

THESIS

PUBLIC COLLEGES FOR EDUCATIONAL ACCESS IN COLORADO

Submitted by

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ABSTRACT

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This thesis explores the frameworks for university-funded educational access programs in Colorado. Through the use of qualitative methods, I conduct a case study of 6 access programs, their practitioners, and their undergraduate student volunteers. I examine the values and social position of access practitioners as well as their ability to work across traditional social and institutional boundaries. Employing a network analytic approach, I examine and conceptualize the structure and connectivity of both federal Trio and university-funded access programs.

My research shows that both Trio and access programs are well positioned for mutually beneficial collaborations. This includes access providing services for Trio parents and families and Trio sharing program evaluation metrics with access programs. Additionally, access programs have a unique ability capacity to recruit and retain students because of their position within universities. Finally, recommendations are made for access program transferability and sustainability. Near-peer mentoring and provide culturally-relevant programs are highly exportable aspects of access programs. In order to sustain access programs, practitioners should link their program to university strategic priorities while also involving high-level university officials in program development and assessment.

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CHAPTER I

INTRODUCTION AND SOCIAL CONTEXT

Programs that help disadvantaged youth get to college have new allies. My university colleagues and I have created new means to enroll and graduate low-income students from college. I researched this new phenomenon and found remarkable collaboration and innovation, as detailed in this thesis. For decades colleges have relied on others to inspire, mentor, and prepare the socially marginalized for higher education; however, universities in Colorado have begun to participate. This thesis investigates these new efforts to support and enroll low-income students in four-year colleges.

The first college preparation programs or “educational opportunity programs” were created in the 1960s with Lyndon B. Johnson’s Great Society as part of the War on Poverty and racial injustice (Blohm 2004). From this era emerged the federal Trio programs and AVID (Advancement Via Individual Determination) (Coomes 1994). The Clinton Era brought additional federal involvement in educational opportunity programs via GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) (Swail 2000). Also, during the final decades of the 20th century, national, nonprofit organizations joined the educational opportunity effort through the I Have a Dream foundation and Math Engineering and Science Achievement (MESA) programs that came forth to work alongside federal programs (Ibid).

Federal support for educational opportunity programs reached its peak at the dawn of the 21st century. Since then, federal dollars supporting college preparation programs have dissipated and nonprofit organizations are stretched beyond capacity (Engle 2007). It is precisely this waning Federal support that gave way for a new framework of college preparation programs. New models for educational opportunity emerged from university professionals *within* institutions of higher education.

The purpose of this research is to explore Colorado's 21st century framework of "access programs" in order to describe how they function. The study presented in this thesis seeks to contribute to the literature, knowledge, and practice of both Trio and university-funded access programs. The study is discussed in detail in later chapters, but the research questions are presented as follows:

1. What is the new model for public, university-funded access programs in Colorado?
2. What are the values and experiences of access practitioners?
3. How is the new model functionally and fundamentally different from foundational precollegiate programs such as Trio?

Why College Access Programs?

Offered by over one third of all universities and colleges in the US, the term "college access program" describes a variety of social and academic enhancement programs designed to inspire, motivate, and academically prepare historically underserved students for higher education (Chancy, Lewis, and Farris 1995). Typically when referring to people of "historically underserved" backgrounds, one references people of low-income, first-generation (first in their family to *complete* a four-year college degree), and racially/ethnically diverse identities (Jones and Palazzolo 2009; see also Green 2006). The public and private benefits of providing educational access are well established.

Economic Benefits

Over the past 30 years, many Americans experienced income and opportunity stagnation due to a lack of educational attainment. An increasingly diverse US population combined with a modern service-based economy requires that *all* Americans are highly educated; however, indicators show a growing difference in postsecondary educational attainment based on social class and racial/ethnic group. The link between education, economic opportunity, and social mobility has long been established. One criteria of this connection is the income gap between those with a college degree and those without. Isaacs, Sawhill and

Haskins (2008) summarize research on the powerful linkages between educational attainment and economic mobility. As illustrated in Figure 1, the study draws heavily on a survey conducted by the University of Michigan that followed thousands of families since the late 1960s.

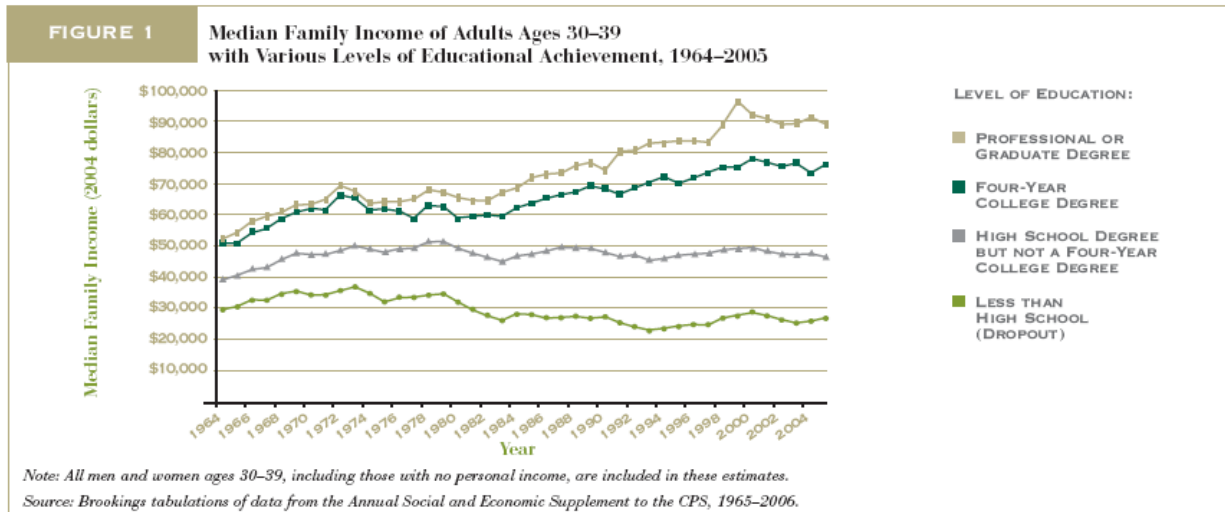


Figure 1: Median family income ages 20-39 with various levels of educational attainment

As Figure 1 reveals, in 2004 the annual median family income of adults ages 30-39 in the US who have earned a four-year college degree is approximately \$75,000. Family income earners with a high school degree yield about \$48,000 annually, and the family with less than a high school degree earns about \$28,000 a year. Even though each level of educational attainment provides a substantial boost to income, results show the economic return for achieving a high school degree (or less) over the past 30 years has been *stagnant*.

In addition, the University of Michigan study highlights how the role of family background deters from the economic opportunities of children born to poor or low-middle class status. Without a college degree, 45 percent of children with parents in the lowest income quintile remained at the bottom wealth quintile as adults, whereas 19 percent that attained college degree made it to the top income quintile. Alternatively, for children born in the top income quintile, 54 percent of those who obtained a college education remained there as adults (Isaacs, Sawhill, and Haskins 2008:95). The strong correlation between education and income explains how the level of educational attainment is directly related to economic mobility. The study

reveals the powerful role that a college education has in helping people change their situation in life. What is more, the study reveals that attending college is no longer an option to get ahead in life, it is a requirement.

Educational attainment and economic mobility are complicated by differences in high school and college graduation rates across racial/ethnic groups. By the end of the twentieth century, high school graduation rates increased significantly across all demographic groups; however, Blacks and Hispanics made only modest progress in closing the gap between themselves and Whites: 90 percent of Whites completed high school whereas only 80 percent of blacks and 78 percent of Hispanics graduated (Isaacs et al. 2008:92). By the year 2000, growth in college graduation rates led to 25 percent of all Americans having a college degree; however, "...despite the fact that Blacks and Hispanics made good progress in increasing their college graduation rates, they did not increase rapidly enough to keep up with Whites" (Isaacs et al. 2008:93). Whereas 30 percent of the white population holds a college degree, only 12 percent of Blacks and 12 percent of Hispanics have completed college (Ibid). As of 2011, the number of college degree holders has increased to 32 percent of the overall population yet "From 1980 to 2011, the gap in the attainment of a bachelor's degree or higher between Whites and Hispanics widened from 17 to 26 percentage points, and the gap between Whites and Blacks widened from 13 to 19 percentage points" (NCES 2012).

It is clear to see, although a high school diploma is necessary it is no longer sufficient to sustain personal income stability over time. The economic benefits of broad, equal access to higher education become clearer when examining how people and society experience significant gains from educational attainment.

Individual and Societal Benefits

The individual benefits for increasing equal access to higher education and subsequent degree attainment go far beyond individual economic gain. Self-reported adult perceptions of degree attainment include significantly increased job security, new and improved career

development, and high levels of satisfaction for holding a college degree (Mishler 1983). Higher levels of degree attainment equate to higher rates of employer-provided health care, lower rates of smoking, better overall health due to increased amount of exercise and healthier lifestyles, more hours of volunteer work, increased voter participation, and more general openness to diverse opinions (Baum, Ma, and, Payea 2010; see also Catterall 1987). All gains from degree attainment translate into significantly increased civic engagement, a greater taxpayer base, decreased demand on social programs, decreased health care costs, and fuller engagement with society overall (Jones and Palazzolo 2009; see also Catterall 1987).

Societal benefits of degree attainment are both numerous and significant. The most powerful benefits of having a college deliver in the form of social and cultural capital. Social capital pertains to an individual increasing both the quality and quantity of his/her social networks and economic means (due to educational attainment) to reside in communities imbued with safety, connection, warm relations, and intellectual discourse (Coleman 1988). Closely related, cultural capital gained from holding a college degree cannot be understated. As Pierre Bourdieu originally defined, cultural capital exists in terms of preferences, tastes, clothing, literature, language, bodily dispositions, symbols, and ideas all of which can be used socially and strategically (Bourdieu 1996:47-53). In short, social and cultural capital make possible the means to ends that otherwise would not be attainable.

As demonstrated above, the lack of a college degree means myriad practical problems that result in tangible costs individuals and societies do not want to pay. However, college access programs can double college enrollment for underrepresented students (McDonough 2004). More college degrees for low-income youth means a more educated society overall, resulting in greater social discourse, civic participation, economic opportunity as well as greater personal and social agency.

Why University Involvement in College Access?

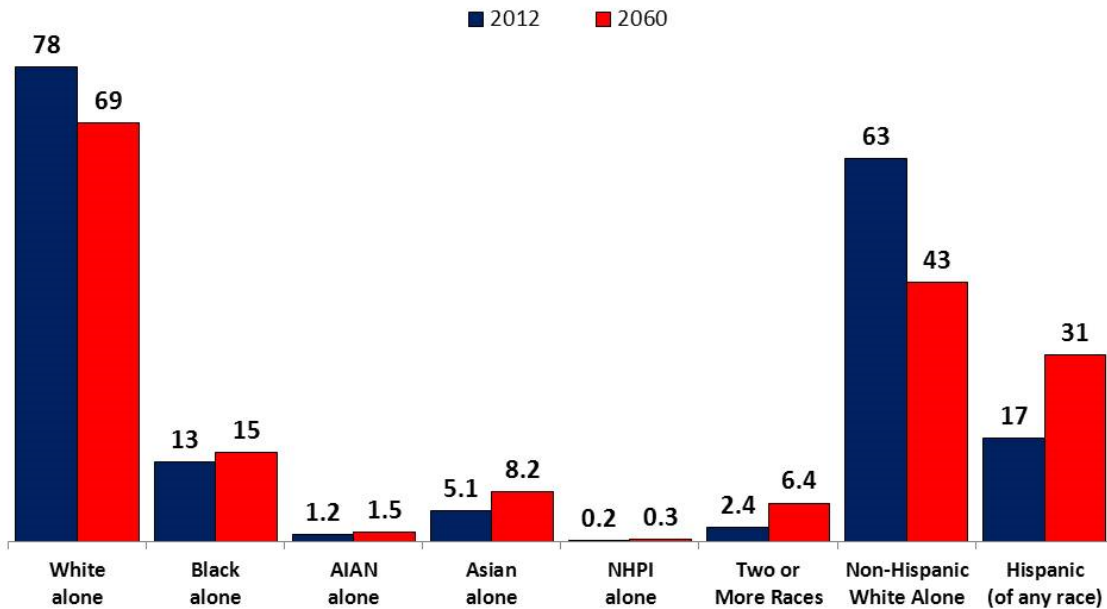
Federal support for Trio programs arose during an era of significant political and social

focus on equal educational opportunity. Recent federal administrations brought about devolution of policy, funding, and overall support for college access. In 2006 and 2007, President G.W. Bush proposed to eliminate Trio and GEAR UP altogether (Delisle, Luebchow, and Rieman 2008). Since President Obama took office in 2008 both Trio and GEAR UP have been level-funded, failing to keep up with the cost of inflation. Thus, thousands of students will not enroll in higher education (Harvey 2008). In 2011, the Obama administration merged GEAR UP (serving approximately one million students) with Trio programs. College preparation practitioners know first-hand that it takes more than federal programs to support historically underserved students in accessing higher education (Green 2006). Shrinking and merging federal support of college preparation programs only serves to limit our reach to students who are already at the margins of society.

Limiting the scope and reach of one of the nation's primary means for educational opportunity could not come at a worse time. Over the past ten years the nation has seen a rapid influx of populations who experience the largest amount of educational inequality. U.S. Census Bureau data reveal not only is the overall U.S. population increasing, it is simultaneously growing more racially/ethnically diverse. In 2012, racial minorities constituted 37% of the U.S. population, and by 2060 they are estimated to constitute 57% of the population (USCB 2012a). Figure 2 below illustrates the population change:

Population by Race and Hispanic Origin: 2012 and 2060

(Percent of total population)



AIAN=American Indian and Alaska Native; NHPI=Native Hawaiian and Other Pacific Islander



U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

Figure 2: Population estimate by race from 2012-2060

As Figure 2 highlights, estimated population projections are summarized as follows:

- U.S. White population is projected to peak in 2024, at 199.6 million; however, the population is projected to slowly decrease, falling by nearly 20.6 million from 2024 to 2060.
- U.S. Hispanic population will more than double, from 53.3 million in 2012 to 128.8 million in 2060, meaning in 2060, nearly one in three U.S. residents will be Hispanic, up from about one in six today.
- U.S. Black population is expected to increase from 41.2 million to 61.8 million over the same period, meaning the share of the total population will rise slightly, from 13.1 percent in 2012 to 14.7 percent in 2060.

The above U.S. Census Bureau estimated population projections have significant implications

for educational opportunity in America. By 2043, the U.S is projected to become a majority-minority nation for the first time (USCB 2012a).

Given that Blacks and Hispanics have considerable income and educational disparities compared to Whites, and that Blacks and Hispanics are experiencing the fastest population growth for the foreseeable future, college preparation programs are being asked to do much more with much less. It is time for new, institutional partnerships to support educational opportunity. Historically, colleges and universities have relied on Trio programs to mitigate the problem of educational inequality. Given the significant challenges facing marginalized populations and shrinking federal budgets – universities must do more: “The roots of unequal educational opportunity are deep, and higher education alone cannot redress the social imbalances that appear to threaten our country’s future, the authors maintain. But neither can the colleges stand apart. All of us must accept the challenge to try to make a difference” (Gladieux and Swail 2000:688).

Colorado’s access practitioners know first-hand that it takes a dynamic approach to support educational equality for historically marginalized students. Increasing college enrollment rates for historically marginalized youth in the 21st century requires traditional programs such as Trio to work inside secondary schools to move obstacles aside and *push* their students into college. At the same time, university-based access practitioners are situated inside universities as a “pull factor” into higher education. Funded and supported by the university system, Colorado’s access practitioners are poised to unite with Trio programs to provide additional social and cultural capital for historically underserved students.

Why University-Based Access Programs in Colorado?

Media images of Colorado often portray sweeping, stunning landscapes and pristine settings for an ideal lifestyle. Colorado ranks 9th in the US for median household income at \$60,180 (USCB 2012b). Also, Colorado is proud to have the 3rd most educated working

population in the United States where 46 percent of all citizens between the ages of 25 and 64 hold a college degree (CCHE 2012a). The above is true; however, so is the following:

- 46% of Colorado's workforce is college-educated, but four-year enrollment rates for White students (33.4%) and Asian students (41.3%) are about double that of Hispanic students (17.3%), Black students (22.0%), and American Indian students (17.1%) (CCHE 2012b).
- Colorado has the second largest degree attainment gap in the country—that is, the gap between the educational attainment of White students and the attainment of the next largest ethnic group, which in Colorado is Hispanic/Latino. In other words, Colorado's system performs far better for white students than it does for Hispanics or those from low-income families (CCHE 2012a).
- In the 12 years from 1989 to 2001, Colorado was the number two importer of college graduates (Protopsaltis 2005).

Indeed Colorado consists of perfect powder ski slopes, lush trails, and a highly-educated population of sorts. So how is it that Colorado has a highly-educated work force and the nation's 9th highest median household income yet also has significant racial disparity and low educational attainment? This dichotomy is known as the "Colorado Paradox" and it derives from a combination of low public investment in education, importing highly-educated labor from other states, and a rapidly changing population.

