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2015

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UNIVERSITY OF CALIFORNIA

Los Angeles

Focused but Flexible: A Multiple Case Study of the Scale-up of
the Puente Program in Three Texas Community Colleges

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy
in Education

by

Elizabeth Jane Alvarado

2015

ABSTRACT OF THE DISSERTATION

Focused but Flexible: A Multiple Case Study of the Scale-up of
the Puente Program in Three Texas Community Colleges

by

Elizabeth Jane Alvarado

Doctor of Philosophy in Education

University of California, Los Angeles, 2015

Professor Patricia C. Gándara, Chair

This dissertation study is about the scale-up of programs intended to promote retention and transfer for underserved groups of students at community colleges. For over thirty years, the Puente program is one such program that has focused on increasing retention and transfer rates for Latino community college students in California. In 2012, with growing dissatisfaction of student outcomes, the Texas Higher Education Coordinating Board and Catch the Next (CTN)—a national non-profit organization dedicated to promoting college success for at-risk students—facilitated the implementation of the Puente program in three Texas community colleges. This dissertation study uses multiple case study methods to examine the organizational change process and its effects on the scale-up of the externally developed Puente program in three Texas colleges. The engaging research questions ask if and how programs developed in one setting can be successfully scaled-up to new state and campus contexts.

The trends presented in these case studies suggest that efforts to scale-up the externally developed Puente program depended on a flexible but focused approach, which combined an adherence to central design principles with accommodations to the state and local contexts. On a theoretical level, these results confirm and advance Levine's institutionalization-termination theory by clarifying, expanding, and extending the body of knowledge derived from a contextual change perspective. To the extent that this study establishes a better understanding of strategies that facilitate the scale-up of a Latino focused transfer program, especially with regard to Puente's approach to professional development, the results of this analysis can also enable more comprehensive educational planning.

The dissertation of Elizabeth Jane Alvarado is approved.

Robert Cooper

Concepción Valadez

Tatiana Melguizo

Patricia C. Gándara, Committee Chair

University of California, Los Angeles

2015

To John, Maria Martha, and all those who lift while they climb.

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ACKNOWLEDGMENTS

There are many people that I am appreciative of in the making of this dissertation.

First, I want to thank my husband, Bennette Burks, for his love and support throughout this academic journey. Around every twist and turn, he guided me forward and I could not have done this without him. I also want to thank my two lovely girls, Avery and Nyla, for their unconditional love and spirited approach to life and learning.

Second, I owe thanks to my colleagues and mentors at UCLA who supported me with their assistance and encouragement. A special thank you to my adviser, Dr. Patricia Gándara, who contributed to the focus and development of this study. Her contributions served as an example of academic excellence and a constant reminder of the importance of this work. I also want to thank Tatiana Melguizo, Robert Cooper, Rick Wagoner, and Concepcion Valadez, who provided insightful suggestions for strengthening this study. Additionally, I am thankful for those at UCLA, including Amy Gershon and Harmeet Singh, who provided essential technical assistance.

Third, I am thankful for my friends and family who provided encouragement throughout this journey. I am especially thankful for my parents, Carla and Fernando Alvarado, and my sister, Christine Alvarado, and her family.

Finally, a special thank you to those at Puente and CTN who supported me in this endeavor and made the time to participate in this study. Your dedication to your work inspired me to be more steadfast in my own academic pursuits.

VITA

Elizabeth Jane Alvarado is a Doctoral Candidate at the Graduate School of Education and Information Studies at the University of California-Los Angeles. Her research interests include education policy, social justice leadership, and organizational change with a focus on creating equitable educational opportunities for students in underrepresented minority groups. Currently, Ms. Alvarado is the Director of Research and Evaluation for Catch the Next, a non-profit organization that promotes college success for at-risk students. Prior to this, Ms. Alvarado worked as a lead Research Associate for the California Community College Transfer Study at the Civil Rights Project/Proyecto Derechos Civiles. Additionally, Ms. Alvarado holds a M.Ed. in Education Policy and Management from the Harvard Graduate School of Education and a B.A. in History from the University of Wisconsin-Madison. From 2005-2007, Ms. Alvarado worked as a bilingual teacher in the Austin Independent School District and she holds a bilingual elementary teaching certificate. Her recent publications include, “Building Pathways to Transfer: Community Colleges that Break the Chain of Failure for Students of Color” with Patricia Gándara, Anne Driscoll, and Gary Orfield in 2012. In 2013, her chapter “Preparing Pre-Service Principals for Social Justice Leadership through Bridge Building: A Conceptual Framework for Cultivating Authentic Collaboration Between Urban Schools and Urban Communities” was published in the book *Bridge Leadership* by Information Age Press with Robert Cooper.

CHAPTER 1

INTRODUCTION

You have been telling the people that this is the Eleventh Hour, now you must go back and tell the people that this is THE HOUR.

And there are things to be considered...

Where are you living?

What are you doing?

What are your relationships?

Are you in right relation?

Where is your water?

Know your garden.

It is time to speak your Truth.

Create your community.

Be good to each other.

And do not look outside yourself for the leader.

Then he clasped his hands together, smiled, and said, "This could be a good time! There is a river flowing now very fast. It is so great and swift that there are those who will be afraid. They will try to hold on to the shore. They will feel they are being torn apart and will suffer greatly. Know the river has its destination. The elders say we must let go of the shore, push off into the middle of the river, keep our eyes open, and our heads above the water. And I say, see who is in there with you and celebrate.

At this time in history, we are to take nothing personally. Least of all, ourselves. For the moment that we do, our spiritual growth and journey comes to a halt.

The time of the lone wolf is over. Gather yourselves! Banish the word struggle from your attitude and your vocabulary. All that we do now must be done in a sacred manner and in celebration.

We are the ones we've been waiting for.

—Oraibi, Arizona Hopi Nation

Statement of the Problem

The American system of meritocracy is intended to ensure that with hard work and individual resolve anyone—regardless of background—has an equal opportunity to achieve his or her aspirations (Johnson, 2014). Public education—“the great equalizer of the conditions of men [and women]”—was designed to assure that achievement is independently earned, not tied to one’s background (Mann, 1848). As the value of a high school diploma has been superseded by a college degree, higher education has become a vital part of securing access to the middle class (Orfield, Marin, & Horn, 2005). The creation and expansion of higher education in the U.S.

is often viewed as a process of democratization: the market and the federal and state governments secure a system of public higher education that enables individuals to fulfill their aspirations (Karen & Dougherty, 2005). This system has inspired overall growth in postsecondary access, institutional innovation, and quality (Carnavale, 2008). But, as the numbers and types of people attending college have increased, the system has produced marked differences in college completion rates along the lines of race and class (Gándara & Contreras, 2009; Karen & Dougherty, 2005; Kurlaender & Flores, 2005).

Stratification and underachievement among minority groups in the postsecondary system has been exacerbated by the growth in postsecondary education that is occurring from the bottom-up. According to Anthony Carnavale (2010) at the Center on Education and the Workforce at Georgetown University, “African-American, Hispanic, and low-SES students are crowding in at the community colleges and the less-selective four-year colleges—and being crowded out by limited resources as these institutions try to serve more and more students with less and less money” (p.117). This bottom-heavy expansion in postsecondary access has tracked minorities and lower-income students into less selective colleges and ultimately into careers with lower earnings and status. Moreover, many qualified students from less-advantaged backgrounds get lost along the way from high school to college, resulting in significant levels of underachievement or under-matching between capable students and less-selective colleges. Students who could have gone to four-year colleges but attend two-year colleges have lower educational attainment than they would have if they went to a four-year college first (Dougherty, 1994; Grubb, 1991; Orfield, 1988).

