th, 2010.
- Watkins, K. E. & Marsick, V. J. (1999). Schools as learning communities: Sculpting the learning community: New forms of working and organizing. National Association of Secondary School Principals. *NASSP Bulletin*, 83(604), 78-87.

Weaver, R. R. and Qi, J. (2005). Classroom organization and participation: College students' perceptions, *The Journal of Higher Education*, 76(5), 570 - 601.

Wenger, E (1998). *Communities of Practice: Learning, Meaning, and Identity*.

Cambridge: Cambridge University Press.

Williamson, A. (1999). In defense of themselves: The Black student struggle for success and recognition at predominantly White colleges and universities. *The Journal of Negro Education*, 68 (1), 92-105.

Wilson, B. (2001). Sense of community as a valued outcome for electronic courses, cohorts, and programs. Retrieved January 25th 2001 from:

<http://carbon.cudenver.edu/~bwilson/SenseOfCommunity.html>

Wilson, B., Ludwig-Hardman S., Thornam, C., Dunlap, J. (2004). Bounded Community: Designing and facilitating learning communities in formal courses. Retrieved January 25th from <http://carbon.cudenver.edu/~bwilson/SenseOfCommunity.html>

Wolcott, H. F. (1981) 'Confessions of a trained observer', in T. S. Popkewitz and B. R. Tabachnik (Eds.). *The Study of Schooling*.

Yin, R. (1994). *Case study research: Design and methods* (2nd ed.). Beverly Hills, CA: Sage Publishing.

Zonabend, F. (1992). The monograph in European ethnology. *Current Sociology*, 40(1), 49-60

Appendix A

Participation Letter & Consent Form

Dear LSAMP student:

You are invited to participate in a research study conducted by Aisha Hollands, a doctoral student in the Graduate School of Education at the University. This study is in partial fulfillment of the Doctor of Education Degree and is being conducted under the supervision of Dr. Jacqueline Temple, PhD, professor in the Department of Curriculum and Instruction at the University.

This study seeks to investigate the extent to which learning community models can interrupt the dropout cycle and address retention of students of color attending predominately white institutions. This qualitative study seeks to understand your experiences as a student of color attending a predominately white institution, and what experiences contribute to your continuing toward your undergraduate degree completion. This study will provide direct implications for the Universities policy-makers, administrators, and faculty regarding the impact of student-type learning communities such as the Louis Stokes Alliances Minority Program.

If you agree to participate in the study, you will be invited to participate in a 90min focus group, a 90min recorded non-participant observation, and you may also be invited to participate in an individual interview. All of the research methods (focus group, etc.) will be either audio-taped and/or video-taped to ensure the accuracy of research findings and to analyze the information shared for themes. Your identity and the content of your interview and group will be confidential. Your participation in a focus group is requested because you are a student of color and participate in the LSAMP program at a predominately white institution, and have important experiences to share. The focus group will consist of approximately nine other LSAMP participants from the University. Prior to the focus group, I will ask you to fill out a demographic questionnaire, which collects some personal information related to your age, ethnicity, class year, etc. and your educational experiences. Once the focus group begins, I will facilitate a discussion that relates to your campus experiences, sources of social support, family and cultural values and coping strategies utilized when challenges or stressors are encountered. One week after the group, I will contact you via email to ask if you have any additional thoughts that emerged after the focus group ended that you would like to be included in the study. Additionally, as a possible participant in a face to face interview, you will also be given an opportunity to review and amend the researchers' notes.

Furthermore, information that is obtained in connection with this study and that can lead to you, the school, university, or to your identity will be kept confidential. To maintain confidentiality observations and interviews will be coded. Only the researcher will access to the code list. Protocols and data will be kept at a secure place by the researcher, and all documents will be and will be destroyed once the research study has been completed. When the information from this study is shared in articles or presentations, your name,

the school, and university will be altered with pseudonyms to protect identities. Your participation in this research study is completely voluntary, and you may choose to withdraw at any time without penalty.