Colorado Paradox

There is an expansive group of historically underserved youth and families whose needs and opportunities must be addressed. Rocky Mountain PBS journalists at I-News (2014) analyzed 60 years of U.S. Census Bureau reports to reveal the social progress gained from the civil rights era are all but lost in Colorado. Surprising trends in racial/ethnic disparities include:

- Home Ownership: Almost 60 percent of Latino households were owner-occupied in 1970; now it's just beneath 50 percent, compared to 70 percent for white households. Home ownership among blacks has stayed at about 40 percent.
- Poverty Rates: After narrowing in the 1970s and 1980s, the poverty gaps in Colorado have widened, with rates almost three times higher for black and Latino residents when compared to whites.
- Infant Mortality: A black baby born in Colorado is three times as likely to die in the first year of life than a white baby. And a Latino baby is 63 percent more likely to die in the first year of life than a white baby.
- Family Income: In 1970, black families earned 73 percent of white family incomes and Latino families earned 72 percent. By 2010, those numbers had fallen to about 60 percent and 50 percent, respectively.
- High School Graduation Rates: Among more positive trends, 86 percent of black adults had graduated from high school in 2010, up from 31 percent in 1960. Latinos also have improved high school graduation rates through the decades, but in 2010 still lagged significantly behind at 65 percent, compared to 95 percent for whites.
- College Graduation Rates: The gaps among adults with college degrees have steadily widened since 1960, with the percent of whites with college degrees three times higher than the Latino rate and double the black rate. Those disparities are the nation's worst for both Latinos and blacks.

I-News journalists summarized Colorado's situation:

The implications of inequality for the future are enormous: The number of minority babies being born nationally recently eclipsed that of whites, and, in Colorado, 46 percent of children under one year of age in 2011 were minorities, the Census Bureau reported. That holds economic consequences in the future for all Colorado residents. Latinos are the largest minority group, comprising 21 percent of the population in 2011, compared to 4 percent for blacks and 70 percent for

whites... According to most experts, racial and ethnic inequality will pose a significant future handicap for a state in which minorities are a rising population (I-News 2014).

As mentioned above, even though high school graduation rates are increasing over time, for Colorado's growing underclass this does not translate into enrollment in higher education. To restate, Colorado's low income, minority youth experience the lowest rates of postsecondary enrollment and the highest educational attainment gaps relative to their White peers: Four-year enrollment rates for White students (33.4%) and Asian students (41.3%) are about double that of Hispanic students (17.3%), Black students (22.0%), and American Indian students (17.1%) (CCHE 2012b).

Colorado ranks among the lowest states in the nation in its funding of public institutions of higher education. The state's investment in higher education per resident student has declined significantly relative to increases in resident student tuition:

In 2000, the state funded 68 percent of a student's cost of college while the student was responsible for 32 percent: by 2010, the state funded only 32 percent, increasing the student burden to 68 percent. In the last five years, the state has reduced funding for higher education from \$706 million to \$513 million, a reduction of 27 percent in total dollars (CCHE 2012b).

Over the past twelve years, Colorado cut in half its support of resident student college attendance costs *and* cut its General Fund for higher education by 27 percent. Colorado is ranked 49th (out of 50 states) in the U.S. in per-pupil spending in higher education and ranked 39th (out of 50 states) in the U.S. in per-pupil K-12 spending (USCB 2010). And to further understand how Colorado's historically underserved youth remain at the margins, in the 12 years from 1989 to 2001, Colorado was the number two importer of college graduates (Protopsaltis 2005; see also Mortenson 2012). By importing a highly-skilled work force and by grossly underfunding K-12 and postsecondary per-student spending, the statement is clear: Colorado does not invest in its students, and especially native students of color. The need to radically support *all* means of equal educational access in Colorado is obvious:

- Colorado’s fastest increasing population, historically, experiences the greatest barriers to higher education and lowest levels of educational attainment.
- High-wage employment opportunities increasingly coalesce around states that can provide employers with a labor force of highly educated (high-skill) workers.
- By 2018, “...nearly 70 percent of jobs in Colorado will require some level of post-secondary education; however, more than a third lack any education after high school and 10 percent lack a high school diploma or the equivalent” (CCHE 2012a).
- Colorado has demonstrated a willingness to import highly educated labor rather than support and develop its native talent.

The above facts and figures along with the rise of global market competition reinforce the need for *all* Coloradoans to obtain additional years of education and educational credentials.

Study Purpose and Significance

A primary means to transform educational inequality in Colorado is through deepening and expanding its university-based college access programs. Successful in their reach, federal Trio programs effectively work within schools to mentor and motivate historically underserved youth to move *around* obstacles and into college (Wallace, Ropers-Huilman, and Abel 2004). Also, universities have practitioners who work from *inside* to remove obstacles and pull socially marginalized youth into higher education. Colorado’s access practitioners are well situated to unify with Trio programs and provide additional resources for historically underserved students.

The purpose of this research is to explore the framework of Colorado’s university-funded access programs in order to describe how they function within and between institutions of higher education. The chapters ahead examine the commonalities and differences between Trio and access programs by conceptualizing their social network structure and how they generate social capital for historically marginalized students. The study presented in this thesis seeks to contribute to the literature, knowledge, and practice of both Trio and university-funded access

practitioners. The following chapter provides context for the study through a literature review on college preparatory programs, specifically university-funded access programs.

CHAPTER II

LITERATURE REVIEW

In Chapter I, I described the characteristics of educational inequality in Colorado. University-funded access programs represent a way for public universities to redress educational inequality. This chapter examines the literature on college preparatory programs, specifically university-funded access programs. This chapter provides context and rationale for the study that is discussed in detail in Chapter IV.

A Brief History of Institutional Access

The democratic idea of education as the foundation of good citizenship has long been part of America's history. However, it wasn't until the 1950s that the federal government began promoting educational equity to citizens of all racial/ethnic identities. The landmark 1957 *Brown v. Board of Education* Supreme Court case eliminated racial segregation from elementary and secondary schools, and it soon extended to colleges and universities. *De facto* racial segregation continued to persist, but it gave impetus for the 1964 Civil Rights Act. Soon after its passage, Congress authorized the 1965 Higher Education Act, which "...fully laid the groundwork for federal involvement in student assistance and firmly established equal educational opportunity as a national educational policy preference" (Coomes 1994:10). The following section reviews literature on the political and theoretical assumptions of federal involvement in college preparation programs.

20th Century Outreach

Federal involvement in educational opportunity programs began with the 1958 National Defense of Education Act. The legislation allowed taxpayer dollars to be routed to colleges and allocated to individual students from all backgrounds, including low-income and racially diverse (Coomes 1994:12). However, the Federal Perkins Loan and graduate fellowship programs were not enough to ensure educational opportunity. In other words, it takes more than money to get a

low-income, racially diverse child to college (Gladieux and Swail 1998). So, in 1965 Congress passed the Higher Education Act creating flagship educational opportunity programs or “Trio” programs, including Upward Bound, Talent Search, and Student Support Services. As outreach and support programs, Trio was designed to motivate and assist low-income, first-generation middle and high school students to persist through high school and transition into college (Santiago and Brown 2004).

Trio is based on a case load/cohort model. Individual practitioners are responsible for developing requisite college enrollment social capital to his/her caseload of students divided across grade-level cohorts (e.g. 30 sixth graders, 30 seventh graders, etc.). “To develop this social capital, programs generally provide a series of interventions that emphasize not only academic preparation, but the development of attitudes and beliefs about college that will result in a positive college enrollment outcome” (Gullatt and Jan 2003:5). Formed during the War on Poverty, an era of utilitarian individualism, federal educational opportunity programs were based on the notions of outreach and individualism (Stanton-Salazar and Spina 2000). Through Trio, the federal government extended its services to a wider section of the population than it would otherwise. The expected return was for historically marginalized students to improve their situation based on services they receive from their Trio practitioner.

With the 1998 reauthorization of the Higher Education Act, Congress created “GEAR UP” (Gaining Early Awareness and Readiness for Undergraduate Programs). Like Trio, GEAR UP practitioners work with cohorts of students at high-poverty middle and high schools (Swail and Perna 2002). With this new program came a shift in federal practice. The statute “demands a coordinated web of partnerships between local educational agencies (this is schools), community partners, and postsecondary institutions. Many Trio programs do these things as well, but the articulation in federal law mandates this partnership in GEAR UP” (Swail 2000:89). No longer was the federal government solely focused on utilitarian individualism. Instead, the

1998 reauthorization officially expanded the government’s scope of educational opportunity beyond school walls to include nonprofit organizations and higher education.

Along with documenting the government’s change in scope, literature discussing “educational opportunity programs” became literature discussing “precollegiate pipeline programs.” Early definitions of the precollegiate pipeline included five sequential steps: (1) aspire to a bachelor’s degree early enough to take the necessary preparatory steps, (2) prepare academically to a minimal level of qualification, (3) take admission examinations (SAT or ACT), (4) apply to a four-year college, and (5) gain acceptance and enroll (Chancy, Lewis, and Farris 1995). As Figure 3 illustrates, the precollegiate pipeline was employed by Yohalem, Ravindranath, Pittman and Evennou (2010) as an analogy to highlight the full complexity of college preparation programs:

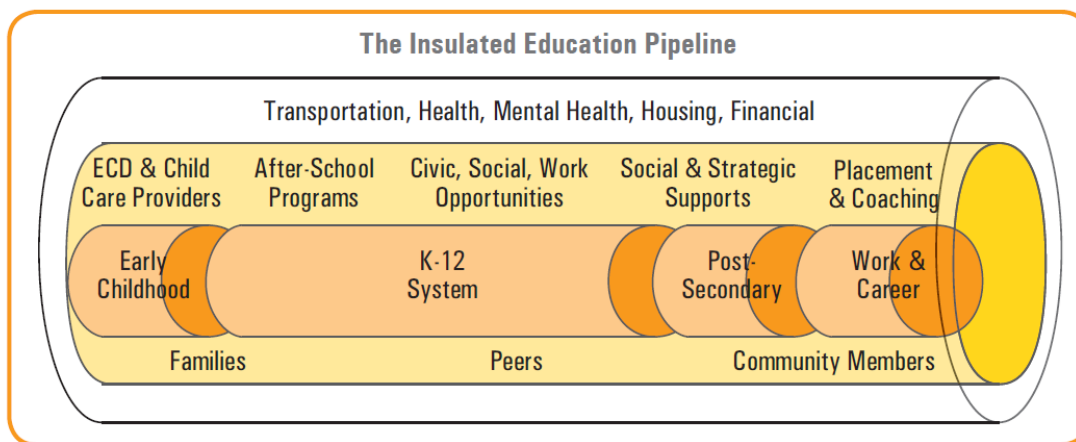


Figure 3: Illustration of Precollegiate Pipeline

As seen above in Figure 3, the precollegiate pipeline analogy gave way for a more nuanced understanding of the many resources it takes to get low-income, first-generation students to persist through high school and college and then enter the workforce. At this point in the literature, the pipeline concept and the government called for institutions of higher education (and non-profits) to get involved in extending educational opportunity to historically marginalized youth. For example, some literature called for two and four-year colleges to fix the “leaks” in their transfer pipeline that make it difficult for low-income students to attain a four-year degree

(Suarez 2003). Other research called for precollegiate programs to involve parents and families in their programs (Huber et al. 2006). Still, others called for pipeline programs to adopt strategies to diversify their profession with low-income, racially/ethnically diverse students (Smith, Nsiah-Kumi, Jones, and Pamies 2009).

As the precollegiate pipeline conceptualization matured in the literature, Trio programs were acknowledged for their long-term success. There is little doubt Trio programs bring the request academic and social capital necessary for historically marginalized students to enroll in college (Williams 2012; Ghulam 2009; Walpole et al. 2008; Santiago and Brown 2004; Wallace, Ropers-Huilman, and Abel 2004; Wallace, Abel, and Ropers-Huilman 2000; McElroy and Armesto 1998). Simply stated, Trio programs were deemed the “missing element” to counter negative school or community influences and successfully motivate students to prepare for and enroll in college (Swail and Perna 2002).

Literature to date addresses the motivations, assumptions, and scope of federal involvement in educational opportunity programs. Federal Trio programs were imbued with the values of their time, utilitarian individualism, and students in the programs were expected to improve their educational situation. The government expanded its scope of equal opportunity in the late 1990s by requiring certain programs to work in partnership with nonprofits and institutions of higher education. The government’s call for connections with higher education brings us to contemporary literature on the hand of four-year institutions in educational opportunity.

21st Century Access

The federal government expanding the scope of its national educational policy preference had an impact on literature. Mandating federally-funded educational opportunity programs to connect with institutions of higher education brought calls for universities to step up to the plate and provide “equal access” to their institutions. Some articles gave universities credit for what Trio accomplished: “Approximately one-third (32 percent) of higher education

institutions reported having precollegiate programs designed to increase the access of disadvantaged students to college” (Chaney, Lewis and, Farris 1995:7; see also Gladieux and Swail 2000:671). Although it is common for universities to provide in-kind resources (not cash) for Trio programs, they are funded through the U.S. Department of Education. Providing office space and furniture to host a precollegiate program does not equate to universities funding their own access programs.

Other literature identified a break in the precollegiate pipeline by pointing out unaligned curriculum standards and poor systems alignment from kindergarten through college graduation:

To reduce the high attrition among students before they complete college, we need to overcome the longstanding separation between K-12 and higher education systems, each of which developed in isolation through much of the 20th century. The disconnects between these systems—with their distinct and discontinuous academic standards, financing, accountability mechanisms, information management, and governance—create significant obstacles to successful transitions through college, particularly for students with little or no family experience with college-going (Kazis 2006:13; see also Kirst and Venezia 2004; Cabrera and La Nasa 2000).

While some authors identified problems with university access, others provided solutions such as dual-enrollment courses for secondary students to take university courses while still in high school (Bottoms and Young 2008). Universities were asked to be more intentional about providing access-related services such as tutoring, intensive advising, and co-curricular experiences to engage low-income, first-generation students (Martinez and Klopott 2003; see also Engle and Tinto 2008). One article suggested that higher education’s role in promoting equal access required a reexamination of resource allocation: “The problem is not so much insufficient spending; it is that the funds are being spent on programs that help the middle- and upper-income families while ignoring the worsening situation of the most needy” (Mumper 2003:115; see also Haveman and Smeeding 2006). Some articles argued for university administrators to bolster access by dealing with on-campus racial and class stratification (Carnevale and Strohl 2013). Other authors rallied for higher education officials and researchers

to increase college access by reversing stereotypes "...in which minority, low-income, and first-generation college students are characterized as lacking the skills and abilities necessary to succeed in higher education" (Green 2006:24).

Overall, the literature discusses many ways for universities to do their part to extend equal educational access. However, research falls short in directly naming the responsibility of public universities to fund their own educational opportunity programs, rather than relying on others to do the work. Four-year, public universities are identified as the weakest link in the access pipeline (Harvey 2008). Literature that comes closest to calling for university-funded access programs is in found in sociology of education discourse.

Sociology of Education and Access

Ricardo Stanton-Salazar is the foremost contemporary scholar on equal educational access. His research discusses how to link social networks in order to provide a web of social and cultural capital for low-income, racially diverse youth to access higher education. Social capital and network theory, once separate conceptualizations, were synthesized by Nan Lin (1999). His theory demonstrates how interactions between people, linked together through intentional social relations, can generate social capital that otherwise would not be possible (Ibid). Stanton-Salazar's writings enfold Lin's network theory of social capital to identify key resources and support for working-class minority youth to acquire requisite capital necessary for educational attainment.

Stanton-Salazar's research draws attention to institutionalized patterns of educational inequality. He delivers a large body of evidence on community and institution-based supports for low-income, ethnically diverse youth. For example, Stanton-Salazar (1997) "...examines the role that relationships between youth and institutional agents, such as teachers and counselors, play in the greater multicultural context in which working-class minority youth must negotiate" (1). This research, validated by others, highlighted how ideological forces of secondary school faculty and administration make it problematic for socially marginalized students to gain the

needed social capital to access higher education (Stanton-Salazar and Dornbusch 1995; Farmer-Hinton and Adams; 2006; Perez and McDonough 2008). His other research discusses how adult, non-family informal mentors influence the opportunities of socially marginalized secondary students to pursue higher education (Stanton-Salazar and Spina 2003; see also Farmer-Hinton 2008; Gonzalez, Stoner, and Jovel 2003).

As informal role modeling has a significant, positive impact on youth development, so do peer-to-peer relationships. Stanton-Salazar (2004) found that historically underserved youth provide social capital to each other in such way that either deters or attracts them to enroll in higher education. Finally, Stanton-Salazar's (2011) research discusses in great detail the role and responsibilities of all institutional agents (including business owners, university alumni, corporate executives; the leadership of upper-middle-class associations; upper-middle class high school students, schools, community installations, social workers, intervention program staff and youth workers) in providing requisite social and cultural capital for socially marginalized youth to make through college graduation (1076-1078).

At the forefront of research and debate on educational inequality, Stanton-Salazar's research names the many people and institutions responsible for assisting low-income, first generation secondary students. He calls for higher education and its alumni to "get involved" with their own efforts, but he falls short of calling for public universities to fund their own college access programs rather than relying on Trio to do the work.

The study presented in this thesis answers the call for public universities to fund and provide their own access programs. I am situated inside higher education and my colleagues and I have responded. Public universities in Colorado have considerable social networks that deliver social and cultural capital for secondary students to enroll in college. The purpose of this research is to explore the framework of Colorado's university-funded access programs in order to describe how they function within and between institutions of higher education. The following chapter discusses the study's conceptualization and research design.

CHAPTER III

METHODS

This chapter discusses my research design and methods for conducting the study. I explain how I arrived at my research questions and how I conceptualized the study. I describe the research setting and my role as a researcher. Additionally, I discuss data collection and analysis with each method I employed. Finally, I discuss methodological challenges associated with the study.

Background and Research Interests

I direct university-based access programs for low-income, first generation secondary students and families. Some of my closest colleagues are Trio practitioners with whom I share office space. We often discuss the unique circumstances of our schools and communities. We know that long-term success for educational equality derives from having authentic professional partnerships and providing sustainable services to students. In meeting rooms and hallway conversations, Trio and access have much in common. I became interested in this research when I began to consider our differences. I knew access programs were a relatively new endeavor on behalf of higher education, but Trio programs have been around for decades. I wondered why our programs were together, but separate? I was familiar with literature on Trio, but upon seeking research on university-funded access programs, I found nothing. This gave impetus for me to investigate Colorado's public, university-funded access programs and practitioners. In order to understand the nature of access programs and synthesize practitioners' experiences, I formulated the following research questions:

1. What is the new model for public, university-funded access programs in Colorado?
2. What are the values and experiences of access practitioners?