This is particularly the case for Latino¹ students—the nation’s fastest growing racial/ethnic group (Gándara & Contreras, 2009). In 2003, Latinos became the largest ethnic group in the United States. In 2009, Latinos represented 15% of the U.S. population or 49.6 million residents. Despite their large numbers, Latinos are among the least likely ethnic group to graduate from college with a four-year degree (Gándara & Contreras, 2009). More than 30 percent of whites and nearly 50 percent of Asians have earned baccalaureate degrees, compared with only 18 percent of African Americans and 12 percent of Latinos. Moreover, recent statistics indicate that the access of Latinos to postsecondary education is increasing, but Latinos actually are losing ground relative to their growing population shares. From 1990 to 2013, the percentage of 25- to 29-year-olds who had attained a bachelor's or higher degree increased from 26 to 40 percent for Whites and from 8 to 16 percent for Latinos. The gap between Whites and Latinos actually widened from 18 to 25 percentage points (U.S. Department of Education, 2014).

Moreover, Latinos are diminishing in their relative shares in four-year college enrollments, especially at selective institutions. Latinos increasingly are over-represented in community colleges and increasingly under-represented in four-year and selective colleges (Carnevale & Strohl, 2010). Between 1994 and 2006, the Latino share of community college enrollment increased from 11 percent to 19 percent and their share of enrollments at the “Less” and “Non-Selective” colleges from 6 percent to 8 percent. Even in the “Less” and “Non-Competitive” colleges, where African Americans are enrolled at twice their share of the high school class, Latinos are enrolled only at 75 percent of their share of the high school class. In “Competitive” colleges, the ratio of Latino enrollees to the Latino share of the high school class

¹ The word *Latino* refers to a person (male or female) of Latin-American origin living in the United States. Individuals in this pan-ethnic group are from a variety of national, ethnic, racial, and social and class background, hold different immigration and citizenship statuses, speak different dialects, and vary by time of arrival in the United States (Gandara & Contreras, 2009).

has remained at roughly 50 percent. The ratio of the Latino eighteen-to-twenty-four-year-old population share to enrollments in the “Very” competitive and “Most” and “Highly” competitive colleges dropped from 70 percent and 60 percent to 38 percent and 44 percent (Carnavale & Strohl, 2010).

This bottom heavy increase in Latino participation in postsecondary education is especially worrisome given the low rate of college completion that is associated with attending less selective colleges—especially community colleges. Based on an analysis of the nationally representative Beginning Postsecondary Students Longitudinal Study of 2004-2009, researchers at the National Center for Education Statistics found that only 25.9% of Latinos who began college between 2003 and 2004 compared to 38.7% of their Whites counterparts completed at least an associate degree within six years (Radford et. al, 2010). These statistics belie the high academic aspirations that are held by many Latino students. For example, Nuñez and colleagues (2011) found that half (51%) of Latino students who enrolled in community college did so with the goal of transferring to a four-year college or university. In contrast, only 14.2% of Latino students who began at community colleges between 1995 and 1996 were enrolled at a four-year institution or had earned a bachelor’s degree within six years (Radford et al., 2010).

In fact, research by Dougherty (1994), Grubb (1991), Orfield (1988), and others have consistently shown that the chances of attaining a baccalaureate degree are significantly reduced when students begin their postsecondary education at a community college. This disadvantage is emphasized for poor and minority students, who are disproportionately represented in the community college sector (Bailey, Jeong, & Cho, 2010). Although transfer rates are difficult to calculate², there is broad agreement across studies that Black and Latino students transfer at

² There is no clear consensus in the field about which measure of transfer rates is most accurate. They range from student survey responses to rigorous formulas for calculating transfer rates. The formula created by the

significantly lower rates than white or Asian students (Alfonso, 2006; Dougherty, 1992; Gándara, Alvarado, Driscoll, & Orfield, 2012; Long & Kurlaender, 2009).

On the other hand, community colleges can serve as a second chance for Latino students and other historically underprivileged groups to overcome past educational inadequacies. Overall, community college students are more likely to be students of color and to be the first in their family to attend college than their peers who start at four-year colleges (Dougherty, 1992). These students are also more likely to have attended primary and secondary schools with inadequate resources and thus leave high school less prepared to tackle college-level work than more advantaged young people (McJunkin, 2005). Net of students' original aspirations, attending a community college is associated with a greater increase in academic aspirations than not going to college at all, but a smaller increase than that for students starting at four-year colleges (Leigh & Gill, 2004). Increases in academic aspirations are greater for minority and low socioeconomic students than for higher socioeconomic white students (Leigh & Gill, 2004). In this way, community colleges remain a powerful institution of post-secondary education for Latinos and other disadvantaged groups.

Transfer and the Multiple Missions of the Community College

When they first appeared in the early 1900s, American community colleges were largely liberal arts oriented institutions providing students with the first segment of their baccalaureate training (Cohen & Brawer, 2009). But over the years, this has changed. Today, the mission of the community college is far from straightforward; most colleges offer a wide-ranging curriculum, with different blends of vocational, career, adult education, remedial, agricultural, and liberal arts

Transfer Assembly Project, is widely used. Its formulation is all students entering the community college in a given year who have no prior college experience and who complete at least 12 college-credit units, divided into the number of that group who take one or more classes at the university within four years after college entry (Szelenyi, 2002, p. 5-6).

programs. Dougherty and others have noted that partnerships with industry and local and state governments have resulted in the development of relatively short-term, certificate-oriented training programs (Dougherty, 1994; Rhoads & Valadez, 1996) while financial pressures have made this sector of education increasingly attractive to administrators (Grubb et al., 1997; Bragg, 2001). As a result, the traditional transfer function of the community college—its role in providing a bridge to the four-year college and ultimately to the baccalaureate degree—has been declining in overall importance (Shaw & London, 2001).

Although most community colleges espouse the transfer mission to some extent, they vary in the degree to which they enact programs and services toward this goal. Accordingly, transfer rates vary between community colleges. The colleges with the highest transfer rates tend to be located in suburban areas with a significant enrollment of middle class and non-minority students. In contrast, the lowest transfer rate community colleges tend to be located in urban areas and are majority-underrepresented minority. For example, in a study that examined the flows of students in Southern California from the strongest- and weakest-performing high schools to community colleges by their levels of segregation, Wenzel and Marquez (2012) calculated that the colleges with the lowest six-year transfer rates (ranging from 15 to 33%) predominantly served underrepresented minority students. In contrast, the community colleges with the highest transfer rates mainly served white or white and Asian students. At these schools, the overall six-year transfer rates ranged from 45 to 58%, averaging 49%. Asian and white students had higher transfer rates, 60% and 51%, respectively. Yet, even at some of the institutions thought of as flagship transfer community colleges, Black and Latino transfer rates were 12 to 20 percentage points lower than the average transfer rate.

Advocates of the community college suggest that these institutions—particularly in their comprehensive missions—serve an important and valid function within the larger structure of the American educational system (Shaw & London, 2001). Some early scholars focus on the increase in access to postsecondary education that community colleges provide (Medsker, 1960; Eaton, 1988). Others suggest that community colleges can and do serve the economic needs of individual students and the broader economy by training mid-level workers (Cohen & Brawer, 1996; Kane & Rouse, 1999; Grubb, 1996). While this may be the case, when one considers the fact that most Latino students arrive at community colleges with the goal of transferring to a four-year college or university and the enormous gaps in transfer and baccalaureate completion rates, it becomes clear that the transfer function also stands to benefit these students significantly. As a result, there are significant concerns related to equity in transfer for underrepresented racial/ethnic groups.

Transfer as a Pathway to Social Mobility

A focus on community college transfer is also important because community colleges are a vital pathway to social mobility for disadvantaged groups in American society. As previously noted, community colleges have increasingly become the gateway through which poor and minority students enter the postsecondary educational arena. For example, roughly half (46%) of all Latinos who choose to enroll in post-secondary education enroll in two-year colleges (Fry, 2011). Moreover, the backgrounds of community college students vary in important ways from those attending four-year schools. Community college students are disproportionately drawn from poor and working-class backgrounds (Dougherty, 1994, Goldrick-Rab, 2007, Mullin, 2012, National Center for Public Policy Research, 2014). Students are also more likely to have attended primary and secondary schools with inadequate resources (McJunkin, 2005). Lastly,

students at public two-year schools are less likely to have college-educated parents than students at four-year schools (Community College Research Center, 2015). As Shaw & London note in their seminal work on community college transfer culture, “for these populations, community colleges are often the first step toward acquiring one of our society’s most effective, but by no means assured, tickets into the broad middle class: a bachelor’s degree” (p. 22).