Confidentiality will be maintained, as consistent with federal regulations and the mandates of not to repeat comments made by other participants outside of the group setting. However, strict confidentiality cannot be provided due to the nature of a focus group. This means that others in the group will be hearing your comments and someone from this group might talk about the focus group or comments made, outside the group despite my requesting that this not happen. Your identity will be protected, as names and identifying information will be changed in the reporting of the data, I will also ask that you choose a name to be used during the discussion, and introduce yourself by assumed name/major/year. Additionally, your name will never be associated with the information you provide in the questionnaire, observation, interview, or the focus group. When using quotes or a vignette, the information will be disguised and your name will not be given. All notes, tapes and transcripts will be kept in a secure location for three years as required by Federal guidelines and after that time, they will be destroyed or continue to be kept secured. Any data stored electronically will be protected. The only other person that will have access to this data, after identifying information has been removed, will be my advisor. If a transcriber is used, he/she will sign a confidentiality pledge.

As with any research, there can be risks associated for participants. Although, I foresee very little risk through your participation in this study, some of the questions asked could cause you discomfort and could possibly cause you to experience fatigue and stress. If this researcher senses that this is true during my time with you, I will assess the situation to make sure that you are fit to continue, and if not, I will thank you for your time and ask you to discontinue your participation in the research study. I will also provide any student who requests it, with a list of local counseling resources.

If you have any concerns or questions regarding your participation in this study or your rights as a research participant, please feel free to contact the Human Subjects Research Review Committee. Thanks, and I am looking forward to your participation, please let me know if you will be able to join me.

Your signature indicates that you have read and understood the above information and agree to participate in this research study. Please understand that you may withdraw your consent at any time without penalty, and that, by signing this consent form, you are not waiving any legal claims, rights or remedies.

_____	_____	_____
Print Name	Signature	Date

Appendix B
Demographic Questionnaire

Age: _____ Ethnic/Racial Background: _____

School Attending: _____ Home State: _____

Class Year: _____ GPA: _____

Were you born in the United States? Yes _____ No _____

Do you live on campus or in campus housing? Yes _____ No _____

What is your ethnic/racial make-up _____

What is your preferred pronoun _____ (she, he, etc.)

Are you the first in your family to attend college? Yes _____ No _____

What is the highest academic degree you hope to obtain? _____

If you experience a challenge or problem at school, how do you deal with it? (*Check all that apply*)

___ Talk to a friend at school ___ Do nothing

___ Talk to a family member ___ Seek out faculty

___ Go to the Multicultural Center ___ Develop a plan of action to address it

Seek counseling Gather more information about the problem

Attend LSAMP

Other: _____

Have any of the following ever made you think of taking time off from school or transferring to another college? (*Check all that apply*)

Financial stress No faculty/staff mentors at school

Doubts about my ability to succeed Experiences of racism at school

Lack of social support at school Lack of family support

Alienating campus environment Low numbers of students of color

College values do not match mine No faculty mentor

Lack of support for diversity on campus Lack of academic support

Other: _____

Would you recommend this school to another student of color? Yes _____ No _____

Explain: _____

Appendix C

Focus Group Guide, Structure & Questions

Introduction (15 mins)

- Facilitator self-introductions
- Purpose of these focus groups, format of the session, guidelines for participating (i.e. not interrupting each other, respect other participant opinions.
- Retrieve all signed consent forms from all students before proceeding

- Review consent forms with students. Advise students that their participation in this study is wholly voluntary, and that they may leave the group at any point they need only respond to questions to which they feel comfortable responding.

- Remind students that all of our interviews, focus group and observations will be recorded, but that their names will not be recorded, and their anonymity will be diligently maintained. Emphasize to students the importance of respecting the confidentiality of the other students participating in the focus group, and observation to not repeat comments made by other participants outside of the group setting. Ask students to choose a name not their own to be used during the discussion, so that their real names do not enter the record – go around and introduce each other, asking for students to introduce themselves by assumed name/major/year.