3. How is the new model functionally and fundamentally different from foundational precollegiate programs such as Trio?

Research Design

My overall approach was guided by relevant principals of participatory action research (PAR). I have a deep respect for local knowledge, for building on strengths and resources within a community, and I value co-learning and capacity building (Minkler and Wallerstein 2008). I shared my findings with research participants to confirm that my interpretation and analysis were correct, as he/she defined. By employing aspects of PAR, I overtly demonstrated the value, trust, and respect I hold for my research participants.

Qualitative Methods

I chose qualitative methods as my approach to answer my research questions. The purpose of my study was to explore the issue of university-funded access across multiple research sites using multiple sources of data collection. Qualitative methods provide the ability to elicit multiple constructed realities, to delve into complex processes, and to perceive structured and unstructured linkages between people, organizations, and communities (Marshall and Rossman 2010). Also, qualitative methods deliver the detail and depth I sought from my research as opposed to acquiring breadth, which would come from using large, quantitative samples. In other words, I relied on interview transcripts, observations, and field notes to tell a story, rather than numerical data to test a hypothesis.

Framed with elements of PAR, I further specified my epistemological approach as a case study. “A qualitative case study provides an in-depth study of a [bounded] system, based on a diverse array of data collection materials, and the research situations this system or case within a larger ‘context’ or setting” (Creswell 2007:244). Conducting a case study allowed me to explore the access program, its director, program documents and processes, and events across multiple research sites. I knew up front the arduous requirements of a case study, yet I embraced the challenge because it would deliver rich enough data to answer my research

questions. Carter and Little (2007) describe my approach best: “A reflexive researcher actively adopts a theory of knowledge. A less reflexive researcher implicitly adopts a theory of knowledge, as it is impossible to engage in knowledge creation without at least tacit assumptions about what knowledge is and how it is constructed (1319). With this in mind, my research was best addressed through multiple data collection methods and at multiple sites. The former is discussed later in this chapter, and the latter is discussed below.

Recruitment and Entrée

I employed purposive sampling to recruit participants for my study. With intention rather than randomization, I selected the individuals who I would contact for my study “...because they can purposefully inform an understanding of the research problem and central phenomenon if the study” (Creswell 2007:125). Since I was interested in studying all existing public university access programs in Colorado, I had a two-fold approach to ensure I contacted the right people through the state.

First, although I am not a Trio practitioner, I support the program, attend conferences, and pay my membership dues regularly. I accessed the Colorado directory listing each university affiliation and contact person. Second, I called the director of admissions at my university and asked for and received his director-level admissions contacts in the state. Next, I created a spreadsheet to sort and track my contact information for the nine public universities in Colorado. I sent recruitment emails to the few people I knew, but most university contacts were unfamiliar. I called both Trio and admissions contacts for each university to inquire if a non-Trio, university-funded access program existed. Although all of my contacts were interested in my research and happy to be contacted, only four of the nine public universities in Colorado have separate access programs. I sent recruitment emails to access program directors at the other four universities to request an interview.

It is not unusual for people to confuse admissions and access programs. The former is responsible for generating yield (recruiting students) for the university, and the latter mentors

and enrolls students at universities of their choice. When making calls to determine if a university had an access program, I spoke with an admissions director who conflated his on-campus student retention strategies with being an access program. I clarified a definition of access programs as engaging middle and high school students, and the director replied, "Oh we have Trio to do that for us." This conversation featured the only slippage I encountered, however I was grateful it that it occurred. The director asked me to share my research findings so that he may incorporate applicable structure and strategies to potentially create his own access program.

Out of Colorado's nine public universities, most had Trio programs, but only five had access programs. Even though I knew I would employ a mixed-method approach and acquire rich data, I was unsatisfied with this number. Because I work in the field, I knew of an innovative, university-funded access program in the state of Washington. The program was so successful it received a million dollar Gates Foundation grant to broaden its scope and further evaluate its success. I added this exemplary case to my sample to expand not only the size of my sample but the diversity of the sample. Extreme case selection is part of a maximum variation sampling strategy, where the researcher selects the most unusual cases in order to "...represent diverse cases and to fully describe multiple perspectives about the cases" (Creswell 2007:129). I sent recruitment emails to the program's faculty advisor and two undergraduate program directors. When they replied with consent I felt confident I had the variation I wanted.

While I recruited access program directors for interviews, I learned most have undergraduate student volunteers to administer the program. I wanted to capture this experience, so again I employed purposive sampling and sent focus group recruitment emails to five undergraduate students from my university who work with access programs. This was the only time I experienced any level of difficulty in recruiting participants for my study. Before agreeing to participate, four of the five undergraduates called me because they were utterly

confused. The formality of my recruitment email and cover letter made no sense to them, and was deemed “obnoxious.” I was informed that my recruitment process was like “using a sledgehammer to drive in a nail” and that I “Should have just asked!” I followed up with each student by letting them know of the requirements involved with researching human subjects, including recruitment emails, cover letters, informed consent, and confidentiality. My explanation remedied the confusion and everyone agreed participate.

I experienced no difficulty entering my research setting. I found Berg (2007) to be right: “Knowledge about the people being studied and familiarity with their routines and rituals facilitate entry and rapport once one has gained entry” (184). Having been in the field since 2004, I knew about half of my interview participants and had previously visited each research site. The interviewees I did not know agreed easily to interviews. As a measure of reciprocity and good will, I confirmed my interview and focus group time with an email of thanks and, taking Wax’s (1952) advice, offered to bring refreshments for our time together.

Research Sites

I conducted my study from January 2012 through April 2013 across six research sites. First, I traveled to the offices of access practitioners to gain better understanding of their work space and work place relations. At the five Colorado interview sites, I was greeted by undergraduate students who participated in the access program during their high school years. Some of them were employed as reception staff and others told me they were “just hanging out” in the office in between classes. During the short wait to interview the program director, I observed the wall hangings, furniture, and smells of each office. Each time I felt as if I was sitting in someone’s comfortable living room. The furniture was nice, but not stuffily wrapped in plastic or Scotch Guard. Smells of home-cooked food and bowls of candy filled my senses. Each office featured community-based folk art, but one office had a spectacular piece. Figure 4 was created and donated by a former program participant who has since graduated college and is now a working adult.



Figure 4: Untitled

I learned the artist/former participant intentionally did not title the piece in order to leave more to the imagination. What I interpreted is what I viscerally experienced being in the warm, inviting lobby waiting for my interview: People from *all* backgrounds share the same sun and thrive together from the tree of knowledge.

Without fail, each office was alive with former program participants who successfully became undergraduate students either working or “hanging out” in the office. I found this student-centric approach compelling. Access offices are like having that close friend whose house you can walk into anytime, unannounced and feel welcomed. I found program directors’ offices to be just as inviting, but with stacks of paper, books, and manila files covering the desk and floor. I also saw dried tea or coffee in the bottom of mugs and hand-written thank you notes from students and parents taped to walls. I noticed that each program director had two or even three computer monitors as well as smart phones and tablets. Each director’s office was decked out with their university’s logo and mascot. When directors spoke of their program participants

and parents, they did so in terms of “our kids” and “our families” as if there was no separation. As each interview completed, I was given thanks for *my* time and a few times I received a hug.

As mentioned above, three of my interviews occurred with access practitioners in Washington. I conducted phone interviews with the access program’s faculty advisor and two undergraduate student directors. To flesh out the experience, I had the program’s web site on my computer screen during each interview. I let slide shows of their student participants and parents at events scroll past my eyes as each participant shared their story with me.

Another research setting was at a large high school in Denver. I had been to this school many times, but on the day of my participant observation I was there with three dozen other access practitioners who were conducting a county-wide event for low-income, first-generation families. My colleagues and I agreed in advance not to promote our respective universities on our clothes or official name badges. Instead, we all wore the same red t-shirt to promote solidarity between ourselves, our programs, and our institutions. The long, narrow lobby that ran the length of the building was lined on both sides with over 50 banner-covered, rectangular tables topped with brochures, pens, and candy. Representatives from local non-profits, youth services, immigration services, and mentoring programs were at attention answering questions about going to college from over 300 students and parents.

As I directed parents to the free day care facilities in one of the larger classrooms, I noticed that every stranger genuinely returned my smile. As I performed my human directional responsibilities, I saw children attempting to squirrel under table banners as their parents talked with each other or local officials. The long, narrow lobby was packed with people, but from where I stood could see that both event providers and participants were actively engaged in asking and answering questions related to immigration and educational access.

My final research site and participant observation took place as a large-group campus tour with low-income, first-generation middle school students. I worked ahead of time with the access program director to follow along with approximately 100 middle school students and two

dozen secondary school staff. We experienced a typical college tour complete with a promotional video of the university, a talk on admissions standards and financial aid options, and a walk around campus highlighting important buildings such as the library and tutorial halls. I jotted notes throughout the tour of the entire experience and later at home created full field notes.

What I found noteworthy about this experience was how disengaged the middle school students became once they were asked to sit still and listen to the admissions/financial aid lecture. The youth were fidgeting and squirming in their seats. It was not until the speaker began to share his personal background of being low-income and first-generation that the students began to pay attention and ask questions. The personal story, over a scripted lecture, galvanized the student's attention. Also, the campus tour ended with an official university t-shirt being provided to each tour participant. The students were beyond thrilled and immediately put on the shirts for their bus ride home. Other than the personal story and the t-shirt giveaway, this particular access program functioned much like a common campus tour for perspective university students.

My Role in the Setting

I employed Adler and Adler's (1987) membership roles to consider "...the extent to which researchers can or should be integrated into the empirical settings they study, and the effect this has on the data they gather" (8). Over the past ten years, I have acquired recognition by other access practitioners, students, and school staff as an insider, as someone who advocates for their interests as they define. The fact that I was already integrated in the settings I chose to research meant that I had a complete membership role. Adler and Adler (1987) explain:

Rather than experiencing mere participatory involvement, complete-member-researchers (CMRs) immerse themselves fully in the group as 'natives.' They and their subjects relate to each other as status equals, dedicated to sharing in a common set of experiences, feelings, and goals. As a result, CMRs come closest of all researchers to approximating the emotional stance of the people they study. CMR's genuine

commitment to the group, and the members' awareness of this, diminishes the need for role pretense (67).

The strengths germane to having complete membership include easy entrance into my research setting. Since I have pre-established trust and credibility in the field, I experienced neither gatekeepers nor resistance to interview requests. In addition, I did not have to carve out space for my research or take on disingenuous personality qualities in order to convince people to talk with me (Adler and Adler 1987:69). Interview and focus group participants were already embedded in higher education understood what I was trying to accomplish. Also a strength, I researched what was in my own backyard. "...using an opportunistic research strategy can benefit researchers in their sociological enterprise. Rather than neglecting 'at hand' knowledge or expertise, they should turn familiar situations, timely events, or special expertise into objects of study (Reimer as quoted in Adler and Adler 1987:69). Being an access practitioner gave many opportunities for observation and learning. Also, having a solid understanding of educational inequality programs, I was able to put aside naïve or pedestrian questions and actively listen to what interview and focus group participants had to say. Even though I had a complete membership role, I felt confident that I took on others' perspectives rather than projecting my own (Becker 1996).

The limitation of my role was to continuously demonstrate that my positionality (personal interest) did not bias the study (Marshall and Rossman 2006). I employed a two-fold approach to limit personal bias. First, I acknowledged myself as a perpetual learner. Since I was seeking to learn, it made sense for me to act accordingly "...since the know-it-all or expert is not likely to be 'taught'" (Loftland and Loftland 1995:40). Second, I remained acutely aware of my racial privilege. From attending conferences, workshops, and state-wide precollegiate meetings, I knew that many access practitioners are racially and ethnically diverse. My racial privilege aligns with dominant U.S. culture which creates and maintains "master narratives." McCorkel and Myers (2003) explain that "...positionality confers distinct sets of narratives that we use to

make sense of the world. Master narratives originate from dominant groups and operate to legitimize and naturalize the order of things” (226). A linkage between my positionality and master narratives that I am acculturated to accept is a strong, positive valuation of higher education as a “silver bullet” to success. Another linkage is that I have been socialized to value low-context (direct, verbose, unilateral) communication over high-context communication which is indirect, contemplative, and collectivist. Through employing elements of participatory action research I mitigated bias in my study. I have shared my research findings with interview and focus group participants to confirm that my interpretation and analysis were correct.

Data Collection

According to Creswell, good qualitative research not only utilizes multiple interactive methods, it also takes place in the natural setting (2003). My study included multiple methods of data collection, each offering its own perspective on reality. The use of triangulation in research methodology works well to establish validity and scientific practice while offering the researcher “...a better, more substantive picture of reality; a richer, more complete array of symbols and theoretical concepts; and a means of verifying many of these elements” (Berg 2007:5).

Sample

My study occurred from January 2012 through April 2013. I conducted 10 (n=10) direct interviews with access professionals. Table 1 below features the demographics of the sample:

Table 1: demographic characteristics of direct interview participants

Pseudonym	Title	Location	Gender	Age	Race/ Ethnicity	Educational Background
Cesar	Director (retired)	CO	M	67	Latino	Doctorate
Ezra	Director	CO	F	58	Latina	Doctorate
Griffin	Student Director	WA	M	22	White	Bachelor's
Jack	Professor	WA	M	52	Native American	Doctorate
Julia	Student Director	WA	F	22	Native American	Bachelor's
Matty	Associate Vice President	CO	F	64	Latina	Master's
Oz	Executive Director	CO	M	48	Latino	Doctorate
Paolo	Associate Vice President	CO	M	63	White	Doctorate
Sanders	Director	CO	M	61	White	Doctorate
Theresa	Director	CO	F	32	Latina	Master's

As shown in Table 1 above, two of the 10 interviews were conducted with undergraduate students who directed an access program. With exception from their university's human resource records (and this thesis) the undergraduates were not to be distinguished from the "professional" program director. The program culture was to esteem undergraduate staff as fulltime professionals, allowing them to capture the full weight and responsibility of their role. I intentionally recruited director-level (or higher) positions for the other eight interviews. I wanted to learn from practitioners who were responsible for *all* aspects of the program including staff hiring, budget management and oversight, assessment, program creation and implementation, grant writing, secondary school relationships, and providing reports for upper-level university

administration. Interview participants were both male (6) and female (4). Three participants spent half of their careers directing Trio programs, and the other half growing access programs at their respective universities.

In addition to direct interviews, I conducted a focus group interview with undergraduate access program volunteers. This particular program was driven by a five-person undergraduate leadership council, and each student agreed to participate. Choosing undergraduate volunteers, not paid student staff, allowed me to gain perspective from people whose livelihoods did not depend on program success. Also, the focus group interview allowed me to learn from people who had directly experienced educational inequality, but were just beginning to come to terms with problem intellectually as aspiring access practitioners.

Interviews

My primary data collection method was semi-structured interviews that lasted 45 to 60 minutes. "Typically, the choice to use an interviewing technique rather than a survey questionnaire technique is based on the selected procedure's ability to provide maximum opportunity for complete and accurate communication of ideas between the researcher and the respondent" (Cannell & Kahn as quoted in Berg 2007:97). Indeed, I was particularly interested in understanding the perceptions of access directors and the meanings they attach to their programs and events. I chose a semi-structured interview schedule because it allowed me "...to tailor the questions and their sequence so that equivalence of meaning is obtained for all respondents" (Richardson, Dohrenwend, and Klein as quoted in Denzin 1989:106). I was more interested in learning from participants rather than my questions being worded and answered in a strict order. I asked questions about program values, challenges, successes, collaborations, and best and worst outcomes.

Focus Group

My secondary research method was a focus group interview with undergraduate access volunteers. I chose a focus group as a secondary method since it is designed to yield a

relatively large breadth of data in a short period of time, in addition to providing a better understanding of group dynamics (Berg 2007:148). My goal was to capture the undergraduate volunteer experience of administering access programs. Also, I was intentional to capture any non-cognitive learning outcomes from the students during a relaxed, conversation-style interview. I used a purposive sampling strategy to recruit interview participants who held leadership positions within their volunteer-based access program. The focus group lasted about 60 minutes and was conducted in a meeting room on the university campus.

Other Methods

As detailed above, I conducted two participant observations during the 15 months of my study. My goal was to force consideration of what it meant to be a parent or family member at an access event. Although I knew I held a complete membership role in both research sites, I was aware of the value of seeking out-group membership (Creswell 2007:131). Considering both observations were held at access events, where information seeking was not unusual, I was able to jot notes on what I observed. Also, I was intentional about participating in my observations (rather than observing on the side) because I learned first-hand and understood from many others that precollegiate programming is highly experiential. In order to fully grasp the culture sharing that I experienced, I stepped away from each observation to flesh out my jotted notes into coherent thought (Emerson, Fretz, and Shaw 2011).

Finally, I employed content analysis before conducting my in-depth and focus group interviews. "Content analysis is a careful, detailed, systematic examination and interpretation of a particular body of material in an effort to identify patterns, biases, and meanings" (Berg 2007:304). Being an access practitioner, I understand the painful nature of having scarce, precious time consumed by being asked questions to which the answers are available on the internet. I was sure to do my homework by reviewing access program-specific websites and Facebook program-related pages so that I would inform my semi-structured interview schedules based on genuine inquiry.