Despite the recent economic recession, baccalaureate degrees remain important in obtaining living wage employment in the postindustrial American economy (Carnavale, 2010). There is some economic payback for as little as even one year of full-time college work (Kane & Rouse, 1995, 1999). Earning an associate degree leads to positive increases in wages in almost every field, compared with earning some credits but not obtaining a credential, but the magnitude of these effects varies by field (Dadgar & Weiss, 2012). For example, researchers at the Community College Research Center found that while earning an associate degree in the humanities and social sciences increases earnings by 5 percent, earning an associate degree in nursing increases women’s earnings by 37 percent (Dadgar & Weiss, 2012). At the same time there is a strong, positive, linear relationship between years of education and wages (Grubb, 1996, p. 89–90). Graduation from four-year colleges leads to higher earnings and a leg up in the competition for high status careers and leadership roles. According to Anthony Carnavale at the Georgetown University Center on Education and the Workforce (2010), skipping an associate degree will cost a high school graduate half a million dollars in earnings, and skipping a bachelor’s degree will cost \$1 million in potential earnings over a lifetime. Economically speaking, access to the baccalaureate degree promises to remain critically important to social mobility.

Transfer is also important because the limited level of racial and socioeconomic diversity on competitive four-year college campuses directly challenges the commitment to upward economic and social mobility at the heart of the American ideology of merit and social mobility. Over the years, largely as a result of the national and international fight for prestige rankings, competitive four-year colleges have become more differentiated, and individual colleges become more internally homogenous by test scores, SES, race, and ethnicity. These trends are concerning given the educational benefits of student body diversity and the central role that four-year colleges and universities play in the training of future leaders.

In *Grutter v. Bollinger* (2003), the U.S. Supreme Court endorsed the use of “affirmative action”—carefully implemented race-conscious policies—as a tool for increasing the representation of students of color and for furthering institutional missions. Affirmative action is a way of leveling the playing field by taking into account the institutional disadvantages that minority student experience in preparing for college such as inadequate resources and limited access to advanced coursework. While leaders have sought to implement affirmative action as a tool for increasing the representation on campus of students of color (Bowen & Bok, 1998), bans on race-conscious policies in education have limited their capacity to effectively do so. Bans on affirmative action have been in place in four states: Texas, California, Washington, Florida, and Michigan. As a result, underrepresented minorities in these states disproportionately rely on community colleges to access competitive four-year colleges and universities.

California Community Colleges and the Puente Program

California depends more heavily than any other state on the community colleges as a way to incorporate underrepresented minority students into the higher education system and provide the opportunity to transfer to a 4-year institution to earn a bachelor’s degree and beyond. Higher

education in California operates largely in the public sector under the state's Master Plan for Higher Education, which sorts students by test scores and grades into a tripartite hierarchical system. The University of California schools (UCs) select applicants from the top 12.5 percent of high school graduates. The California State Universities (CSUs) select from the top 33.3 percent of high school graduates. The community colleges then admit any student capable of benefitting from instruction. The California Master Plan also articulates a transfer process that is intended to make up for the fact that only a third of the state's students can start at four-year campuses and a much smaller fraction of its nonwhite students. As a result, large numbers of University of California and California State University graduates are former community college students. But, decades of research show that most disadvantaged and minority community college students in California who aspire to transfer never do achieve this goal.

For example, Gándara and colleagues (2012) tracked the 1996-1998 entering cohorts of students in California community colleges who were between 17 and 20, held a standard high school diploma, expressed intent to transfer, and had taken at least one transfer course. After 6 years, 51 percent of Asian students and 45 percent of white students had transferred to a 4-year college, but only 31 percent of Latino students had made the transfer. Moreover, the formula used for calculating transfer rates used in this study did not include transfer students in developmental education; consequently, the transfer rates are inflated. Another study, conducted by Horn and Lew (2007) followed a cohort of 514,376 students, who entered a California community college for the first time in 2000-01 over the course of six years to determine their transfer outcomes. They found that 17% of the cohort had transferred by 2006 and that another 6% had become transfer-ready. Of the transfer-ready group, two-thirds actually transferred to a

four-year university. Even within this small percentage, Black and Latino students comprised a disproportionately lower percentage of the transfers.

The problem of low transfer rates in California is not new, nor has it gone unnoticed by policymakers, administrators, and others. One of the most effective strategies that California community colleges employ to promote transfer for academically underprepared³ students is support programs that offer a full-service experience to help them get on track early and feel supported for at least one critical year (Gándara et al., 2012; Tinto, 1998, 2000, 2003; Zhao & Kuh; 2004). The Puente program in California is one such program that has proven successful in increasing student persistence and transfer for academically underprepared Latino and other underrepresented community college students. Started in 1981, Felix Galaviz and Patricia McGrath, a counselor and English instructor from Chabot College in Hayward, California, created the Puente program to address the problem of low Latino transfer rates to four-year universities (McGrath & Galaviz, 1996). Based on their experiences, Galaviz and McGrath designed a program that would provide Latino community college students with personal and academic counseling, culturally relevant classes geared to strengthen academic skills, and mentorship to create a sense of “belonging” (Meznek, McGrath, & García, 1989). It is important to note that Puente is now available to all students, not just Latinos, seeking its services, although it retains its Latino focus.

There are three primary components to the Puente program: the writing component, the counseling component, and the mentoring component. Puente students are required to take two consecutive literature and writing classes where they build confidence in their writing skills in

³ *Academically underprepared* is a status, typically imparted to a student through a series of community college tests and placements, that indicates that the student needs to develop their cognitive abilities in order to succeed in a postsecondary educational experience (Grubb et al., 2011).

part through an exploration of Mexican American/Latino literature. These classes also provide a seamless transition between noncredit “developmental” English and “transfer level” English. In the counseling component, students work closely with their Puente counselor until they graduate. With the guidance of their Puente counselor, students explore career opportunities, and develop an academic plan. Additionally, community mentors from a range of ethnic backgrounds help Puente students gain educational experience and acquire the skills for success in college and beyond.

While there has never been a formal evaluation of the community college Puente program, there is considerable evidence that it is very effective, generally doubling the transfer rate for Latino students who participate compared to those who do not (Laden, 2000). The Puente program itself touts an overall transfer rate of 55 percent for its students (Puente Project, 2012a). Additionally, in a recent study of high transfer colleges for Black and Latino students from low resource high schools, researchers found that the Puente program was frequently cited as the focal point of transfer support for low-income minority students (Gándara et al, 2012). Further, in another evaluation by Gándara & Bial (2001), Puente was one of seven programs nationwide to offer three or more different types of counseling services, and the only one to use a comprehensive suite of personal enrichment and social integration strategies. Specifically, the report praised the regular interaction that students have with a Puente counselor as well as a community mentor who serves as a positive role model and a purveyor of social capital—they facilitate the actions of students within the structure of higher education and beyond. Another mark of success is that the Puente model continues to be replicated in colleges across the state and serves as a template in designing programs geared toward increased persistence and transfer of underrepresented minority students.

In California, the Puente program has seen a slow but steady growth in the number of participating colleges and students since it began in 1982. The Puente program currently serves between 20 and 30 students at any one college and is in place at 59 community colleges across the state. In spite of the program's continuous growth and demonstrated track record of success, the program has maintained an isolated position on most college campuses and has reached only a small fraction of the students who stand to benefit from it. As a result, some critics have dubbed the Puente program a "boutique" program—it offers a comprehensive suite of services to only a handful of students. This characterization has undermined the reputation of the program, particularly in recent economically stressed times, when people are looking for programs that offer the highest yield for their investments. Nonetheless, the history and track record of the Puente program shows that support for programs that enhance community college transfer opportunities for underrepresented minority students is not only possible, but has already been happening throughout California.