Focus Group Questions

For the purpose of this study, college persistence will refer to a student's postsecondary education continuation behavior that leads to graduation. College retention is an institutional measure to retain students in college until completion of a degree and is the measure of the proportion of students who remain enrolled at the same institution from year to year (Hagedorn, 2004). Additionally, learning communities are designed to help students overcome feelings of isolation, encourage a sense of group identity, and to strengthen connections between various college experiences.

Questions (Warm-Up/General)

1. Why did you decide to go to college?
2. What attracted you to this School? Why did you decide to attend here?
3. Since attending, what has been most helpful to you in adjusting to the campus? Think in terms of student advising, student services, etc.

4. What has made your adjustment to this school difficult or problematic for you or in your observations for other students?

Questions (Retention Specific)

1. How do you define the term retention?
2. How did you learn about retention programs and services offered by your institution?
3. What retention programs and services, if any, have assisted you in getting to where you are now?
4. In your opinion, what factors are important to students of color/underrepresented in STEM majors that use current retention programs and services? Why?
5. How do you feel these programs and services impact or influence the retention of students of color?
6. Did these retention programs and services influence you to stay at your institution? If so how?
7. Do you find the retention programs and services useful otherwise? If so how do the programs and services assist you?
8. What support systems should be in place for SOC student retention at this predominantly white institution?

Our questions today will also focus on several aspects of your experiences with LSAMP learning community, I would like to start by asking how you found out about LSAMP.

9. LSAMP offers a variety of activities.

a) What types of programs/activities do you participate in?

b) What type of information or resources do you get through LSAMP?

10. How does participating in LSAMP help and promote your academic and social needs?

Prompts:

- Connecting to programs/activities in community
- Type of resource information available.
- Connections to other health and human services organizations
- Connections to other peer run programs
- Connections to other social activities

11. One goal of LSAMP is to offer services and supports to students of varying racial/ethnic/linguistic communities. In your experience, how well is the LSAMP doing

in meeting this goal of serving various communities who are underrepresented in science, technology, engineering, and math?

12. What is one thing that you like best about LSAMP and least about LSAMP?

13. What have you learned as a result of participating in the LSAMP learning community?

14. What have you accomplished academically, professionally and or socially as a result of your participation in LSAMP?

15. What experiences/stories indicate the need for other learning communities like LSAMP at this University?

16. What do you think are areas that could be improved on in the LSAMP? And how could the University support the grant needs further?

Again, thank you for taking the time for this discussion. Is there anything else you would like to add before we close?

Appendix D:
In-depth Interview Questions

Time:

Date:

Location:

Interviewee:

General campus experiences

1. As a student of color, what is it like being a student at a predominately white college?
2. What are some positive experiences you encounter? Any challenging ones?
3. If you had to name the top stressors you experience, what would they be? How do you deal with them?
4. In what ways would you say students of color experience discrimination at this college? Could you explain further?
5. Are there any stereotypes others hold about students of color that affect you as a student? How do you deal with this?
6. Despite these stressors and challenges, are you making progress toward completing your degree? What experiences help you as you work toward your bachelor degree?

Social Support

1. At this school, who provides you with support while you're pursuing your degree? At home?
2. For those who have a faculty mentor, how has this experience been for you?
3. What have been your experiences with the LSAMP organization on campus?
4. What about your experiences with the cultural center or multicultural office?

Family and Culture

1. What cultural or family experiences bring you strength and help you cope with being at this school?
2. What personal beliefs do you hold that help you continue toward your Bachelors degree?
3. As a student, are there particular family and cultural messages held about students of color that are a source of tension for you? Are there conflicts between your personal values and what this college values?
4. What recommendations would you make to college administrators to help support students of color as they work to complete their degrees?
5. In closing, is there something that you wished I would have asked to help understand your experiences at this college and as an LSAMP student?