Data Management and Analysis

As appropriate with case studies, I was sure to keep detailed records and notes of each interview, participant observation, and research site. Prior to the interviews, each participant read and signed a consent form. For the three phone interviews I conducted with participants in Washington, my recruitment email and cover letter served as consent. All interviews were digitally recorded, and transcripts were prepared immediately following in order to optimize coding and analysis. In addition, I wrote a summary of each interview immediately afterward, knowing it would help guide my analysis when comparing data across the separate interviews (Rubin and Rubin 2005). All data files were kept on a password-protected drive, and all signed consent forms were kept in a locked file. I employed a professional transcriptionist who used a secure drop box for sending and receiving files. I created transcript summaries and analytic memos for interviews and turned jotted notes into complete field notes for observations. In addition, I found it useful to create a spreadsheet to track formulated meanings and extracted statements from interview transcripts.

My analysis was not a one-time occurrence during a period of time that was set aside beforehand. It began upon coding the first transcription and continued as each transcription, field note, and data collection process was completed. Using guidance from Creswell (2007), I directly interpreted each research site and corresponding interview to draw meaning from its unique circumstance. While refraining from over-conceptualization, I coded definitions and understandings from access practitioners about their values, strategies, program structure, and their overall situation of facing the Colorado Paradox. As mentioned above, I created a spreadsheet for each interview to track extracted statements in line with coding. I generated a wealth of information from this study, which required a final period of extensive analysis to facilitate overall synthesis. To do this I conducted a cross-case synthesis to look for similarities and differences in data, to separate descriptive versus explanatory statements, and ultimately to find common features and create an overall framework for the analysis (Swanborn 2010).

Finally, to create the social network maps, Figures 6, 7, and 8 featured in Chapter IV, I used the Draw feature in Microsoft Word. The maps are an original creation, yet were inspired by Paul Baran's (1964) illustrations of computer networks. The maps proved useful in conceptualizing and synthesizing the overt and hidden or unobvious connections between Trio and access programs, practitioners, their participants, and program resources such as businesses, non-profits, and corporations.

Methodological Challenges

I addressed the issue of bias above, yet I remain acutely aware of the subjective nature of my study. Being an access practitioner myself, while researching other access practitioners could call into question my credibility as a researcher. Claims could be made that the study was filled with subjective and arbitrary judgment (Flyvberg 2006). I agree with Harding's (1991) critique of positivist standards of objectivity: "...values and assumptions are products of a researcher's positionality and, as such, are not eradicated through the methodological procedures that positivists use to test hypotheses" (as quoted in McCorkel and Myers 2003:226). Agreeing with Harding that I cannot escape from who I am, still, I gave due diligence to the indexical and reflexive qualities of my study. Indexicality refers to the highly contextual nature of objects and events (open to multiple meanings) and reflexivity refers to accounts as a researcher being "...both influenced by the indexical character of the situations that produce them and, in turn, reflecting back onto those situations once they are produced" (Adler and Adler 1987:26).

To situate my subjective nature as much as possible, I confirmed my research findings with interview participants through member-checking. I emailed each direct interview participant and requested a 20 minute conference call in order to review my interpretations and descriptions of their experience. Each participant readily established a meeting time. During each phone call, I conveyed the themes and patterns I captured from their interview transcript

and summary. As I discussed their views, values, and experiences, all interview participants affirmed and validated the authenticity and accuracy of my findings.

Also, by triangulating methods, I collected rich data and attained a “thick description” of the case study (Ibid). Becker dismisses the dilemma of whether sociologists are able to conduct value free science by arguing that “...life itself and the very nature of reality is entirely subjective, thus the true dilemma for researchers is consider where s/he rides in the ‘hierarchy of credibility’” (1967). At first, it was daunting to consider that qualitative research is evaluated according to whether it makes a substantive contribution to knowledge and/or advances theory and/or provides new data. However, my credibility remains intact. I found much excitement and meaning upon conducting my research as it gives voice to access practitioners who support socially marginalized students, families, and their communities. Also, my research is a contribution to both literature and practice for emerging university access programs in Colorado and Washington that address the issue of equal educational opportunity. The potential significance of this research includes but is not limited to:

- Contributing empirical knowledge to both the sociology of education and higher education literature that is directly informed by access practitioners and students
- Contributing to the continued establishment of collaborative, equitable, sustainable partnerships with K-12 schools
- Developing research that addresses key programmatic components of raising educational aspirations of historically underserved students and families

CHAPTER IV

NETWORK ANALYSIS AND SOCIAL CAPITAL

This chapter discusses my research findings. The first section highlights the commonalities between Trio and university-funded access programs. The second section examines program differences by conceptualizing the network structure of both programs. The third section reveals why access programs have stronger community connections than Trio. The final chapter section discusses how Trio and access practitioners differ in social capital generation for program participants.

Embedded Resources

One thing Trio and access programs share in common is the ability to generate resources or “social capital” for their students. It is a fundamental understanding in network analysis theory that social capital is captured from embedded resources in social networks (Lin 1999). Alternatively stated, patterned interactions among people can generate increased productivity and resources for participants in a social network. This was validated in the literature and in my research. Precollegiate practitioners function as a collective, a network of individuals who are capable of improving the larger networks around the students they serve (Perna and Titus 2005; Yonezawa, Jones, and Mehan 2002; Swail 2000).

There are two types of embedded resources within social networks, ego resources and contact resources (Lin 1999:36). Ego-resources refer to a student’s readily-available, individual relationships such as friends and relatives. I found that both Trio and access practitioners serve as contact resources because they mobilize information, services, and social credentials for students through instrumental action. Naming precollegiate practitioners as contact resources is to give full value to all forms of capital they generate for students. To demonstrate *how* practitioners generate capital requires an understanding of their social position and values.

Positionality

I learned that Trio and access practitioners share in common their social position, a fundamental aspect of how they serve as embedded contact resources. Salzman (2002) discusses social position or “positionality” as an accumulation of one’s demographic characteristics, personal subjectivity, and power relations, all of which effect a person’s observations, interpretations, experiences, and relations with others. I named the positionality of Trio and access practitioners as *bicultural*, meaning they are situated between two places (LaFromboise, Coleman, and Gerton 1993). The biculturalism of precollegiate practitioners situates them between their personal background culture and their professional culture of higher education.

From participant observations with Trio and access staff as well as from my interviews, I found the majority of Trio and access practitioners come from low-income, first generation backgrounds and many are ethnically diverse. Conversely, the culture of higher education in Colorado remains largely informed by people from White, middle/upper-middle class backgrounds who hold advanced degrees. Being situated between two places, precollegiate practitioners know first-hand what it is to be historically marginalized because of their personal culture and, as degreed professionals, they know first-hand how to navigate higher education and identify with institutional culture. Oz¹, a low-income, first generation, Latino Trio-turned-access practitioner who holds a Ph.D. in education illustrated his biculturalism:

So a counselor that goes to a school also needs to connect with students from all backgrounds. So even if they are whatever ethnicity, they have to have the skills and the ability to connect with everybody and have a high level of energy to motivate students and to be engaging so it does take that unique individual to be energetic, have the ability to connect, and the knowledge. They need to bring in good knowledge about [the institution], careers, the process, applications, all of that... And I think that's the harder part, because anybody can give you the rhetoric that we should be doing this. It is much harder to actually put it into place... The know-how, and the nitty-gritty of it, that is where the magic is. To me, the lesson is not necessarily the high-level rhetoric, which you need, but the

¹ Pseudonyms are used in place of real participant names throughout this thesis.

know-how, the being there and making sure...providing more support that kids at that age probably welcome, but knowing all along that that's what needs to happen... it very precious...it all depends on the people.

The “ability to connect with everybody” to which Oz refers to is the practitioner’s reliance on his/her background culture as well as having the “knowledge” of the culture and expectations emanating from higher education. Theresa, a low-income, first generation, Latina access practitioner who holds an M.A. in education explained her biculturalism. She first spoke of practitioners’ personal backgrounds:

What’s great is that most of our counselors who work with the students are diverse themselves and have taken different paths. So when you’re able to relate to [students], most of us are also first generation, so when were we’re able to relate with them and be at their level at times when we talk with them, that makes a difference for them too.

Theresa then spoke about the expectations from the university:

We had about a month and a half straight where we did Financial Aid Nights at all of our schools, and that's a month straight, every week, one or two nights... and then also working 9:00 a.m. - 5:00 p.m. in the office etc, etc. I think it's something that maybe only access people get. It's a different demand on time and emotions.

Theresa continued her train of thought to illuminate that not only does being bicultural require program development and deployment to historically underserved communities but also the ability to meet strategic objectives on behalf of the university:

First is the high school general recruiting stuff, coordination of high school visits, supervision of high school staff, coordination of fairs and community events, that kind of stuff. And then I have [two programs] to lead and coordinate also... We still have to answer to our institution and our numbers, but if you’re in this line of work, you’re not only here for your school. There’s another reason why you’re doing this, because it’s more intense work than just an admissions counselor kind of job or whatever it may be.

Theresa revealed that she can connect and relate with low-income, first generation communities as well as coordinate two programs at the university level, requiring the supervision of professional and student staff, budget management, and partnership development on behalf of the institution.

The above account of biculturalism from Oz and Theresa resonates with Anzaldúa's (1990) notion of being *mestiza*, "... an Aztec word meaning torn between ways, *la mestiza*, is a product of the transfer of the cultural and spiritual values of one group to another" (377).

Anzaldúa (1990) continues to flesh out her concept:

She has discovered that she can't hold concepts or ideas in rigid boundaries... Only by remaining flexible is she able to stretch the psyche horizontally and vertically. *La mestiza* constantly has to shift out of habitual formations; from convergent thinking, analytical reasoning that tends to use rationality to move toward a single goal (a Western mode), to divergent thinking, characterized by movement away from set patterns and goals toward a more whole perspective, one that includes rather than excludes (378-79).

Ezra, a low-income, first generation, Latina access practitioner who holds a Ph.D. in education encompassed and affirmed the dynamic abilities required of a bicultural *mestiza* precollegiate practitioner: "I am there, available to answer any questions for our families or the students. I [make] myself available to the students, to our coaches, to our counselors, to our administration, to anybody out there in the state that needs us." Ezra's reference to "anybody out there in the state" means the entire state of Colorado. With Ezra's quote the full complexity of being *mestiza* becomes clear: Not only are access practitioners responsible to the low-income, first generation students and communities they serve, they must answer to upper-level university administration, and they must provide their biculturalism as a service throughout the state.

Although being *mestiza* means being many things to many people, I found this type of positionality remarkably conducive for functioning as a contact resource. On the one hand, the practitioner understands first-hand the challenges of historical marginalization. On the other hand, the practitioner knows and navigates higher education for themselves and their students. Along with positionality, I had several robust discussions with practitioners about their values, which turned out to be another means to serve as embedded contact resources.

Allyship

Trio and access practitioners not only share in common their positionality, they share in common a core value of allyship. To value and practice allyship requires an understanding of

power, privilege, and oppression. Simply stated, privilege can be defined as an unearned benefit. Power and oppression work in tandem for dominant groups to control and command other groups, access to resources, and the right to self-determination. In a presentation at the National Conference on Race and Ethnicity, Kendall (1998) brought together the concepts of privilege, power, and oppression to define allyship as using personal privilege to align oneself privately and publicly in a way that is most beneficial to those who do not share such access to power and resources. Alternatively, bell hooks (2000) describes allyship in terms of men being comrades and women being sisters: "Feminism defined as a movement to end sexist oppression enables women and men, girls and boys, to participate equally in revolutionary struggle" (67).

Since many Trio and access practitioners come from the same social and cultural backgrounds as program participants, but are now situated within higher education in relative positions of power, practitioners are naturally allied with the students they serve. Matty, a low-income, first generation Latina access practitioner who holds an M.A. in education, had an intuitive sense of her allyship: "...it's as though [participants] saw there was somebody who was successful who had come from a school like the ones they were in. It made a difference to them." Griffin, a White, first generation access practitioner from an economically privileged background who holds an M.A. in political science, shared his sense of allyship: "I'm going down every week so I can have this high school student who has a completely different life experience teach me about what it means to be an adult or what it means to be a citizen or what it means to be a human being." Also, Matty and Griffin shared that their sense of allyship is a visceral, embodied experience. They can literally feel a connection with student participants and can perceive that the connection is mutual.

Not only is allyship practiced between two individuals, Reason, Scales and Millar (2005) expand the notion of allyship from a binary concept to something greater where dominant organizations work to transfer power to subordinated groups. Theresa reflected on her personal

experience of oppression and her current practice of allyship now that she is directs an access program on behalf of a university:

I personally prefer to work in these types of schools [low-income, ethnically diverse, first generation] because all my life I've worked or gone to school where I'm a minority. It's nice to be able to work in schools and with students where your race, your culture, your ethnicity is a majority in that school, and to be able to walk in as a role model... It's a major part of these students' lives, when they're able to see someone, not that it has to be that way, but we are able to motivate students in different ways. For some students it makes a bigger impact when they're able to see someone who looks like them, who talks like them, who had the same struggles or situations or whatever it may be, and to see that that person made it.

Through Theresa's words it is clear that her value and practice of allyship not only holds deep, personal meaning but also works to create social capital by building relationships and larger networks of trust for her students. Ezra explained how she works in allyship to directly enhance the life chances of her students:

I was really able to take the program and develop it with what I have seen when I worked in the schools to what students needed, so it really is geared towards what not only I but also my other team members saw in the schools and what students needed. They need more attention, relationships, role models. So our main value is to get the students educated [about college]. We'll do whatever it takes to get them educated, to get them into higher education. If that means we do a lot of evening activities, we'll do that. If that means we offer parent programs, we do that. Just whatever it takes to get these students to see that there is something for them after [high school]. So we meet with the students and they're like, 'I can go to college?' and we're like, 'Yes, you can go to college! It's going to take you on a different path than maybe your friends, but that's okay. Let's see what that path is!' For our program and for me personally this is the biggest thing. We can do whatever it takes to get you there. And to give you hope!"

Theresa demonstrated her allyship by overtly extending trust and belief in her students' potential. She knows their cultural background because she too experienced it but also Theresa has transcended the constraints her culture to become a role model and ally for a new generation of historically underserved students. Through the value and practice of allyship, precollegiate practitioners facilitate positive life outcomes, create relationships of trust, and widen the networks of program participants. Such advocacy and allyship is an overt act of

serving as an embedded contact resource in order to create social and cultural capital for students.

Network Structure

As stated in the beginning of this chapter, my analysis employs social network analysis in order to highlight the commonalities and differences between Trio and access's precollegiate networks. Trio and access practitioners have in common their positionality, values, and functioning as embedded contact resources that generate social and cultural capital for student participants. The differences between Trio and access became salient when I examined their network structures.

I found myself in agreement with Nadel (2013): It is best to separate discussion between the structure of network relations from discussion of their content in order to gain clarity between the two. The final two sections of this chapter discuss the content of Trio and access' networks, but first, the remainder of this chapter conceptualizes and compares their network structures.

It is well known that the structure of a network is determined by *how* individuals within the network are connected. Connections are determined by interactions that reveal the ties, connections, and group attachments between individuals (Scott 2000). Paul Baran's (1964) seminal work on network connectivity captures and visualizes how individuals, through patterned interactions, link together to give a network its structure.

As seen in Figure 5 below, Baran distinguishes three major types of network connectivity: centralized, decentralized, and distributed (1964:3).

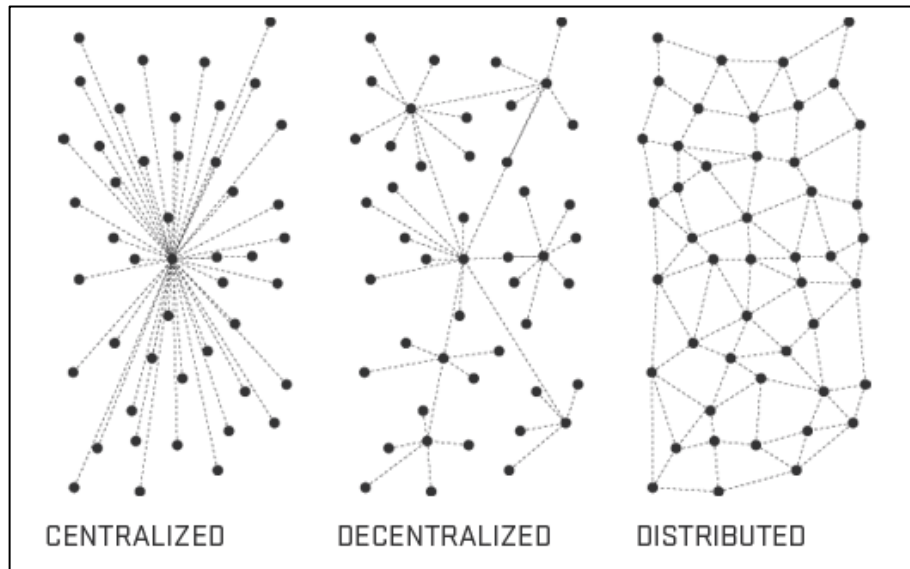


Figure 5: Paul Baran's illustration of the three major forms of network connectivity

As seen above, a network with centralized connectivity, where all interactions are dependent on and linked to a central node (person), is the most vulnerable to system failure because if the central person leaves the network, consequences are total network failure (Baran 1964:3). On the other end, distributed network connectivity can have significantly greater integrity. If one or many nodes are eliminated in this network, it will retain connectivity because of many central people are distributed throughout the network to maintain connections. A decentralized network falls in between centralized and distributed, meaning if the network loses a person connectivity will remain, but if the network loses several people total network failure will occur (Ibid). Illustrations provided and discussed at length below, I found that Trio's network structure is similar to decentralized connectivity and access's network structure has distributed connectivity. The reason for such difference was found upon discussion of program origins.