Texas Community Colleges and the California Puente Program

In the 2012-2013 academic year, spurred by concerns about the costs of persistently high rates of failure among academically underprepared community college students, the Texas Higher Education Coordinating Board (THECB) provided funding for three community colleges in Texas to implement a scaled-up version of the Puente program as a strategy for ensuring success for this group of students. In partnership with the California Puente program and the Catch the Next (CTN) organization, the Texas Higher Education Coordinating Board's goal in supporting the Puente program was to expand the Puente strategies that, according to experience, had improved outcomes for academically underprepared students to Texas community colleges so that the strategies would have a wide-ranging reach and impact on college completion.

Adopting the externally developed Puente design also allowed the Coordinating Board to act locally in response to low rates of success in developmental education without having to create programs anew, an inefficient process that takes considerable time and effort. Furthermore, the externally developed Puente program had name recognition and well documented success.

The scale-up of the Puente program to Texas represented the first implementation of the program outside of California. Based on demographic commonalities, it would seem that Texas was an ideal site for the scale-up of the Puente program. The Texas community college system is very large, second only to California, enrolling 720,000 students in the 2013-2014 academic year (Texas Higher Education Coordinating Board, 2014). Additionally, Latinos make up more than 50 percent of the total student population in both states (Texas Education Agency, 2014, California Department of Education, 2015). Given the situation in which Texas colleges found themselves limited in funding dollars, the Puente program appeared to offer a good investment. Despite these demographic similarities, significant differences between Texas and California community colleges challenged the scale-up of the Puente program in Texas colleges.

For example, unlike California, officials in the Texas community college system hesitated to make baccalaureate transfer a specific goal for the Puente program. This may be because many Texas policymakers believe that most students do not want or need to obtain a baccalaureate degree (Wellman, 2002). The motivation may also be economic; it costs more money to support the attainment of a Bachelor's degree than a technical degree or certificate. Consequently, while transfer has been highlighted as *one* of the missions of the Texas community colleges, emphasis on transfer relative to other functions has been low.

Although Texas has a good statewide information system and data analysis capacity, for many years the state did not calculate a statewide transfer rate. Based on estimates conducted by

Wellman and colleagues (2002), of the students who took 12 semester credit hours or more, 11% had obtained a baccalaureate degree after six years, and another 18% had transferred to a four-year institution but had not yet completed a baccalaureate degree. Institutions receive no financial appropriations from the state for transfer related outcomes. Further, there remain many fields of study that do not have a full 60 hours that are transferable and Texas does not have a policy of guaranteeing university admission and junior status for associate degree graduates, except for those with an Associate of Arts in Teacher Education. Of course, transfer rates differ among the colleges and are dependent on local demographics, decision-making, market conditions, and cultural contexts.

At the same time, political commitments by state government to addressing inequalities of access and success in post-secondary education have been relatively strong in Texas. The commitment to access was evident in the 2000 “Closing the Gaps” initiative sponsored by the Texas Higher Education Coordinating Board. This initiative was geared toward sharply improving rates of participation and graduation at Texas higher education institutions, especially for Latinos. The rationale for the Closing the Gaps initiative was provided by the state demographer, Steven Murdoch, who described the way that the Latino education crisis would lead to an undereducated workforce and, as a result the state would be less competitive in attempting to attract new business (Dougherty, 2008). The first goal of the Closing the Gaps initiative was to greatly increase the number of students in high education by 2015, and particularly among Latinos and Blacks. This initial goal was for 500,000 more students by 2015. Community colleges were responsible for 70% of this increase. By 2010, although the state managed to increase enrollments at public two and four-year institution, there was ongoing concern related to retention and graduation rates at these institutions. In particular, there was a

great deal of apprehension over the low rate of degree production that is associated with participation in community college developmental education.

Over the past decade, Texas community colleges have been a part of many initiatives that have been launched by professional associations and other organizations to “re-mediate” remedial education in Texas in hopes of improving student outcomes. In 2010, the THECB in collaboration with select community colleges and universities launched a developmental education initiative to identify and implement innovations designed to fundamentally reform a system that is failing students statewide. This search for effective practices in aiding college completion promoted openness to many proposals for change and enabled the emergence of several externally and internally developed educational programs, of which the Puente program was one. In fact, the Puente program overlapped with several of the strategies backed by other DEI initiatives including: paired student success and developmental education courses, instructional redesign with student supports, acceleration, and case management (Quint, et al., 2011). The Puente program, however, was unique in that it is an equity oriented transfer program. The program’s explicit goal is to help Latino and other underrepresented students accelerate through developmental English and ultimately, transfer to a four-year college or university. Moreover, the Puente program has a well-established track record of success in community colleges throughout California. Finally, the program is exceptional in that it targets Latino students in a more intensive and culturally validating way than other programs.

Rationale and Research Questions

Today, low rates of success among Latino community college students continue to be identified as a serious problem in Texas and other states across the nation. In California, the Puente program has successfully promoted the retention and transfer of academically

underprepared Latino community college students to four-year universities for over thirty years. With a growing dissatisfaction with student outcomes in developmental education in Texas community colleges, there is mounting social and political pressure to scale-up successful programs such as Puente.

Scale-up can refer either to increasing the capacity or the size of a program through the addition of students to existing programs *or* to increasing the size of a program through the addition of new sites. In this study, scale-up addresses the latter issue of moving an educational intervention from one location to another. While this definition appears simple, researchers have established that in scaling-up programs, it necessitates that colleges adopt new plans or practices that produce modifications in the behavior of principal actors. This kind of change can be hard to achieve. In the literature on community colleges specifically, research has found that change initiatives tend to be idiosyncratic and are not easily replicated by others (Grubb, 2011).

Most studies of scale-up, however, tend to focus on whether or not programs work in general at the expense of examining how or why programs might work in diverse contexts (Kezar & Eckel, 2002). These studies mainly focus on the content of innovations rather than the factors that are related to implementation outcomes (Gumpert, 1993). Few studies focus on how institutional conditions relate to change initiatives or what the challenges of scaling-up externally created programs might be (Hearn, 1996). While the Puente program has proven successful in increasing transfer rates for Latino community college students in California, as the Puente program moves to Texas, there is an opportunity to test the portability of the program and to consider strategies for scaling-up the program to new state and campus contexts.

While some attention has previously been given to the diffusion of the Puente program in California (Beatty-Guenter, 1994), no study to date has provided insight into the scale-up process

in varied state and campus contexts. This study opens up the "black box" of program scale-up in the context of three Texas community colleges and seeks to answer the following questions:

- How was an externally developed Latino-focused transfer program scaled-up in a new state and campus context?
- What factors supported the scale-up of an externally developed Latino focused community college transfer program in a new state and college context?

The purpose of this research is twofold: (a) to describe the process by which three Texas colleges adopt and implement a Latino-focused transfer program that was developed externally in a different context and (b) to explore more fully the strategies that facilitate scaling-up successful community college programs such as Puente in new contexts. On a theoretical level, this study will advance the academic development in the study of scale-up by clarifying, expanding, and extending the body of knowledge derived from a contextual perspective. Additionally, to the extent that we can better understand the potential factors that challenge and support scale-up, the results of this study will facilitate more comprehensive educational planning.

Attention to the phenomenon of scale-up is warranted. There are many colleges in the nation that face similar struggles with regards to Latino student success outcomes and there is much to be learned about interventions that are working toward transforming the educational opportunities for these students. Many other states are experiencing, or will soon experience, the demographic changes now taking place in Texas and California (Passel & Cohn, 2008). Moreover, only programs that can work at a reasonable scale under differing conditions are likely to be translated into policy. Knowledge of how to reproduce existing successful Latino-focused transfer programs is, consequently, a high priority issue.

Study Overview

This study used comparative case study methods to investigate the scale-up of the Puente program in three Texas community colleges. Chapter 2 of this study explores the research on Latino student success and failure in college and describes the dimensions of the Puente program that may positively contribute to transfer outcomes for this group. Next, Chapter 3 presents a literature review on program implementation and scale-up in diverse settings. Adapted from the work of Levine, this literature review builds a conceptual framework that situates legitimacy and profitability as key determinants in organizational responses to external change initiatives. These linkages have been largely unexplored in previous studies of organizational change in higher education, yet they show great potential for both explaining organizational behavior and assessing the potential costs and benefits of scaling-up innovations.

Chapter 4 defines the research methodologies and the sources of data that were used to explore the research question posed in this introduction and the process of data analyses. This chapter also describes the action settings for the implementation of the Puente program on each Texas campus. Chapter 5 describes the results of this inquiry by examining data from a variety of sources including surveys, interviews, and participant observations. The subjects of adoption, early implementation and scale-up, especially with regard to the legitimacy and profitability of various programmatic strategies, are discussed. Finally, in Chapter 6, the implications of these findings are discussed in terms of the continued scale-up of the Puente program.

CHAPTER 2

LATINO STUDENT TRANSFER AND THE PUENTE PROGRAM

Considering all the research about community college transfer, what is known about the means by which the Puente program operates? In this chapter, the answer to this question is addressed in two steps. First, the chapter considers a number of different individual and institutional theories related to Latino student transfer. Second, the chapter builds a typology of the California Puente program to clarify how the various components of the Puente program operate at both the individual and institutional levels to address issues related to transfer in California community colleges.

Factors Influencing College Success for Latino Community College Students

Researchers, policymakers and educators have long placed importance on understanding the policies and practices that promote success of community college students who represent nearly 40 percent of all undergraduate students enrolled in institutions in the United States (Bailey, Calcagno, Jenkins, Leinbach, & Kienzl, 2006). Despite this, theoretical frameworks to explain the factors influencing college success outcomes for Latino and other minority groups in community colleges remain underdeveloped, largely because the literature has focused on students in four-year colleges. Nonetheless, this section reviews some of the major student success paradigms in higher education. Findings in the literature suggest that student outcomes such as transfer are significantly related to a combination of characteristics, behaviors, and educational experiences for both mainstream and underrepresented groups. At the same time, the data suggest that there are important differences in the factors that predict successful transfer for Latinos and students in other underrepresented groups.

Individual Influences

In the literature on community college retention, students are thought to bring several individual characteristics that influence their transition to four year colleges, including high school experiences, financial circumstances, and psychosocial factors. These characteristics shape students' community college experiences, including their enrollment patterns, the courses they take and the grades they earn which, in turn, affect their goals for the future and whether they transfer to four-year colleges. Latino community college students, who tend to be poorer and have attended lower quality high schools, are at higher risk of dropping out prematurely than their white and Asian counterparts (Feldman, 1993; Hoyt, 1999). In addition, regardless of race/ethnicity, those whose parents never attended college tend to know less about the college process and environment than those whose more highly educated parents can give them guidance. Compared to students with college-educated parents, they take fewer courses and thus accumulate fewer credits and earn lower grades in their courses, net of family income, high school quality, high school grades, and educational goals and motivations (Pascarella, Wolniak, Pierson & Terenzini, 2003).

The attributes of the high schools that community college students attended prior to enrolling in community colleges are extremely strong predictors of student outcomes in college. Students from low-resource high schools are more likely to be academically underprepared and less likely to graduate or transfer from college (e.g., Alexander et al., 2007; Porchea, et al., 2010). This is particularly concerning given the high rates of Latinos who attend low resource schools. For example, in California, one third (32.4%) of Latinos attend low resource high

schools⁴ (Gándara et al, 2012). In contrast, only 1 in 25 (4.1%) Whites and 1 in 10 Asians attend such schools (Gándara et al, 2012).

Independent of precollege factors, research has found that once students enroll in college, whether a student succeeds or fails in college is affected by his or her academic and social experiences. Academic experiences include such factors as faculty–student interactions, involvement in learning communities, and working with other students on schoolwork outside of class. Social experiences include such measures as participation in cultural activities and leadership activities on campus. While there are important differences in the theoretical perspectives explaining how students change across time as a result of their college experiences, student engagement underlies the major theoretical frameworks explaining change during the college years (Pascarella & Terenzini, 2005; Tinto, 1993; Astin, 1993; Bean, 1983; Terenzini, Rendon, Upcraft, Millar, Allison, Gregg, & Jalomo, 1996; Tinto, 1993, 1998, 2004).

One of the most extensively tested models to explain student success outcomes for traditionally underrepresented groups is Nora’s (2004) student/institution engagement model. This model emphasizes the interaction between the student and the institution and the influence of this interaction on student outcomes such as transfer (Crisp & Nunez, 2014). During college, environmental pull factors such as working off-campus and family responsibilities continue to challenge students in the academic and social college setting (Nora, 2004). Latino students at two-year colleges often attend part-time, which is associated with a lower chance of transfer (Gándara & Contreras, 2009). Moreover, nearly 60% of Latino graduating college seniors reported working an average of 30 hours or more per week (U.S. Department of Education,

⁴ *Low resource schools* are identified based on academic performance scores, the proportion of students whose parents had a college degree, the percentage of students on free or reduced lunch, and the proportion of the students who are African American or Latino (i.e. the level of segregation).

2005). Working such extensive hours while enrolled in college significantly reduces the likelihood of degree completion.

Given these differences in student backgrounds, some scholars have questioned whether academic and social engagement in college is the most important influence on retention for non-traditional students. For example, Rendon's validation theory notes that non-traditional students⁵—typically first generation, low socioeconomic, and students of color—are unlikely to become involved academically or socially on their own, and it is incumbent upon the institution to “open the door” by creating social and academic communities that welcome this population of students to college life. Instead of assuming that students will take advantage of engagement opportunities, validation theory challenges the academic organization to push itself to transform and grow in new directions to accommodate the requirements of a diverse student population (Barnett, 2010). Although Rendón (1994, 2002) offered validation as an alternative to integration, Barnett (2010) suggests that it may also be viewed as a precondition for engagement. In other words, faculty and other institutional actors may reach out to students in validating ways that lead them to feel more engaged.

Institutional Influences

Most of the research described so far has emphasized the role of student characteristics and experiences in predicting transfer. In contrast to traditional retention theories that emphasize individual responsibility for engagement and persistence, institutionally oriented retention frameworks put the burden on institutions to create responsive environments that better reflect the needs of an increasingly diverse student body. These undertakings are especially productive

⁵ *Non-traditional students* are defined as students who come from low-income, working-class backgrounds and are often the first in their family to attend college.

because they have the potential to inform policies and practices concerning community college students. As such, it is important also to consider the institutional characteristics that may be associated with student success outcomes. This section reviews the limited number of studies in this area that address the role of academic and social engagement and aggregated socio-demographic characteristics in community college student outcomes.

Researchers have uncovered a number of institutional variables that are associated with student outcomes such as retention, degree completion, and transfer. For example, Bailey, Calcagno, Jenkins, Leinbach and Kienzl (2006) found a negative relationship between an institutions' enrollment size and institutional degree completion rates. Moreover, colleges with higher percentages of underrepresented minority students, part-time students, and women were found to have lower completion rates. Similarly, work by Wassmer, Moore and Shulock (2004) indicated that community colleges with lower percentages of underrepresented minority students, more traditional aged students, students with higher levels of SES and academic preparation, and/or a greater focus on transfer programs had higher six year transfer rates. In addition, Porchea, et al. (2010) suggested that, after controlling for student-level effects, total enrollment, tuition, and the percent of full-time faculty may be related to transfer for community college students.