Origins

As mentioned in Chapter II, Trio programs formed during the War on Poverty, an era of collective action that yielded programs based on utilitarian individualism (Stanton-Salazar and Spina 2000). Imbued with the values of its formative era, Trio was created with a decentralized network structure in order to individualistically answer the problem of educational access and

opportunity (Perna 2006). Figure 6 below illustrates the decentralized network connectivity of Trio:

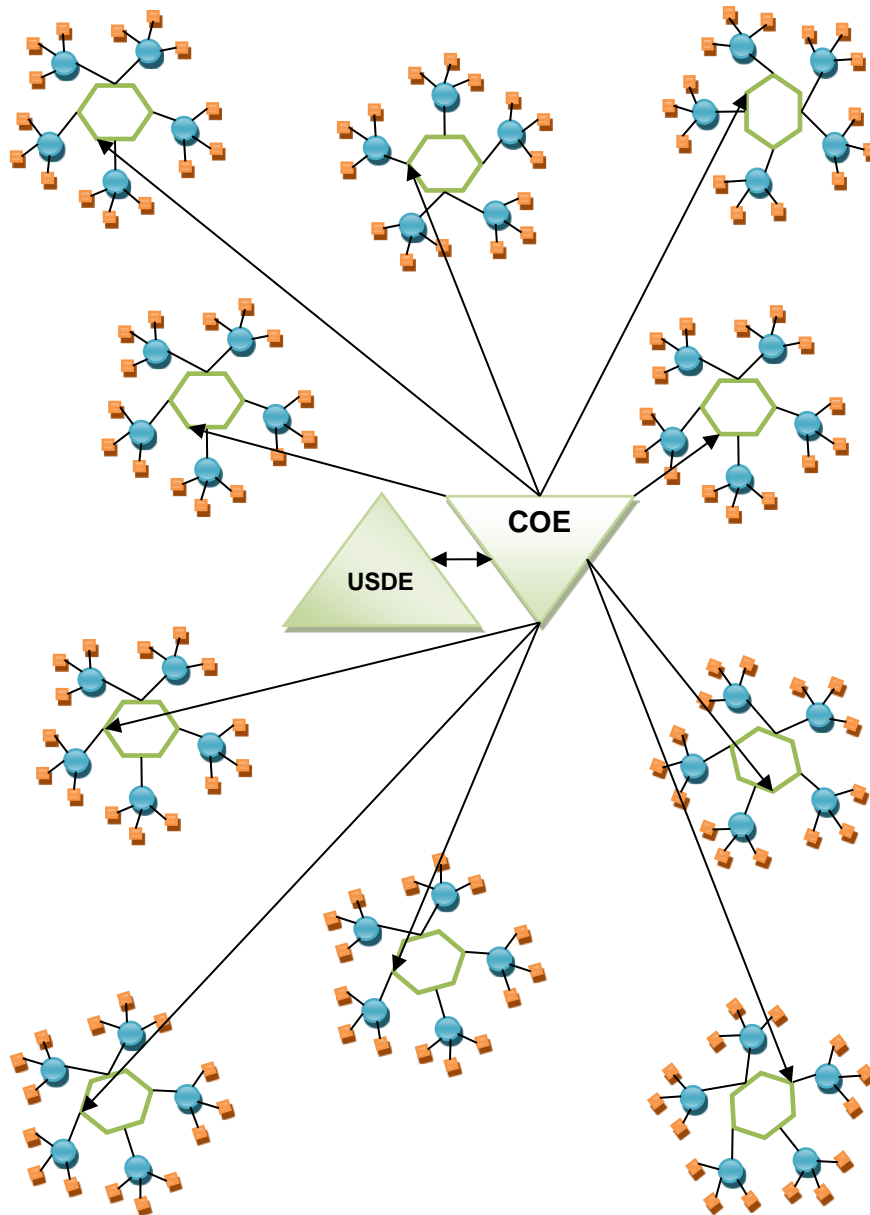


Figure 6: Illustration of Trio's network structure

As seen above, Trio's network connectivity shows two central nodes at the national level that send and receive communication between each other, the U.S. Department of Education and the Council for Opportunity in Education (COE), Trio's central organizing unit. From the national level, COE sends and receives communication through its 10 regional organizations or

“hubs” (represented as hexagons above) that consist of approximately five states per regional hub. Figure 7 below is an expanded view of Trio’s structure at the state and local level:

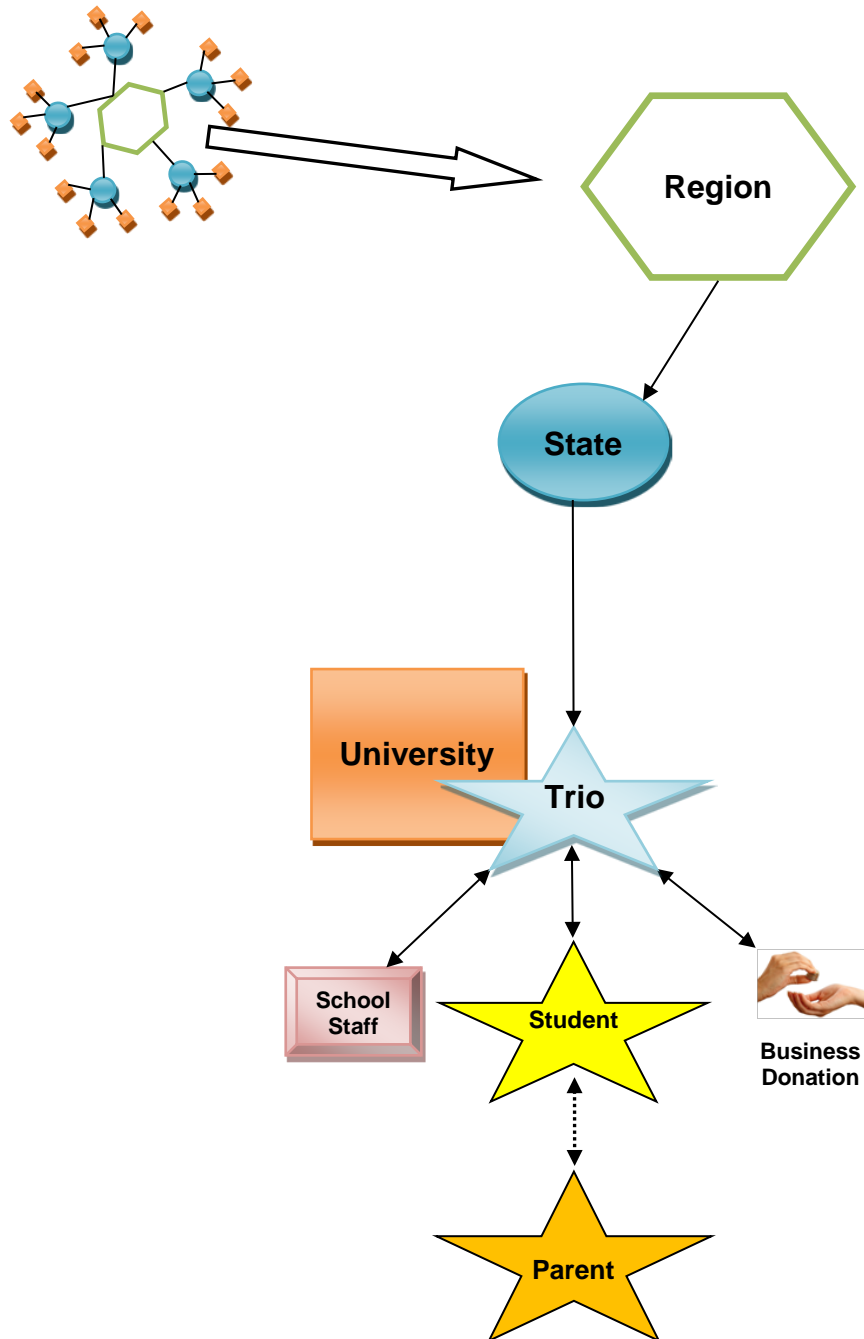


Figure 7: Expanded view of Trio’s network at state and local level

Figure 7 above shows that each state leader in the Trio network receives federal communication via communication his/her regional network. In turn, each state leader is responsible for

communicating with each Trio program director throughout the state. Trio directors operate their program through an office that is (more often than not) housed within a postsecondary institution. Even though housed within higher education, it is important to note that individual Trio practitioners often have a tangential relationship with their host institution.

Also, the above illustrates that Trio practitioners interact directly with students as program participants and *indirectly* with the participants' parents as needed for permission slips and travel debriefing. In addition, Trio practitioners connect with school staff, typically counselors, to receive student nominations for participation, and occasionally Trio receives donations of food and promotional items from local businesses. Overall, Trio's network structure is similar to Baran's decentralized network structure – meaning Trio experiences hierarchical, linear network relations. Such connectivity allows for Trio practitioners to have a direct relationship with students and school staff, but offers only a tangential relationship with postsecondary institutions and parents.

Conversely, my interviews made clear that university-based access programs formed *within* postsecondary institutions, owing to the insight and expertise of celebrated Trio practitioners. Sir Isaac Newton said, "If I have seen farther, it is by standing on the shoulders of giants." Likewise it is fair to say that in the state of Colorado, access programs were seeded by a handful of longstanding Trio practitioners who had the knowledge and expertise to germinate access programs inside postsecondary institutions. Cesar, an established, well-respected Trio-turned-access practitioner, shared his approach to creating his access program:

I knew that most of the Trio programs were sponsored by post-secondary institutions; I felt that they were only being sponsored for the money. In other words, those institutions would not have that kind of a program if it wasn't for the money coming in from the feds. Similar to [Trio], I took bits and pieces from Upward Bound... I put together a proposal to the president's office where they basically had a middle school component, a high school component, and a first-year component, first year of college. The next step, of course, was to sit down and design how exactly that was going to work in the long run. It was difficult, because each [school] has a different population and they have a different mission. It was really difficult trying to streamline it into one program. But we were able to do it. We had like a cookbook of things that we needed to

have a successful program... What I would do too, that was really important is, I would put together an annual report for the president and also for his board and about every year I would make up a half-hour presentation to the board in terms of our successes and those kinds of things. That I think helped with the institutionalization aspect of it because if you don't have a buy-in from them, they don't know what you're doing, and you just have [access programs] at a certain level that'll never go anywhere. So I think that's real key.

Cesar took his intimate knowledge of Trio programs, of how to deliver on expectations from high-level university officials, and his knowledge of individual school culture and combined it with his forty years as a precollegiate practitioner to grow a separate, distinct educational access program inside his university. Similarly, Oz, another highly regarded, longstanding Trio-turned-access practitioner, shared his perspective on the creation of access programs at his university:

The university itself is not going to think about access and even if it did, it wouldn't know how to. People at [our university] have made it their life goal to get the university committed to outreach, committed to access programs but also be there to provide exactly how to do it... You know, it's hard to say what made [access] gel. Because during the late 90's, you got affirmative action being attacked, so then the university had to be more creative about doing outreach. Then Governor Owens brought to light, at a high political level, the Colorado Paradox, which was that the state of Colorado was not growing their own college graduates. And at our university, we had people who were champions of outreach and being out there, who also kept working to get the university to be more proactive... Also, there was an emergent [middle school] effort that also brought a lot of people together who had similar goals in mind. Also at the same time, we had admissions create a new [high school] access initiative and that became very high-profile because it was loved by the university, by everybody basically in the state... So it's all of these things together I think brought the university to say, 'We will give such efforts resources and the attention they deserve.' So it's all these things, kind of like an organic approach to it. It just happened little by little. To me, it speaks to my philosophy of, just do these things and somebody else will do another thing, and together I'll build some structure and through different efforts things will gel together. And I think that's what happened, a lot of people putting in their effort and coming together later on.

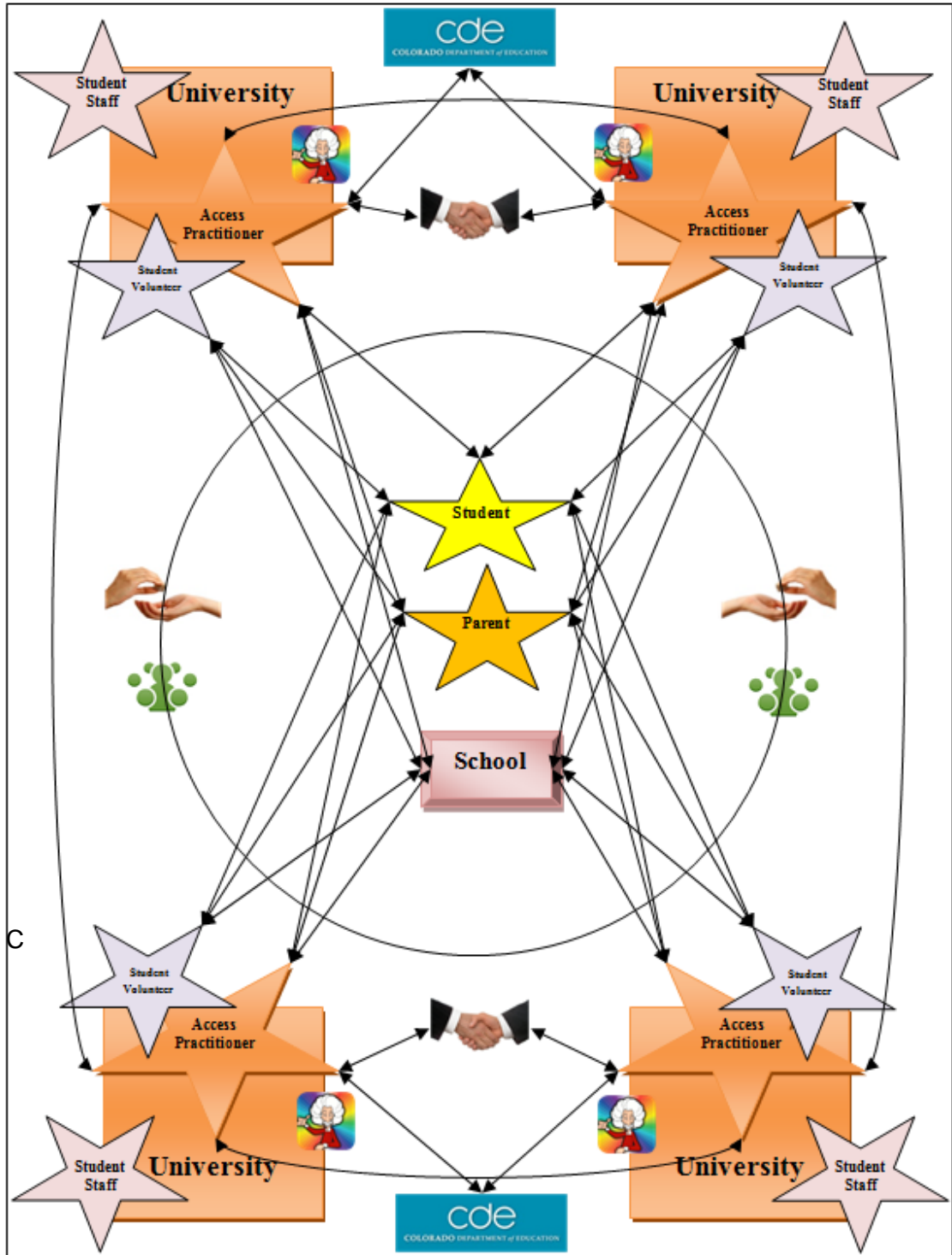
Like Cesar, Oz combined his 20 years as a Trio practitioner with emerging institutional efforts in order to organically grow his access program from within his university. Imbued with the values of a much different era than the 1960s, university-based access programs were created with a distributed network structure in order to provide an alternative approach to educational equality.

Figure 8 below illustrates network connectivity of Colorado's access programs.

Figure 8 reveals significantly different network connectivity than Trio's network. Recall that Trio has a decentralized network of linear, hierarchical connectivity and tangential relations with postsecondary institutions. I uncovered that access programs emanate from *within* universities and spread laterally to create a web of relations at the local level, encircling secondary students, families, and their schools. To do this, access practitioners work with their university faculty to their donate time and knowledge as keynote speakers or workshop facilitators at events. Also, access practitioners guide their faculty's research-based grant funding into schools that already host access programs. In additions, access practitioners intentionally recruit undergraduate students as both volunteers and staff to help administer their program and coordinate events.

Also, small-scale donations are secured from local businesses and larger sponsorships from corporations. Local community-based non-profit organizations who serve youth (e.g. Boys and Girls Club) readily join access events have proven themselves a part of the precollegiate pipeline (Coles 2012). Finally, some access practitioners secure educational grants from the state to direct more resources into schools. Overall, access practitioners have numerous partnerships that work in tandem as equally integral parts. This creates and interactive web of linkages that surround students, families, and their schools. Overall, the distributed network connectivity of access programs encompasses a far greater number of organizations and individuals at the local level than Trio in the state of Colorado.

Creating network maps helped me to see that Trio and access's program structures differ in two ways. First, they differ because of respective program origins. Second, they differ because Trio programs were formed at the federal level and organized downward to eventually situate alongside higher education. Access programs were formed within institutions of higher education and spread laterally to other universities and communities while enfolding many local resources. The following section discusses the implications of the differing program structures in greater detail.