While some of these institutional factors are beyond the control of the college, there are some approaches that colleges can take to improve the chances of success of their students. For example, findings in the literature on community college transfer suggest that creating a "transfer culture" (Cohen, 2003) is a critical feature of those colleges that experience success in transferring higher percentages of their students to four-year colleges. Cohen and Brawer (1996) found that administrators at high-transfer colleges were much more likely to indicate that transfer

was the college's number one function (88% vs. 45%). They also found that transfer culture was exhibited in ongoing activities related to the transfer function. Handel (2006) conducted a study of University of California and California Community College partnerships and concluded that the following elements should be implemented at community colleges that want to establish a "transfer-going" culture:

- Establish transfer to a four-year institution as a high institutional priority;
- Ensure that transfer is seen by students as expected and attainable;
- Offer a rigorous curriculum for all students that includes writing, critical thinking, mathematics, and the sciences;
- Provide high quality instruction, including innovative and research-based pedagogies;
- Develop intensive academic support programs based on models of "academic excellence" (e.g. academic counseling, peer tutoring, and reciprocal learning techniques);
- Create an environment of belonging in which students feel stimulated to achieve at high academic levels;
- Establish strong community and family linkages that foster intellectually stimulating, secure and culturally rich environments for students on and off campus.

As Gándara and colleagues (2012) have noted, in suburban colleges with significant numbers of students whose parents have at least some college education, there is often strong support in the community for these practices. Further, most of these recommendations reflect the practices of high-transfer colleges, but do not target the specific needs of underrepresented minority students, and especially those from low-resource high schools.

While there is substantial knowledge about the characteristics of high transfer colleges and the features of a transfer culture that exist on those campuses, less is known or written about the features of colleges that are especially successful with a more challenged population of underrepresented students who arrive at college academically underprepared. In 2012, Gándara and colleagues reported on five California community colleges that had disproportionately high transfer rates for students of color from low-resource high schools. Based on case studies of each campus, they concluded that each campus had its own success story with respect to strategies for supporting the transfer function. However, they also discovered several findings that stood out:

- All of the colleges struggled in transitioning students out of developmental education and into transfer level courses; some colleges were experimenting with accelerated interventions in developmental education.
- Strong counseling was essential for community college transfer, but was not always readily available;
- The colleges targeted a “transfer culture” to the specific needs of minority students through culturally appropriate interventions and counseling strategies;

The following section considers each of these findings in more detail.

Developmental Education

Data suggest that one of the greatest barriers to success in college for Latino students and students in other underrepresented groups is the need for these students, especially those from low performing high schools, to complete developmental or remedial education courses in order to meet the prerequisites for enrolling in transfer courses (Gándara et al., 2012). In a review of the literature on the effectiveness of developmental education, Melguizo, Bos and Prather (2011) found mixed evidence that these courses, at least for math, were associated with increased

success in transferring. Another recent study found that only 16% of students nationwide who were referred to developmental education three levels below college level proficiency ended up completing even the developmental education requirements (Collins, 2010). Along the same lines, Crisp and Delgado (2011) and Hagedorn and her colleagues (2008) found that taking developmental education courses was a negative predictor of transfer to a 4-year universities.

No doubt one reason for this relationship is that students in developmental education come to college underprepared, and this is a predictor of not completing a degree. Yet, Hagedorn and her colleagues (2008) also found that time is associated with successful transfer and those students who complete course requirements in less time are more likely to transfer. Additionally, based on case studies of developmental education courses at community colleges across the country, Grubb concluded that inadequate instruction is at least partly responsible for poor progress in basic skills sequences (2011). Thus, a major challenge remains in the delivery of developmental education courses, as well as strengthening their content, so that students can move more rapidly and successfully through the curriculum.

According to Norton Grubb and colleagues, one of the most challenging aspects of developmental education is the division between basic skills courses (2011). This separation has been especially prevalent in developmental English. On most community college campuses, developmental English is institutionalized in separate reading and writing courses, sometimes even housed in separate departments. This approach treats reading and writing as different “skills” rather than seeing speaking, reading, and writing as alternative forms of communication, as in a whole language approach (Grubb, 2011). The separation of reading and writing also means that students must spend more time in developmental education, and the more levels of

developmental courses a student must take, the less likely that student is to ever complete college English or math (Bailey, 2009).

Another critique of traditional developmental English courses is that the majority of these classes follow what Grubb and colleagues call “remedial pedagogy— drill and practice on sub-skills, usually devoid of any references to how these skills are used in subsequent courses or in adult roles” (2011, p.1). In these classes, the emphasis on small sub-skills part-to-whole instruction, the technique of drill and repetition, and the lack of any applications to the world outside the classroom lead (Grubb et al, 2011). Consequently, students that do make it to the end of a remedial reading sequence, may not have mastered more sophisticated reading and writing abilities such as analysis and critique that are necessary for college-level coursework.

In addition, while there is a good deal of variation in what kinds of texts are used in developmental English courses, most instructors aim to find works that are at the appropriate reading level but do not necessarily find motivating reading (Grubb et al, 2011). Based on observations of 13 community college classrooms, Grubb and colleagues (2011) found that most texts drew from a narrow range of “academic” material. Hence, while the purpose of developmental English classes to prepare students for college-level classes, the structure and delivery of these courses are not likely to prepare students for the transfer courses they hope to take.

Counseling

Virtually all studies of community colleges cite the counseling function as key to student success (Wassmer et al, 2003). Driscoll (2007) found that the first year, even the first semester, of community college is the most critical for the long-term outcomes for potential transfers. If students do not take the right courses, if they fail, or they find the courses in which they are

enrolled too challenging, or not to their liking, this is the period in which they are most likely to drop out. Similarly, Hagedorn and her colleagues (2008) concluded, on the basis of tracking 5,000 students over five years through the Los Angeles community colleges, that personal characteristics of students were less important for successful transfer than the fact that the students had taken and passed the necessary transfer courses early in their academic careers.

Community colleges, however, vary in the types and quality of matriculation services they provide their students, ranging from mere brochures, to centers with part-time counselors, to trained, competent, experienced academic and career counselors (Grubb, 2011). The theory of action behind such support is that services can increase student success in college by providing them with supplemental help, complementary to what happens in the classroom, so that they can become better integrated into the college environment, excel in their coursework, and achieve whatever goals they set for themselves (see Baily & Alfonso, 2005 and Grubb et al., 2011 for reviews of the empirical rationale for counseling and student services).

For academically underprepared students, community colleges have implemented an array of student support services to address a variety of needs. These services can be organized in a variety of ways. Typically, part of the initial interaction is an assessment test, followed by advice on the sequence of developmental courses that a student should take (Grubb et al., 2011). For students who fall behind in their coursework, or who flunk a certain number of courses, counselors may emerge again as part of an Early Alert process or probationary system. Students may wind up seeing counselors several times before they decide on a major. Hence, counselors can play very important roles, not in providing support for the cognitive and emotional dimension of college, but in helping students plan for their educational and their occupational futures. For students in developmental education, who often arrive at college without educational

plans, or with only vague ideas of what they need to do, this role of counseling is especially important (Grubb et al, 2011).

In theory, all students have access to guidance and counseling, particularly when they enter the college. The reality is often quite different. There are many limits to guidance and counseling. In community colleges, counselor-to-student ratios of 1 to 1,000 are common (Karp et al, 2008, Grubb, 2001). Moreover, a national survey of entering community college students found that 32 percent did not attend a freshmen orientation program and half did not meet with or recall seeing an academic adviser during their first four weeks of college (McClenney, 2007).

As a result, students often enroll in courses without understanding the level of rigor associated with the course or the applicability of the course to any specific program or transfer objective. Ultimately, inadequate student services act as a barrier to student success, particularly for students who aim to transfer to a four-year school, leaving them without crucial information on the transfer process and its requirements (Dougherty, 1992, Karp et al., 2008).

Cultural Support

Few studies in higher education have examined the role of cultural validation in the commitment, effort, and engagement of racial and ethnic minority students. Literature from the K-12 sector, however, suggests that the most successful interventions span the social cultural and political aspects that shape teaching and learning. Although it is seldom discussed in the literature in higher education, perspective sharing and cultural compatibility operate in important ways in educational intervention programs for students of color. As mentioned previously, Rendón (1994) has written extensively on the need for cultural validation in post-secondary education. Additionally, in the 2001 report, *Paving the Way to Postsecondary Education: K-12 Intervention Programs for Underrepresented Youth*, Gándara concluded: “Most of the effective

programs paid attention to the students' cultural background and attempted to incorporate this both in the structure and the content of the program" (p. 36).

Empirical studies of minority students in K-12 education have found that teacher-student relationships and teacher encouragement are critical "resources" for motivating African American and Latino students (Valenzuela, 2010). Minority students' perceptions of the quality of their relationship with faculty—remote, discouraging, unsympathetic, approachable, helpful, understanding, encouraging—was a strong predictor of learning for Asian/Pacific Islanders, Mexican Americans, Native Americans, African Americans, Puerto Ricans, and other Latino groups (Lundberg & Schreiner, 2004). In addition, a survey of 7th–11th graders in 95 schools revealed that minority students, especially African Americans, identified teacher encouragement more frequently than did Whites as a very important reason for working "really hard" in school (Ferguson, 2002, p. 5). Effective teachers know about their students and their family and community dynamics and help build bridges between the students' world and the classroom experience (Moll, Amanti, Neff, & Gonzalez, 1992). According to Gloria Ladson-Billings, these teachers incorporate a culturally relevant pedagogy that "empowers students intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge skills and attitudes" (Ladson-Billings, 2009, p.20). In other words, these teachers challenge the deficit view that often permeates classrooms where the tendency is to attribute low levels of success to cultural mismatches between students and schools.

Studies, however, have found key differences in student's validation experiences. For example, Hurtado and colleagues (2011) examined student perceptions of academic validation in the post-secondary classroom and found key differences in student experiences; students of color reported lower levels of validation than White students. Similarly, Cabrera and Nora (1994)

found that African Americans, Latinos, and Asian Americans were more likely than White students to feel isolated from class discussion and singled out in class. These results suggest that Latino students and other underrepresented groups may experience validation differently than their White peers in the same classrooms and colleges.

Typology of the Puente Program

During a period of waning support for affirmative action, Felix Galaviz and Patricia McGrath, a counselor and English instructor from Chabot College in Hayward, California, created the Puente program to address the problem of low Latino transfer rates to four-year universities (McGrath & Galaviz, 1996). Based on their experiences, Galaviz and McGrath designed a program that would provide Latino community college students with personal and academic counseling, culturally relevant classes geared to strengthen academic skills, and mentorship to create a sense of “belonging” (Meznek, McGrath, & García, 1989).

There are three official components to the Puente program: the writing component, the counseling component, and the mentoring component. Puente staff members are trained to conduct the Puente program at their community college sites. To better understand the Puente program, the following section describes the instructional, counseling, and mentoring components in more detail. This review draws on research on Puente conducted in both community college and high school settings. While there may be some minor discrepancies in how program operates in each setting, the core, theoretically based, components of the program are thought to function similarly.

The Instructional Component

Given the high rates of referral to developmental education among Latino and other underrepresented community college students, the Puente program’s instructional component in

both developmental and college level English is an especially important feature of the program. Puente students are recruited from the highest-level of developmental English and students are expected to complete their developmental English coursework in the first semester. The Puente program's instructional element requires that community college Puente students take two consecutive integrated literature and writing classes where they build confidence in their writing skills through an increasingly complex exploration of the Mexican American/Latino literature and other genres of literature. These classes also provide a seamless transition between noncredit "developmental" English and "transfer level" English. These practices are quite different from the traditional remedial English curriculum and pedagogy.

First, the program stresses the integration of reading and writing at all levels; the reading of full-length Mexican-American texts rather than short excerpts or passages, using both fiction and non-fiction sources; critical thinking (rather than basic skills) at all levels of instruction. Moreover, the program spans the divide between developmental and transfer-level English by integrating and developmental reading and writing instruction and pairing it with a transfer-level English course in the second semester. In this way, students are able to accelerate through developmental English (pre-transfer level reading and writing) and ultimately, progress toward transfer to a four-year college or university. As well as strengthening content, this approach allows students to move more rapidly through the curriculum.

Second, in the classroom, the Puente model uses the writing process approach, which is the antithesis of traditional remedial pedagogy with its part-to-whole development of language development (see Grubb et al., 2011 for a detailed description of the writing process approach to instruction). The writing process stresses writing as a form of communication among people and as the expression of ideas, emphasizing the social dimension of writing from the outset (Grubb,

2011). The writing process breaks the process of writing into discrete steps that lead to a finished papers, first brainstorming ideas, then writing freely without undue concern for correctness, and then a crucial process of revision and editing (sometimes by peers or peer groups, sometimes by instructors) and creating multiple drafts. As Grubb and colleagues note (2011), this is a fundamentally different way of breaking down the process of writing since students are always producing writing.

Additionally, in contrast to traditional remedial curriculum that is devoid of cultural meaning, in the Puente program, a specially trained Puente instructor focuses on the “interweaving of acclaimed local Latino literature into the developmental curriculum and training experience in the use of writing portfolios so that students may learn to critique writing assess their own progress and set high performance standards for themselves” (Gándara and Moreno, 2002, p. 466). The assumption is that students bring culturally specific knowledge to learning on which they can build (Gonzalez, Moll, & Amanti, 2005).

The Counseling Component

Puente has helped resolve, through the counselor/adviser and the career-planning course, the problem of basic skills students who lack understanding of how developmental courses fit into their future degree plans and career options. In the Puente program, students work closely with their Puente counselor until they graduate. With the guidance of their Puente counselor, students explore career opportunities, and develop an academic plan. According to Gándara and Moreno (2002), “the counseling component is in many ways the heart of the Puente program and provides oversight of the students’ progress toward transfer and other goals” (p. 468).

In fact, in an evaluation by Gándara & Bial (2001), Puente was one of seven programs nationwide to offer three or more different types of counseling services, and the only one to use a

comprehensive suite of personal enrichment and social integration strategies. In the Puente program, students work closely with their Puente counselor until they graduate. The counselor ensures that students enroll in transfer courses, that any academic difficulties are swiftly noted and addressed, and that students are “supplied with the information necessary to navigate the community college and transfer pathways” (Gándara & Moreno, 2002, p. 468). Counselors also regularly visit the Puente English classroom to integrate themselves into the daily activities of the Puente students. In addition, counselors arrange for college visits and other field trips as well as parent and mentor meetings and events. Finally, counselors also help students explore their future career opportunities.

The Mentoring Component

The Puente model was designed “according to the belief that in order for a program to be effective for Latino students, it would have to incorporate the surrounding community into its fabric: it could not exist successfully without substantial links to family and community” (Gándara & Moreno, 2002, p. 470). This notion of creating a family atmosphere, or a *familia*, including multiple generations of individuals from the same family or community, is an important aspect of the Puente program. For example, the program holds a *Noche de Familia* (Family Night) with food, informal conversation, presentations in both Spanish and English, and materials and information that are of critical importance to these parents, such as information about financial aid or other programs that can help both students and families. Latino community members are also encouraged to volunteer as mentors and guest speakers, and contribute to the program through donations, internships for students, and political support for the college and for the Puente program.

Correspondingly, mentoring is the third component of the Puente program. In the program, community mentors from a range of ethnic backgrounds help students gain educational experience and acquire the skills for success in college (Cooper, 2002). These mentors typically “share a common language and even a family history with students and pass on their understanding of how to retain ties to the community while succeeding in school and college” (Cooper, 2002, p. 612). Mentors are encouraged to maintain relationships with student for a minimum of one year during which the goal is to meet with students, either individually or in groups, monthly. Mentors are also urged to meet with the students’ families to get to know more about the student.