- 
 State Grants
- 
 Professor
- 
 Corporate Sponsor
- 
 Business Donation
- 
 Non-Profit

Figure 8: Illustration of access' distributed network structure

Centrality

Centrality is a common measurement used to summarize the location of individuals within a network in terms of their strategic positioning to more diverse and valued information (Lin 1999:36). For my research, I used centrality to understand the implications of Trio and access having different network structures. Looking at Figures 7 and 8, it is obvious that both networks directly serve and support students. It is known that first generation students who share centrality with institutional agents as a means to getting into college are often successful (Pérez and McDonough 2008). Sanders conveyed the significance of Trio and access' shared centrality in relationship to students they serve:

So what are the principles we are working on? Principles from a human ethics perspective: Provide the services for what you believe in. Do you believe meritocracy and education is critical? Do you believe in equality because then you better make sure that people have equal opportunities from the time they're born. But, that also means there's social responsibility to, when given the opportunity, to act on it and to make sure that those who come in the next generation have the same opportunities you did. You don't close the opportunities down because you got them and you want your children to have an unfair advantage due to, let's say, social class. So if Trio or [my access program] are successful in helping kids who otherwise are not likely to succeed, and not make it into college statistically, which is quite evident, then we help those students make it to any form of higher education then we've helped them and in turn it helps their communities or the communities that they will eventually work in.

Even though Trio's decentralized and access' distributed networks differ, Sanders made clear that both networks give strategic positioning to student participants. Advancing centrality a step further, the network maps revealed that Trio has greater global centrality and access has greater local centrality. "A point is locally central if it has a large number of connections with the other points in its immediate environment – if, for example, it has a large neighbourhood of direct contacts. A point is globally central, on the other hand, when it has a position of strategic significance in the overall structure of the network" (Scott 2000:82).

A positive implication of Trio having greater global centrality means the program experiences high visibility and funding at the national level. On the downside, Trio's minimal local centrality situates students as the end-user leaving no significant connections or resources

for parents, teachers, schools, businesses, and nonprofits. Trio has been criticized for its unwavering commitment to individualism at the expense of creating larger social networks for parents and families (Stanton-Salazar and Spina 2000:239). There is little doubt that Trio actualizes educational opportunity for students; however, the program does so at the expense of community and local institutional-level engagement.

Access' distributed network has negative implications as well. Having no global centrality at the national level means access programs are dependent on small-scale grants and fickle institutional funding along with the wavering generosity of local businesses and corporate sponsorships. On the other hand, having strong local centrality means not only students but also parents, teachers, schools, and nonprofits are situated at the center of a web of connections and resources focused on educational opportunity. Sanders explained his perspective on what it is to have a robust access network:

Getting [people] to see our programs as different in the 21st century means being in the school with the families and nonprofits, but we're not just the lead institution, we are part of a community effort... we have local partners that bring in more resources that what we can bring including the teachers and community education leaders but also people from this community, you know the students' parents among others so that when you walk into any school in this district, you walk into a pathway to higher education in kindergarten and all the way through.

Sanders acknowledged that access programs were created as large networks filled with well-resourced individuals and interlinking groups who work together at the local level to provide strong connections for many stakeholders in educational access.

The differences between Trio and access' centrality lie in their overall network structure and directly correspond to the depth and breadth of each program. Trio, infused with almost a billion federal dollars, stretches across the entire U.S. to provide educational access for individual students. Access, dependent on inconsistent funding, works deep within Colorado's first generation communities to engage not only students but also teachers, parents, schools, nonprofits, and business in the educational access endeavor. I discovered the local centrality of

access's network was due to practitioners intentionally linking their programs together between universities and across communities. The next section explains how this was possible.

Network Weaving

As discussed in the beginning of this chapter, access practitioners are bicultural and considered as *la mestiza*, meaning that he or she is not bound by rigidity but rather is flexible and moves away from habituation towards a more inclusive, holistic perspective (Anzaldúa 1990:378-79). Just as access practitioners are not characterized as having rigid boundaries neither do their networks. I found that access practitioners work intentionally to knit together private sector funding sources, small-scale grants, institutional support, and nonprofit assistance to form a common vision and provide a web of resources for their students, families, teachers, and schools.

Krebs and Holley (2006) describe this process as “network weaving.” It is “...not just ‘networking’, nor schmoozing. Weaving brings people together for projects, initially small, so they can learn to collaborate. Through that collaboration they strengthen the community and increase the knowledge available in it” (10). Network weaving increases social and cultural capital generation by improving internal and external network connectivity.

Relationships

Two factors are necessary in order to weave a sustainable network. First, relationships across traditional divides must be established in order to foster innovation. Access practitioners place high value on creating relationships. When asked, “What worked best for developing your program?” Cesar replied: “You know what has helped us develop [our access program] is the contacts I've developed over the years with postsecondary [people] across the state. Those relationships have stayed.” Like Cesar, Theresa verbalized the importance she places on relationships: “While it is meaningful and fulfilling, I am also hearing [from staff] that our work is very taxing, because of the relationships. They're not checks in a box or a student ID. It's a human being!” In addition to acknowledging the value of her relationships, Theresa continued

her response with how she works across the traditional divide between a university and surrounding secondary schools:

The schools really need help. I'm not trying to be negative about the school structure, but they're overwhelmed with the students. And they have their own agendas, and each school has different requirements. The TCAPS and all that kind of stuff that come up at the school. So counselors really can't be counselors any more, they have so many other things that they have to do that the relationships that we've been able to build with them have been, I think, one of the greatest successes for us. Without their support, our program wouldn't be able to function. We need them for student access, for parent access, transcripts, GPAs, all that kind of stuff. So building those strong relationships is important.

Cesar and Theresa know what it is to have relationships based on personal investment and connection with colleagues and with the schools they serve. Yet when continuing his line of thought, Cesar added an additional quality to understanding his relational networks: "One of things that I helped to try and set up [for our program] was having [my staff] learn from the community what their needs were and what they were concerned about that the university was *not* doing for them." Cesar tapped into something other access practitioners validated: Although access programs originated from people and resources within universities, program content and structure came from honoring relationships by *actively* listening to the needs and objectives of those whom they serve. Oz shared his perspective on the relationship differences between Trio versus access programs:

One thing about the TRiO programs is, because we get money from the feds, they are insistent on [providing metrics]. In fact, they won't give you money unless you provide those first, and they won't keep giving you money unless you meet those objectives. But for [access] programs, it has been a challenge to integrate [metrics]. I think one of the reasons for that is that we go into the school and work with [school] staff about what needs to be done, and we're intentional about having this open dialogue about what they need. And I think when—and we need to do that, in fact, it is necessary when we first go in. And I think if we were to come into that conversation saying, 'Here are the metrics, here are the objectives,' I don't know if that would have been received well.

Oz made reference to the fact that hierarchical relationships are not unilaterally the best approach for precollegiate programs. Matty shared her thoughts on the importance of honoring relationships:

In listening to the answers, it started to become clear how we could help. I listened to what [the school] said and I knew who could help with the solution. I knew who to go to and I knew that the people that I was thinking about were not necessarily vice presidents, but I knew who was actually doing the work in different areas. So I would listen to what [teachers and counselors] had to say and I then could see patterns. I could see that there were some things that were consistent across schools, and I could see that in some communities, it wasn't consistent. I heard issues related to students dropping out. But there were so many common threads, and because of those common threads, I thought, [laughs] 'Houston, I think I can identify the problem.' So I started to see, okay, we're not here to do their work. It is really to help and to act as consultants, if you will, to provide some resources, but not to do their work. [The school staff] had to define for themselves what the problem was. That was important to me, that we not go down, which I think is totally obnoxious, and say, 'We know what your problems are and we're going to provide the solution.' [The school staff] absolutely had to define the problem. And over time, they could also start to identify some of the solutions. Initially I would recommend and suggest that perhaps something could work and then they would buy into it or say, 'We're not sure that would work.' But it was very collaborative. We're going to work together as one.

An essential aspect of fostering relationships across traditional divides is not only the importance of active listening but also that relationships are based on longevity. Matty continues:

And I had to think of issues related to, how do we sustain this over time? What if I move on to a different position? How do we make sure that we sustain this? And in listening to the schools, it became clear that these are schools where lots of people have gone to them, because they're the poorest, the most diverse. Everybody goes to them, and they would say, 'Your school has been chosen to do—' whatever or 'We're going to introduce this.' There's this big hoopla and a media event and all of that, and then [the school] never sees them again. I thought, 'That's not going to happen with this. We are going to be there. We are going to be a physical presence. We are going to listen to what they have to say, we are going to respond to what they have to say, and we're going to deliver!' For me, the very, very worst thing is that the university would renege on its commitments and we've told students and families that we are committed to paying whatever and that would suddenly go away. Because I know that there are students who have been told in the grade schools that [my university] will be there for them, and if you take that away, it would be devastating. I think renegeing on our commitment would be terrible. And I feel strongly that we cannot renege on our commitment even to have a physical presence in those communities.

Matty's emphasis on active listening and longevity is a true definition of what it is to foster relationships. The other criterion for effective network weaving is for practitioners to facilitate collaborations for mutual benefit.

Collaborations for Mutual Benefit

Krebs and Holley (2006) assert that short and long-term collaborations for mutual benefit are essential for creating a state of *emergence* "...where the outcome—a healthy community—is more than the sum of the many collaborations (10). Oz described the central components of collaboration for educational access:

Well, primarily the students. Without those efforts, they would be the population that will never—nobody would ever talk to them. No one would ever reach out and tell them there are these opportunities. The families, because they are so grateful that someone does care. The schools, and although the schools can be funny, either they're going to love it or they're going to resent it, or somewhere in between. So we're always hoping that we get school personnel who are going to really welcome what you have to offer and then help you do even more things to leverage what we have to offer... So when we talk about resources and access for disadvantaged students, how do you actually do that? How do you actually get a kid from a crappy neighborhood to go to a place like [our university]? It takes a lot. It takes many steps. It takes different strategies, commitment, being there, creating networks and connections and being there.

The "being there" Oz emphasized implies the concern and care required of relationships in order to generate a mutually beneficial collaborative effort. Ezra expanded on the linkages necessary for collaboration:

It's pretty amazing, really. But [our program] wouldn't happen without partnerships with so many people, from here, from our schools, from their administration, from the school districts... And then we create all these different partnerships with outside entities, CESDA, College Invest, College in Colorado, all the different departments here at [our university], engineering, journalism, education, and all these people will come in and do presentations for us at our [events]. We also bring in the Butterfly Pavilion. It's just a circle of partnerships, really, and it can't be done without those partnerships. We need so many people to help us to operate our program from year-to-year. Without all the different partnerships that we've formed, it wouldn't happen... It's just having that one on one with all our stakeholders, and that's everybody, from our students, parents, partners, counselors, principals, our presenters here from [campus], from outside the university, from our different groups that we belong to, CESDA, ACT, just everybody, it's a myriad, a plethora, I guess you could say a plethora, I love that word, of partnerships throughout the state. And with our stakeholders and all the people that help us out... We are interconnected everywhere.

Ezra's feedback shows how access practitioners, on the local level, create mutually beneficial, network-based resources. Ezra made it clear: Who access practitioners are and the collaborations they share are important.

I was fortunate to experience a high-quality collaboration for mutual benefit as one of my participant observations. What distinguished my participant observation as a collaborative partnership for mutual benefit was the win-win-win (no losing) connectivity among all event participants. EduExpo 2013 (Education Exposition) began five months in advance with monthly working group meetings including the following representatives: local students and parents, Adams County School District officials, Adams City High School administration, state educational access, migrant education, adult education, nonprofit youth career-placement, county youth initiatives, local teachers, Lion's Club, Front Range and Aurora Community College officials, Metro State, Colorado State, and Regis University officials, along with several locally-recognized businesses such as Cricket, Project Vision 21, Little Caesar's, and media representation from Univision. The list of constituents was large, yet I found this is what local centrality of a distributed precollegiate network looks like. It is all necessary and relevant in order to create a mutually beneficial experience for all stakeholders, especially students, families, and their schools.

The EduExpo program agenda was created from feedback of all working group members. We featured high-demand themes such as applying to colleges/training programs, preparing for college, paying for college, and persisting through college to graduation. Also, there was consensus to make the event culturally relevant for the students and families in attendance. We featured a local Mariachi band, local food, and Nahuacali (traditional Mexican folk dancers). Groups donated their time and talent, the restaurant donated the food, and each member of the working group donated their time and talent. In short, no overhead or entertainment costs, but the solidarity benefits were enormous. Also, we found it important to not only feature topics on educational access but also topics on immigration. Informed by a local immigration attorney, the working group created sessions on Deferred Action and Colorado's version of the Dream Act known as the ASSET bill. Finally, the one-day event was free to all

participants (we ended up with over 300 families) and over \$10,000 worth of raffle prizes were donated.

The working group succeeded in its goal of providing a county-wide, high quality educational access event without cost to anyone involved. Our only personal and programmatic expense was the gas it took to drive to meetings and the event. EduExpo is one of many examples of how access practitioners work across traditional divides to create innovative, mutually beneficial educational access programs by network weaving. By knitting together relationships and partnerships, access practitioners create a distributed network of mutually beneficial strategic collaborations at the local level.

Networks as Capital

Previous chapter sections integrated aspects of Lin (1999), Krebs and Holley (2006), and key research discoveries to conceptualize the commonalities and differences between Trio and access' precollegiate networks. This final chapter section continues the comparison by discussing how Trio and access practitioners differ in social capital generation for program participants. Owing to a distributed network structure, access programs create additional social capital for both students and families while reinforcing cultural inclusivity.

According to Lin (1999), the meaning and purpose of interacting in a social network is to acquire and/or reinforce social capital. Social capital "...refers to social relationships from which an individual is potentially able to derive institutional support, particularly support that includes the delivery of knowledge-based resources, for example, guidance for college admission or job advancement" (Stanton-Salazar and Dornbusch 1995:119). Lin (1999) further specifies two types of social capital: instrumental returns bring *new* economic, political, and social resources; and expressive returns *reinforce* and protect presently held resources such as emotional health and life satisfaction (1999:30). I found both commonalities and differences in the instrumental returns Trio and access practitioners create for their participants.

Instrumental Returns

Broadening the social networks of historically marginalized youth increases their mobility (Stanton-Salazar and Spina 2000). Both Trio and access practitioners enfold students in their programs to bring them new, added social capital. Precollegiate programming is a structural response to low-income youth's social and cultural capital deficits for college enrollment (Hagedorn and Tierney 2002:4). Through mentoring and hands-on, college preparatory activities, Trio and access practitioners have in common the ability to widen students' social networks and give them cultural understanding of higher education. In other words, Trio and access programs deliver the requisite academic and social capital necessary for college enrollment.

What differs between Trio and access is the degree to which they integrate students into college, which has implications for capital mobilization. Trio has free, on-campus tutoring services for their students, which are acknowledged for their success in helping students transition into college (Wallace, Ropers-Huilman, and Abel 2004). Yet because of Trio's tangential relationship to higher education, practitioners have fewer linkages overall to campus faculty, student organizations, and retention programs. This means fewer instrumental returns for Trio students. Trio has been critiqued for helping students enroll in higher education, but not retaining students *through* graduation: "Simply stated, the academic capital that brings a student to the college door may not accrue the requisite interest to sustain him/her through until college graduation" (Hagedorn and Tierney 2002:5; see also McElroy and Armesto 1998). I learned how access practitioners use their institutional networks to better integrate students into college life. Ezra spoke about this:

A lot of the kids that are [in our office] working used to be in our precollegiate program. We've seen them through all the different stages of their education and work life and beginning life. I guess that's the most important thing to me, that I've had a hand in that by initially recruiting them and then the students coming back to work for us, being their supervisor, etc.

By hiring former program participants as student office staff, Erza generates economic and social capital for them. Also, her students acquire additional cultural capital by learning university professionalism and office procedures. Theresa spoke of the same:

One of the great things is, when students do come [here], the connection and the relationship continues. There are students who come back and see our counselors, who just walk in, 'I want to say hi, how are you?' Or who come back for help with registration, financial aid. We actually just hired one of our work-study students who graduated and was in the program last year. She's now working with us.

Like Ezra, Theresa's students acquire new economic, social, and cultural capital as student office staff by assisting with highly-detailed university administrative processes.

Along with hiring students as staff, I learned that access practitioners intentionally take advantage of university retention programs as a means to integrate former program participants into college. Particularly helpful for low-income, first generation students, undergraduate retention programs are designed to engage students through various forms social, academic, and cultural assistance so they may persist through graduation (Seidman 2005; see also Noble, Flynn, Lee, and Hilton 2007; Swail 2003). Here is what past students had to say about retention initiatives: "[The program] taught me so many keys to success in life in general: dedication, perseverance, commitment and most of all accomplishment." Retention programs reinforce the values of hard work and dedication as necessary for college graduation. Retention programs reinforce personal identity valuation:

Thank for being the driving force not only to my academic success, but my growth as an individual. [The program] gave me the strength I needed to grow and to embrace who I was, all the identities included. Every day I know my accomplishments as a person, in both my professional and personal life, is and will continue to be influenced by my [program] family.

Along with creating academic capital and professional development, retention programs develop leadership potential: "The [program] experience takes in people and turns them into leaders. It is designed to help create meaningful, powerful, and profound experiences that last forever and change the world." Meaningful experiences are the cornerstone for student integration via

retention initiatives. Theresa shared her impetus for connecting her high school access participants to retention initiatives as undergraduates:

What are we doing? What are we going to do for [our participants] who are [at our university]? I feel like if we don't have things in place for when they get here, that's a major issue on our part. That's not okay for us to get them here and then not do anything to keep them here. It's a population that needs extra attention, extra help. If we don't do things to—if we don't have resources, we're doing a disservice to them, because we've tried so hard to recruit them here. We need to do everything we can to keep them here.... That's why for me, it's really important, the retention piece, because if our program is bringing in all these students, I want to make sure that we're doing what we can to keep them.

Theresa's feedback gave insight into her deep sense of personal and professional responsibility. Not only must she enroll program participants in college, but as they matriculate as undergraduates she connects them to retention services that provide social and cultural resources for college persistence. Sanders spoke more specifically about his connection to retention programs:

[We] connect the students with an at-risk community, to connect their ethics and values with the values of people struggling on a daily basis to make ends meet – and to understand the cultural dimensions of education. That is, people can value education but if they haven't been educated themselves they can't teach their kids at night mathematics and science.

Sanders' connects former access program participants with historically underserved community outreach projects, also considered an retention initiative. By engaging students in service-learning, they begin to grapple with the larger social forces at play in their lives. "Findings show that low-income, first-generation students tend to benefit more from educational practices that involve them in class presentations or participation in class discussions and from activities that engage them in a collaborative learning process" (Filkins and Doyle 2002). Collaborative learning through retention programs creates additional academic, social, and cultural capital for students.

Along with office positions and retention programs, access practitioners integrate their program participants as undergraduates by asking them to return to their former high schools to serve as role models for current program participants. High school youth appreciate support that

emanates from adult, nonfamily members (Stanton-Salazar and Spina 2003). Also, academically engaged students can influence other students to make schooling a priority (Ream and Rumberger 2008). Theresa talked such an approach: “We’re also going to have student panels... We’ll have former [program] graduates come in and talk to our students who are graduating from high school now about their success.” The student panel platform is how former program participants, who are now undergraduates, enrich the social web of current high school participants by creating a space for shared identity and academic involvement. Theresa described another approach to role modeling:

We just go in and we have our [undergraduate] students, they’re student ambassadors. We try to connect prior graduates from [our high schools] to serve as role models for the [current] students. [Student ambassadors] go to the schools, maybe once or twice a month, once a week, most of them, some of them are biweekly. The [ambassadors] can do whatever is needed. They do presentations, arrange visits to the schools, that kind of stuff... We have I think it’s 10 student ambassadors right now, and we have about 20 schools. So there are some of our students who are super-go-getters and they have, like, three schools each. It depends on what their schedules are. It’s the perfect example of a role model. Most of the [ambassadors] are diverse who came from those same schools, so they have a face and a story, and that relates to that person who you’re working with... That kind of turnover or circle where they’re coming back is super-important for me, because again, the role-modeling stuff, where we can get them out to the schools, especially if they’re recent graduates from the school. They still know students who are there. They have connections and relationships.

Theresa’s past participants who became her undergraduate student ambassadors function as an integral part of the university. They gain added social and cultural capital through expanding their institutional networks and employing the dress, language, and gestures of what it is to role model. Hiring program participants as undergraduate staff, linking them to retention programs, and esteeming them as undergraduate role models are how access practitioners deliver instrumental returns to the students they serve.

The following section moves outside of Colorado to access practitioners in the state of Washington. Jack, Griffin, and Julia specialize in integrating and retaining historically underserved college students. They transformed the notion of role modeling into a full-scale university-based access program run by undergraduate student mentors.

Near-Peer Mentoring

This section discusses how undergraduate students gain unexpected, yet remarkable instrumental returns through becoming *student* access practitioners. “INSPIRE” is an innovative approach to integrate, retain, and create social and cultural capital for access students before and after they enroll in college. INSPIRE is an all-volunteer college access and retention program based on near-peer mentoring. Near-peer mentoring is “...a process where an older or more able peer tutors a younger peer who is close to his social, professional, and/or age level, and whom the younger peer may respect and admire (Singh 2010). Low-income, ethnically diverse students who help other low-income ethnically diverse students have a good track record (Museus 2010). I asked INSPIRE interview participants for anecdotal responses from their program participants. Here is what INSPIRE’s high school students have to say (as posted on the program’s web site) about near-peer mentoring access programs:

[INSPIRE] is a one of a kind organization that is creating real change in my community. Never have I been a part of a group that is so passionate about their cause. Every week we get to see college students who are helping us get into college. [INSPIRE] is part of a greater movement that is going to change my community and the whole country.

Because of weekly visits from his college mentor, the high school student is shown that he can make a difference in his community while in college. Also, the student experiences direct care and support from a relative stranger, meaning people outside his immediate community and inside higher education can be trusted. Figure 9 below features a text from another INSPIRE high school student, Colin, to his undergraduate near-peer mentor:

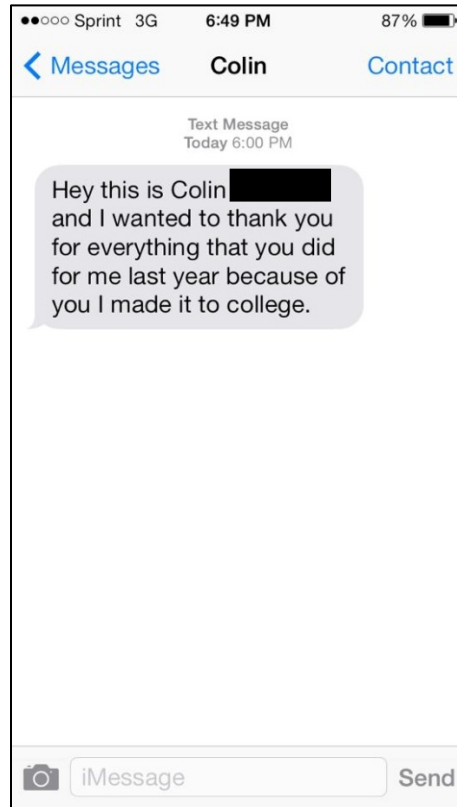


Figure 9: Text from high school mentee to near-peer undergraduate access mentor

Colin’s simple, but profound text meant that his near-peer mentor transferred the necessary social capital for Colin to enroll in higher education. Below is another quote on INSPIRE’s web site from a high school participant:

[INSPIRE] takes students and turns them into leaders who want to help make a difference. My mentor showed me that I can go to college in ways I never imagined. My mentor gave me the confidence to overcome my problems and really encouraged me to succeed. I want to be in [INSPIRE] when I am at [the university].

This high school student received leadership development along with the support to continue her education beyond high school. Her interest in becoming a mentor for INSPIRE means that she can see herself in college.

INSPIRE has a dual-focus approach. First, undergraduate students meet weekly with low-income, first generation high school students to assist them with college enrollment. Second, the undergraduates complete a 300-level course in educational opportunity and social

mobility. Students who are familiar with diversity issues and are engaged with collaborative, academic-based endeavors have greater access to intercultural capital (Nuñez 2009). Jack, the program's faculty advisor, gave his perspective of the program:

Well, it's a program that's class, and it's open to any student, and it has a reputation on campus as being this phenomenon where [undergraduates] get to work together and make decisions and help change lives and they go out into all of these schools and they've got this wonderful relationship with the schools themselves.

Not only do undergraduates participate in applied learning, they function as novice access practitioners. Jack explained:

[Our mentors] show how to navigate the scholarship and funding aspects, how to fill out forms, how to write a competitive essay, how to be successful in taking an SAT exam, how to transition to college, how to be a college-level scholar, all of those types of things... In addition to helping [high school students] get to college, we want to get them really excited about why one goes to college, and once they arrive at college, we want them to understand how to be successful here. We don't just want to get them to this place, we want to get them through this place, because it's not enough that they just get to college. They have to graduate. They have to get a great education as well.

Jack illuminated how access *and* retention are the primary focus of INSPIRE. Integrating volunteer undergraduate students as rookie access and retention specialists has the potential to profoundly expand the social networks of historically marginalized high school students:

Minority youth need not only the same kind of access to supportive networks that middle- and upper-class teenagers have, as well as the networking skills required to utilize them, but also the critical skills to decipher the hidden codes of our society and its institutions: the facility to code-switch from one to another according to the situation (Stanton-Salazar and Spina 2000:250).

Undergraduates who learn to provide the services of access practitioners not only gain instrumental returns; they provide instrumental returns to program participants in terms of academic, social, and cultural development. Jack emphasized that two-thirds of INSPIRE's 500 undergraduate mentors are former program participants in high school. He continued to highlight the social and cultural capital gains of the program:

[Undergraduates] get to learn about what life is going to be like when you get out there, because out there, there are people who don't support what you're trying to do. And you have to find ways to work with them, to work around them, and every

once in a while you have to find ways to knock them aside so you can get done what you want to get done, especially if you're doing something as important as this is. And along the way, in addition to doing that, there have been enormous opportunities for growth and learning and personal discovery on the part of the two populations that we deal with, the kids in the high schools and the kids at college, all of whom are benefiting from learning more about how society works, about advantage and disadvantage in society, about access and lack of access in society. They're getting an additional minor or major out of this other than what they choose to concentrate in academically. There's so much learning that's taking place, some in the classroom, some in the field, some just internally, that it's been very robust.

Jack described a reciprocal relationship of instrumental returns not only for program participants but also undergraduate mentors. It is known that working-class youth can and do function as social capital for each other (Stanton-Salazar 2004). Near-peer mentoring can change the way adolescents and young adults interact. High school students are able to "see themselves" in college because undergraduate mentors, who come from similar backgrounds, learn the culture of higher education and translate it to their mentees. Also, near-peer mentoring provides high school students with greater social and academic networks while undergraduates gain academic and professional experience functioning as university student officials.

I interviewed two founding members of INSPIRE to learn more about their experience as undergraduates in the program. Griffin, who was in his fifth (and final) year with the program no longer mentored high school students. He received one of INSPIRE's 55 student leadership positions. Griffin explained:

The way I see my role is twofold. One, I have fiduciary responsibility from the university's perspective in terms of making sure that [we are] operating legally and effectively and that we're staying within budget and we have enough money to operate, that students are staying safe, that we're playing our role within the university. The other piece, and I would say this is equally important, is, I see myself as working for the students leaders in this program... That's everything from helping them think through how to run an event effectively to figuring out how to order signs or rent a tent for a big event to helping them with life skills, helping them with, how do we cope with being a student and running, at this point, a pretty large nonprofit and learning some skills that the average college student does not know and doesn't actually have a lot of outlets to know.

Griffin described his practice as having learned budgeting, basic accounting, the importance of liability, event planning, undergraduate student development, and the basics of nonprofit management. I asked Griffin what he considered unique about his program:

So many other programs and departments and units at this university are not used to thinking outside of the box, they aren't used to the [INSPIRE] way of thinking about completely shifting our implementation, still staying true to our ideals and mission and values, but the implementation can adjust. That's where you get innovation. So that was an interesting illustration of that challenge of partnering with people where it's more than just about program delivery in terms of partnership. You've got to create partnerships with other programs and other people who share your values and way of thinking about this work as well... Ultimately, we share this goal with others in the region, that we need to solve the education problem in [our] county. There are [two foundations] and a few others, and they're really pulling together, for the first time, all of these different community-based organizations, schools, school districts, government organizations, everything in between to get everyone together on the same page and look at collective impacts, which is really, really great.

What Griffin described is that he learned how to network weave. He understands the importance of relationships and creating innovative collaborations for mutual benefit.

Like Griffin, Julia spent her entire undergraduate career with INSPIRE. In her fifth (and final) year with the program, she described her leadership role as a program evaluator:

Along with growth and high expectations, we need to do really good data collection, all the time. We have a lot of students to collect data on and a lot of indicators to collect data around. And here are sub-challenges around that. So we have the mentors do data our collection because they know the students. So they update the student files we have. And ensuring that 500-600 mentors update data every week, when data may not be the first thing they think of when they wake up, it's a challenge to make it a part of their curriculum and to help them understand cognitively why collecting data is important. To understand what we are doing and whether or not we are actually making impacts. And there are nuances too, it's not just number data, its qualitative data too... So overall, how are we a part of moving the needle?

Julia's undergraduate experience with INSPIRE provided her with the necessary skills and resources to create and deploy program assessment. Also, she engaged hundreds of other undergraduates to learn the value of good data. I found this remarkable and asked her to explain how she got students interested in what often presents as a dry topic. She explained:

We've been doing a lot more of putting it in the curriculum in terms of talking about data and actually pulling up our database during meetings and then connecting that back to questions like, 'Do we really think we're making a difference?' and approaching the curriculum that way. I come in [to class] and say 'I don't really know if the [INSPIRE] makes a difference' and you guys think it does' and then I have them generate their ideas of why they think it works. So I ask questions like, 'How do you know it works?' and 'How do you know your one student going to college is indicative of all these students going off to college? How do we really know?' and 'How do we think about data and how we use data in a way that we are really good consumers of data knowledge period?' I ask these questions generally, not just for [INSPIRE]. We tried this approach and it has been helpful so far.

Julia created support for data collection by posing key questions to undergraduates to pique their curiosity. Instead of data collection being dry or intimidating, Julia acquired the skill set to make the mentor experience interesting and meaningful. Julia's assessment skills applied to INSPIRE's emerging retention efforts as well:

Another success is tracking students into college and if they are successful there. You know so freshman and sophomore retention and then the completion rate. We hadn't originally done a lot of work on our model around supporting that. But we've done a lot better job of tracking which students into [our university] and getting them connected to us here in a very intentional way. And then working with other programs that send students off to other colleges and see what they are doing to support kids that go off to other colleges so that we could model after... So not just add hoc follow up but more intentional connecting of the

mentees when they go off to college to supportive programs on those college campuses.

Julia was trained and guided by Jack, INSPIRE's faculty advisor, to value quality data collection and analysis. Over time, Julia gained additional instrumental returns through teaching younger undergraduates the same values. The kind of academic, social, and professional development undergraduate students such as Griffin and Julia experienced is remarkable. INSPIRE struck me as an unconventional, innovative approach for student-led, university-based access initiatives. Student integration in college diversity programs that deliver intercultural capital through positive cross-racial interactions proves successful in retaining students through graduation (Nuñez 2009).

After speaking with Jack, Julia, and Griffin, I facilitated a focus group of Colorado's undergraduate access mentors who participate in a similar to Washington's program. INSPIRE-Colorado facilitates low-income, first generation undergraduate volunteers as near-peer mentors who work with local, historically underserved high school students. I gathered a strong sense of collective project ownership among the mentors. When asked about their successes with the program, each mentor described cognitive and non-cognitive gains, starting with Gwen:

My biggest success has definitely been, like you know, the personal development as far as getting to work on the team, getting to know people on a different level, getting to bring your own personal opinions and style and creativity to something bigger than yourself. But then also the professional aspect of working with a team, learning how to, you know, articulate yourself, and how to appreciate yourself and what other people have to offer in a group setting.

Gwen reflected on self-presentation skills and inner-group dynamics, both essential for college persistence and for mentoring high school students.

Juan spoke of his motivation:

My biggest success would be the personal growth that comes with volunteering. I feel like I learned a lot and that comes from it being a passion. If I wasn't a volunteer, I wouldn't be as passionate. It means that since I am putting in my own time, I am putting the pressure on myself like a grade or paycheck would.

Juan shared off-record the source of his passion. Through his student-led access program, he overcame his "stuttering problem." Juan is fluent in both English and Spanish and experienced stuttering with both languages. As the student-professional liaison to his local high school administration, Juan was responsible not only for mentoring but also for in-person program progress updates to school administration. With much preparation and practice, Juan found his passion within overcoming his speech impediment while simultaneously attaining professional development and transmitting his skill sets to his high school mentee.

Jorge learned how to do much with very little:

One of my biggest successes as a volunteer was learning to work with the limited resources we have. It develops skills. So many times we sit here and think, "How are we going to do this?!" It's just having the opportunity to even know how to do this is one of the biggest takeaways for me when I leave here.

Jorge is a business-administration major. Learning how to do much with little empowered Jorge with a head start in his career well before college graduation. Pete talks of his experience as a student access practitioner:

My greatest success has been the professional development skills I've gained from the program. Interviewing people will help me a lot, learning to write grants, budgeting, and presenting to schools. All these things have been a huge success. When I turn in my resume somewhere and they'll say, 'INSPIRE-Colorado? Tell me about that.' They will say, 'Wow! That's great!'

Applied-learning is fundamental to student-directed access programs, and undergraduates gain real-world experience while in college. It is precisely this type of timely, relevant experience that motivates students to persist through college while simultaneously empowering their near-peer high school students to enroll in higher education. Angel shared what he gained from the program:

For sure one of the things I will take away from being a volunteer with [INSPIRE-Colorado] is that there is so much that I have learned, not only about myself but others. There are so many things I have grown from as far as personal growth and professional development, like all of it. There are so many things I could name that have helped me to grow. I know there were times it seemed like I was sacrificing a lot, but at the same time I really value being a volunteer in this program specifically because I can see how the volunteer work I am doing translates to the real world... This program itself is really driven on volunteers and it really makes a difference in the real world. It's not just like a college setting. You can really see these things happening. The examples of that could be some of our scholars becoming mentors, things like that... I think being a professional has been a huge thing. Not to say that I am like perfect and I get it right all the time, but I think from where I started to where I am now I think have learned a lot. And I think that is something that has been super important because I feel like now that I know some things I didn't before I can relate it back to the population we are trying to help. And I think that is super important... I just think it's so valuable. So there are like professional sides of things and more personal side of things, like where my passion is definitely like more growth and making sure access is available to everyone really. I think the idea of access is so strong with this program and I think my passion has only been fueled more with this program.

Coming from the demographic backgrounds of the students they serve, Gwen, Juan, Jorge, Pete, and Angel know what it is to be historically marginalized by institutions of higher education. As near-peer mentors they receive necessary social and cultural capital to navigate college and realign their life chances. In turn, they transmit their experiences and capital

acquisition to their high school mentees. Gwen, Juan, Jorge, Pete, and Angel are imbued with the bicultural positionality (mestiza) of access practitioners. “In decoding the system, one learns to appear self-reliant, but to act interdependently, to accommodate the public sphere, and to recenter in the private sphere” (Stanton-Salazar and Spina 200:248). I discovered that access practitioners are creating the next generation of bicultural access practitioners.

Trio and access practitioners share in common the ability to actuate social and cultural capital for program participants. In addition, both programs are successful at enrolling students in higher education. A significant difference between Trio and access is the level to which they integrate program participants in higher education. The variation derives from access practitioners having stronger social networks within universities, allowing their students to receive greater economic, academic, and social capital. The section below discusses an additional difference between Trio and access programs.

Expressive Returns

The previous section discussed the commonalities and differences of how Trio and access mobilize instrumental returns for their students. Lin (1999) specified expressive returns, or the maintenance and reinforcement of possessed resources, as second type of social capital. “Being assured and recognized of one’s worthiness as an individual or member of social group sharing similar interests and resources not only provides emotional support but also public acknowledgement of one’s claim to certain resources (Lin 1999:31). Because Trio programs value individualism, only student participants receive direct services leaving parents and family members with indirect ties to resources. Trio has been critiqued for lack of parental involvement: “...parents are only superficially involved, likely because these programs often lack the time, funding, staffing, and other resources that are required for more substantial involvement” (Perna and Titus 2005:468; see also Huber et al. 2006; Becker 1999). I discovered that access practitioners are intentional about directing resources towards expressive returns to parents through providing culturally relevant programming.

Often low-income, parents do not have middle class experiences (education, attitudes, dispositions) in their background to draw upon and model for their children to be successful in secondary school let alone higher education (Gándara 2002:92). “Although all classes have their own forms of cultural capital, the most socially and economically valued forms are those possessed by the middle and upper classes” and these most valued forms are not taught in school (McDonough 1997:9). Without the many resources derived from educational attainment, parents may inadvertently perpetuate educational inequality for their children. Access practitioners strategize to blend low-income and middle class values. Matty explained:

[School administration] said, ‘Our parents are not familiar with going to college. They don’t understand what it’s like. They’ve never been on a college campus.’ So we created [our access] family visits. We worked with the athletic department, because we wanted them to see that going to college isn’t just being in the classroom, it’s also doing other kinds of things. The athletic department, when I called them, and again, I didn’t call the athletic director, but I knew who could give me the answer, and she said, ‘Oh, I think we can do this.’ So suddenly [all of our parents] had parking passes and tickets to the football game. We were able to do that.

Research supports that lower income parents have fewer resources to draw from when advocating for their children’s needs (Horvat, Weininger and, Lareau 2003). Matty leveraged free parking and football tickets so her students and also their family members could attend. This allowed for low-income, first-generation families to have a strong, positive group identity at a traditionally middle class college experience. Also, it sends a message that *all* families are worthy of education and they belong in college.

Theresa explained how her parent engagement activities include convincing parents to forgo immediate income from their kids working instead of attending college:

We’re able to provide education for the parents, especially for Latino students, especially right now with how the economy is. The biggest thing is [students] are working to help their family. But if we’re able to educate the parents and say, ‘Yes, we know you need [your student] to work, but they can do so much more later if they’re able to go to school.’ So that education piece is a big job.

By Theresa being aware of parents’ concerns and intentionally addressing them creates means for socially marginalized parents to claim their space within higher education through investing

in their child's education. Along with convincing parents to forgo immediate economic capital for deferred returns, Theresa explained the academic content of her parent programs:

All of our workshops are offered in English and Spanish. We offer about four parent workshops a year at each of the schools. They're all evenings. We do an extreme amount of evening activities. The first one we offer is College 101, educating [parents] on what college is, what it takes to get there, the differences and different colleges, two-year, four-year, private, proprietary, public. The second one is how to pay for college. We talk about financial aid, scholarships, private scholarships, savings, private loans. The third one is, we do an actual financial aid night. We bring students in and we fill out financial aid applications. The last one, last year we did next steps. Now that your student's all ready to go, what happens next? But this year we're transitioning a little bit, and our last one is going to be College 101 but for juniors, to get them a little bit earlier, to get them thinking a little bit earlier.

Theresa understands the cultural importance of offering dozens of parent workshops featuring critical information in both English and Spanish. Many students in access programs are bilingual, although many parents are not. Offering parent programs in family members' first language is a way to transmit institutional recognition of cultural pluralism. Ezra also spoke of English-Spanish parent presentations:

We have presentations for parents on navigating the school system, financial aid 101, how to finance my student's career, student development, all kinds of different presentations for the parents, both in Spanish and English. So we do provide Spanish translation or presenters who will do the presentation in Spanish.

Featuring native languages at university-funded access events means public recognition of valuing parents' and families' full identity.

Along with culturally inclusive presentations, Ezra spoke of how she utilized former program parents as role models for new program parents:

When we have parent panels, we'll have parents who will come in and do presentations for free. Former [access] students who have gone through our program who are either currently at [our university] or have graduated, we'll have their parents come in and talk to our current parents and let them know, 'This is what you can expect when your students goes to the [access] program.' and 'This is what you can expect when your student goes to college.'

Ezra employed her more experienced parents to enlist other low-income, first generation parents in the program. Secondary and postsecondary partnerships who utilize Latino parents

as informed allies in college planning are proven to narrow information gaps, enhance familial culture, and expand social and academic networks (Auerbach 2004).

Finally, Ezra discussed how parent participant is not optional, but required in her access program:

Ours is a student-parent component and the parents are required to attend. If they don't attend, the student can't be in the program, literally. Yeah, that's the deal-breaker. If the parent can't participate, the student can't participate. We've made a few, a few exceptions, but that's only been because the parent has no transportation and there is someone who's willing to bring the student [to campus], like an aunt or an uncle or a college professor. Because we had a college professor who was connected to an "I Have a Dream" family whose student is in our program, and that college professor would bring the student to [our program]. We make a few exceptions, but not many. Unless a parent gets all that information, they're not going to be able to help their student.

I found Ezra's parent participation requirement compelling. Doing so encourages and supports parents as they push high educational aspirations for their kids. In addition, parents receiving direct support from a university may help to remove barriers and dissolve stereotypes between low-income communities and institutions of higher education (Engle 2007). Also, developing mutual understanding between people and institutions is a form of capital (Yonezawa, Jones, and Mehan 2002).

Programs conceived and designed without the needs and characteristics of the participants in mind often miss the mark for underrepresented populations. Access practitioners are responsive to parents' needs by fostering positive ethnic identity through culturally relevant programming. This way, access programs offer expressive returns to parents through reinforcement of familial culture. This sends a two-fold message to students and families. First, every person in a community is important. Second, the cultural boarder between low-income communities and universities does not have to be antagonistic.

The purpose of this study was to explore the framework of Colorado's university-funded access programs in order to describe how they function within and between institutions of higher education. This chapter featured my research findings. I learned that access practitioners are

bicultural. They are closely allied with their low-income, first-generation students and also fluent in translating the culture of higher education. I discovered that Colorado's access programs grew directly out of Trio's successful history of addressing educational inequality, resulting in stronger community connections for access practitioners. Interview participants shared their strategies of providing social and cultural capital for program participants. High school students who work or volunteer for access programs as undergraduates are becoming the next generation of access practitioners. Last, I learned how access enfoldes parents and families into their programs with a high regard for cultural pluralism. The conclusion chapter discusses the theoretical implications of this work and recommendations for both practice and future research.

CHAPTER V

CONCLUSION

The study set out to explore the framework of Colorado's university-funded access programs and how they function within and between institutional settings. The study identified the origin and structure of access programs along with practitioner values, identity, motivation, and outreach strategies. Also, I sought to identify key differences between access and Trio programs, which were defined structurally and programmatically. Because university-funded access programs are so recently developed, they have not yet been examined by researchers. The study sought to answer the following questions:

1. What is the new model for public, university-funded access programs in Colorado?
2. What are the values and experiences of access practitioners?
3. How is the new model functionally and fundamentally different from foundational precollegiate programs such as Trio?

This chapter discusses empirical findings, theoretical implications, and provides recommendations for both Trio and access practitioners as well as institutions of higher education. The chapter closes with limitations of the study and concludes with pathways for future research. The study's main empirical findings were summarized in Chapter IV: Network Analysis and Social Capital. Below is a synthesis of the empirical findings in answer to the research questions.

Colorado's new model for public, university-funded access programs is a structural response to a social problem. Access programs are simple by design, inexpensive, and highly-relational. The model formed through grassroots organization, it is flexible and adaptive to both communities and institutions. Finally, access programs address the current and future influx of low-income, first generation, ethnically diverse youth. Access practitioners are highly resourceful, adaptive, creative, and willing to work across traditional boundaries. They serve as

cultural translators between low-income, first-generation communities and institutions of higher education. Access practitioners work inside higher education to shift practices towards cultural pluralism; and they work outside higher education to create new allegiances to the educational opportunity movement.

Here are the 10 key areas in how access programs can be transformational:

- Access practitioners practice allyship by working across traditional divides. This changes the way local communities and institutions of higher education view each other towards a more culturally inclusive relationship on both ends.
- Access programs simultaneously can meet the needs of students, families, and schools by providing timely, relevant information and services.
- Access practitioners employ active listening to provide services in a way that students, families, and schools define as important, needed, and culturally relevant.
- Access programs provide social and cultural capital acquisition for students beyond their high school years.
- Access programs esteem and situate low-income, first generation families as an important group within higher education culture and practice.
- Access programs assist with creating a college-going culture at historically underserved schools.
- Access practitioners leverage local resources, keeping program costs minimal while creating connections within and across communities.
- Access practitioners reduce university overhead costs by creating volunteer staff versus paid professional staff, by having food, transportation, and activity materials donated.
- Access programs increase university student integration and help diversify the student body.

- Because of access programs universities can lay claim to doing their part to assist equal educational opportunity, rather than relying on others to do the work.

Access programs have strengths but also they have limitations. Access practitioners are highly charismatic individuals who serve many needs across many people. Access programs often have only three or four staff members. Creating dynamic local networks is emotionally and physically demanding. Hinging a program's success on a skeleton crew of potentially overextended practitioners leaves a program vulnerable to high staff turnover. Another challenge lies in collecting meaningful data. All access programs in the study collected data on participant satisfaction, practitioner contact hours, and activity/program satisfaction. However, not all programs consistently collected data on program impact. In other words, access programs lack comprehensive metrics. Not having quality data leaves a program unaware of its effectiveness, of needed adjustments in strategy or program deployment, and vulnerable to losing financial support.

Comprehensive data collection presents a significant difference between Trio and access programs. Trio programs are known for having high standards and quality evaluation criteria. Trio programs continuously and consistently provide detailed reports on program impact and effectiveness. Another difference between Trio and access programs is their ability to see their high school participants through to college graduation. This difference is structural rather than preferential. Trio programs were neither designed nor resourced for college retention efforts. Historically, university advisors and student affairs professionals are responsible for providing retention services. Having grown from inside higher education, access programs were designed to provide their own retention efforts and/or connect their high school students to established college retention programs.

Parent/family engagement remains a significant difference between Trio and access. Like retention efforts, Trio was neither designed nor resourced for providing services to parents. As discussed in the previous chapter, this is a fundamental limitation of Trio programs. Access

programs were created and funded with parent engagement as a priority. Access' family programs validate the parent/care-giver experience and provide critical information in a way that honors and respects cultural differences. A final difference lies in program funding. Federal Trio programs are funded by millions of taxpayer dollars. Access programs rely on minimal university funding and must supplement their resource-base by enfolded non-profits, businesses, and corporations for financial support.

Theoretical Implications

Literature on educational opportunity programs often features discussion of social capital generation. Lin's (1999) literature combining social capital and network analysis was invaluable. It provided the framework for examining Trio and access programs from a network analytic perspective, revealing patterns and differences in communication and connectivity. Also pivotal to this thesis, Krebs and Holley (2006) gave language and conceptualization to the remarkable relationships and collaborations experienced by access practitioners. Finally, Stanton-Salazar's body of research gave clarity to the responsibilities of institutions and individuals in supporting and mentoring low-income, first-generation, ethnically diverse youth. Stanton-Salazar's most recent article (2011) calls upon universities and alumni to do their part to redress educational inequality; however, his article stops short of specifying action or structure. The study presented in this thesis seeks to address this omission by adding literature on public, university-funded educational inequality programs. I provide empirical knowledge directly informed by university officials and students who created such programs

Recommendations

This thesis relies on empirical findings to make recommendations based on the notion of collective impact. Collective impact is the intelligence that emerges from broad cross-sector coordination:

Shifting from isolated impact to collective impact is not merely a matter of encouraging more collaboration or more public-private partnerships. It requires a systemic approach

to social impact that focuses on the relationships between organizations and the progress toward shared objectives (Kania and Kramer 2011:39).

Access practitioners have demonstrated their willingness to work across institutional and cultural divides, yet I documented no intentional relationship or shared objectives with Trio programs. My first recommendation is for access to work in partnership with Trio. Not to create “more” programs per se but rather to provide needed services and to leverage resources. As discussed in the last chapter, Trio has been critiqued for its lack of parent programs. Access and Trio programs often serve the same low-income communities. Access practitioners can be intentional about including Trio parents in activities rather than providing de facto services if a Trio parent happens to attend an access family event.

Also, access practitioners can identify and connect with Trio programs at their university. The idea is to provide additional undergraduate retention-based resources for Trio students once they enter college. Trio was neither designed nor resourced for intensive undergraduate student integration in higher education. However, co-curricular experiences via retention programs are already in play at universities. Access practitioners, who already link their students to retention services, can include Trio students in retention efforts in order to increase the chances for *all* low-income, first-generation students to persist through graduation. Finally, access practitioners need to be forthright by informing and including Trio practitioners about local connections, partnerships, and resources. Access can show Trio how to network weave and create collaborations for mutual benefit, this way both programs will strengthen.

My second recommendation is for access programs to learn and acquire program evaluation techniques from Trio programs. Common evaluation elements could include (but not limited to) program effectiveness in high school graduation and college enrollment, effectiveness in creating participants’ personal agency and capital requisition as well as participants’ college graduation rates due to participation in retention programs. Such program

evaluation would maintain access' strength of flexibility while simultaneously reducing program insecurity and promoting program funding.

My final recommendation speaks directly to the sustainability and transferability of access programs. As mentioned in Chapter I, the fastest increasing demographic throughout the U.S. is ethnically diverse people from low income, first-generation backgrounds. It is both necessary and beneficial for institutions that hold capital, status, and power to become responsive to the needs of their constituencies (Hagedorn and Tierney 2002). Access programs are nonproprietary with several transferrable aspects including network weaving, culturally relevant programming, and near-peer mentoring. Enhancing or catalyzing new networks is foundational to Colorado's access programs. Such activity and practice is exportable to any community and comes with the added benefit of being highly adaptive to local needs and resources.

Providing culturally relevant programming is essential to access programs and also readily transferrable. Working with area non-profit organizations and university faculty who are knowledgeable about multiple perspectives and social worlds provide the means for accurately addressing families and students' needs. Lastly, all colleges have undergraduate students who participate in volunteer experiences. Educational outreach-based, near-peer mentoring experience can be created at any college, particularly if it is grounded in academics by crafting class curriculum on social justice, educational opportunity, and leadership development.

When considering program transferability, it is also necessary to think of program sustainability. There are several means to actively sustain access programs at public universities. Involving high-level university administration and faculty promotes program visibility and university sponsorship. Also, directly linking access programs to a university's strategic priorities (e.g. providing co-curricular student experiences) further strengthens institutional support. Program sustainability is directly tied to quality data collection and analysis. Doing so and providing regular reports can demonstrate increases in diverse student enrollment,

retention, and graduation to university administration. As noted in Chapter IV, the INSPIRE program in Washington submits quarterly reports to the university's cabinet. Finally, access programs could engage local media for stories and press releases about their successes and events. This provides excellent public relations for the university by demonstrating to communities that higher education truly cares people at the margins of society.

Limitations and Additional Research

The study has offered an exploratory perspective on the emerging framework of university-funded access programs conducted through purposive sampling across multiple sites in the states of Colorado and Washington. As direct consequences of the methodology, the study encountered two limitations that need to be considered. First, direct interviews and/or focus groups need to be conducted with Trio and access students who experience retention programs. Although I was not seeking to learn from this specific experience, Trio, access, and retention programs may benefit from such research in terms of program focus and improvement.

Also, employing extreme case selection in research methods are considered by some nonliteral, meaning the utility of the case selection is limited to the situation in which it occurs – otherwise nontransferable. However, the extreme case interviews featured in the study deliver foundational, practical knowledge for access program origination and development. The idea is for access practitioners to *not* reinvent the wheel but rather to know fundamental values and engagement strategies that work to reinforce local connections and deliver social capital towards family engagement and college graduation.

There are several suggestions for additional research. First, Stanton-Salazar's research could be continued by documenting access program models throughout the U.S. In his most recent article, Stanton-Salazar (2011) called for universities to change their existing power structures to be more responsive to the needs and aspirations of low income, first-generation,

ethnically diverse students. Researching and documenting access program models would serve as a direct response this call.

Second, this study suggested that access programs are creating new and different social networks for low-income, first-generation youth. Documenting this phenomenon would be a further continuation of Stanton-Salazar's research. Third, whether or not access' family programs have an impact on parents supporting their student participant should be assessed. This could be done through conducting focus groups during parent-teacher conferences or by administering a short questionnaire at a family event, at the end of the school year. Fourth, access programs work across institutions and communities to enroll and graduate students from college. Evaluating program effectiveness would measure how access programs are effective in transitioning communities toward a college-going culture. This evaluation could take place as exit interviews with graduating high school seniors. Finally, while conducting the study additional access programs have emerged. College Track is a new, non-profit access model that is funded by local school districts to help inspire and enroll historically underserved youth in higher education. Additional research could be conducted to inquire, document, and assess this model's relations, structure, and effectiveness.

Despite panoramic media images of Colorado's beauty and abundance, there exists a growing underclass of low-income, first-generation youth who are left on the outskirts of educational and economic attainment. The benefits of a college education are known and public universities in Colorado have begun to shift institutional priorities by providing direct means for low-income, first-generation families to join higher education. For these programs to be sustainable and grow, they must develop evaluation strategies to inform program improvements and document success.

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