At the same time, the Puente program boosts the resources that peers can draw from one another by fostering a supportive cohort of students who share high aspirations and *reinforce* this in each other (Gándara, 2002). According to Cooper (2002), these “peers can make the worlds of college appealing” (p. 613). Gándara (2002) has also found evidence that peers—both friends and boyfriends—may be a key factor in what makes the Puente program work. Puente students were more likely to hang out with friends from school than with out of school friends, which “connected them to school in important ways” (p. 484).

Ultimately, students in the Puente program have several potential sources for mentoring — from one another, from a fixed set of instructors, from the counselor, and from the supplemental mentors. The program itself provides students with “safe spaces,” peer support communities, and faculty, counselors, and mentors who share similar backgrounds with the students. Gándara and Moreno (2002) have also noted that the formal community mentoring component helps to build a political infrastructure within a community to support the Puente program. In many cases, community mentors raise the profile of Puente and encourage greater

participation in the program in the form of donations, provision of resources, and additional mentors.

Program Limitations

Given Puente's enduring success in California community colleges, one would expect to find the program widely implemented in community college campuses across the country. The program, however, operates solely in a select number of California colleges (and high schools) and maintains an isolated position on most community college campuses. Consequently, the program serves only a small fraction of the students who stand to benefit from it. The question is, why does the program serve so few students?

Although there are no empirical answers to this question, one possible answer is that the Puente program represents a significant cost. Providing the material and human resources needed to implement the Puente program, with its lengthy professional development and curriculum enhancement components, requires economic, human resource, and ideological commitment (Gándara et al, 2011). Moreover, the program requires a high level of human contact between the counselor, mentor, instructor and student, which is *a priori* labor intensive. The mentoring component, alone, requires significant time and resources to organize and monitor. In California, the program is funded as a line item on the state budget each year, which covers only about half of the cost of the program. Colleges that wish to undertake the Puente program must supply the funding and commitment necessary to implement the program on their campus. Hence, the implementation of the Puente program depends on the overall fiscal status of the state and the college, rules for resource allocation, administrative priorities, and the importance accorded to the Puente program among faculty, counselors, and staff.

While some attention has previously been given to the diffusion of the Puente program in California (Beatty-Guenter, 1994), no study to date has provided insight into the strategies associated with the scale-up of the program, particularly in varied state and campus environments. As a result, although the Puente program is often viewed as a good candidate to scale-up, we know very little about how to scale-up the program in California let alone to diverse contexts. The goal of this study is to examine the scale-up of the Puente program in three Texas colleges. This analysis aims to produce compelling information that will be useful in scaling-up the Puente program in Texas colleges. Additionally, this research seeks to provide guidance to educators, policymakers, and researchers who lack certainty on how best to grow programs that carry out the specific function of improving outcomes for academically underprepared underrepresented minority students. As noted previously, while this study takes place in Texas, many other states and the nation as a whole are experiencing, or will soon experience, the demographic changes now taking place in Texas and California (Passel & Cohn, 2008). The insight and knowledge gained from this study have the potential to shape the infrastructure for programs that enhance community college transfer opportunities for Latino and other underrepresented students in many other states as their populations become more diverse.

Summary

The literature reviewed in this chapter supports Puente's holistic approach to intervention in Latino students' higher education experiences. The risk factors for non-completion are well documented throughout the literature including arriving at college academically underprepared, enrolling in lengthy, disconnected, and minimally engaging developmental course sequences, and receiving insufficient counseling and advising services. Despite this, the research on Latino persistence in college has tended to focus on student characteristics, academic preparedness,

financial challenges and out-of class experiences. Although most literature on post-secondary success highlights the warning signs of dropping out on the individual level, an increasing amount of literature has emerged which identifies the institutional factors that assist in increasing the odds of transfer and academic achievement among historically underrepresented students. The Puente program was designed to promote validation experiences with faculty, counselors and mentors that could contribute to Latino students' sense of integration in college.

Despite Puente's empirical approach to student success, the final section of this chapter noted some of the limitations of the Puente in terms of the scale of the program. The argument was made that there is little meaningful data to advance an understanding of how to scale-up equity oriented student success programs like Puente in diverse state and college settings. As a result, the strategies to support program development are unknown. The following chapter addresses the topic of scale-up and builds the conceptual framework for this study.

CHAPTER 3

PROGRAM IMPLEMENTATION AND SCALE-UP IN THE COMMUNITY COLLEGE

While ample research literature illustrates the means by which the Puente program operates, much less is known about the implementation of the program, particularly in diverse contexts. This chapter summarizes key points of knowledge about program implementation and scale-up in diverse community college systems. Only in understanding **scale-up**—or the implementation of an innovation whose efficacy has already been established in new contexts with the goal of producing similarly positive impacts (Schneider & McDonald, 2006)—can our understanding of institutional improvement be increased. Hence, this chapter builds a theoretical framework for studying the scale-up of programs to new state and campus contexts. Within each topic, some ideas derived from the literature are reviewed.

Scale-Up, Adoption, and Implementation

What does it mean to say that a program is scaled-up? Scale-up can refer to increasing the capacity or the size of a program through the addition of students to existing programs *or* increasing the size of a program through the addition of new sites. The scale-up of the Puente program to Texas colleges refers primarily to the later definition of scale-up, because it addresses the problem of moving an educational intervention from one location to another. At the same time, this study has implications for discussions of program capacity – or the ability of a program to expand at individual sites with existing resources—because scaling-up in Texas involved increasing the size of the program at each college.

Given this comprehensive notion of scale-up across diverse contexts, how do we assess scale-up? In the literature, discussions frequently judge scale-up in terms of adoption. *Adoption* simply refers to the dispersal of a program to greater numbers of classrooms and colleges.

Adoption, however, is a different matter from use (Coburn, 2003). For example, as Coburn (2003) has noted, to adopt a textbook says little about how the textbook will be used. Hence, adoption is a superficial proxy for assessing scale-up because it provides no sense of the nature of the change envisioned or enacted. Similarly, Elmore (2004) argues that focusing on adoption alone neglects other measures that may be fundamental to the ability of colleges to engage with a program in ways that make a difference for teaching and learning and ultimately, student outcomes. Instead, these scholars highlight the multidimensional nature of scale-up and suggest that expanding a reform to multiple settings is a necessary but insufficient condition for scale-up.

There is a growing body of work that underscores the need for greater attention to the complexity of implementation in program scale-up (e.g., Coburn, 2003, Elmore, 2004; McLaughlin & Mitra, 2001). Simply put, King and colleagues (1987) define *implementation* as how a program looks in operation. In a more comprehensive definition, Berman and McLaughlin (1976) propose that implementation is an organizational process whose end product is an altered institutional arrangement. That is, in implementing a program, colleges adopt a new plan or new practices that require a modification or change in the behavior of principal actors.

Change can be defined as an alteration in the structures, processes and/or behaviors in a system (Zaltman & Duncan, 1977) or as the introduction of something new into an organization. In the latter case, this type of change is called an innovation—the adoption of an idea, behavior, or process that is new to the organization (Damanpour & Evan, 1984). Some innovations are *transformational* and produce a major overhaul of the organization's structure and strategy (Nadler & Tushman, 1989). Other innovations are *incremental* and result in less dramatic effects though, over time, they may result in significant alterations to an organization (Keller, 1983). In the literature on higher education, researchers note that most change efforts tend to be

incremental (Keller, 1983). Such changes do not involve significant disruptions in processes or structures; individuals simply take on additional roles and drop others. Ultimately, critics argue that this type of change is unlikely to address the needs of students, the environment, or of society. As opposed to incremental change, transformational change produces an overhaul of the organization's structure and strategy and has the potential to address systemic inequities such as racial/ethnic achievement gaps. Yet, this type of change is more elusive and difficult to initiate and manage (Eckel & Kezar, 2003).

Some might argue that the Puente program is an incremental innovation because it impacts a small subset of students and allows the majority of instructors and student service providers follow traditional approaches to instruction and counseling. In contrast, others might argue that the Puente program is inherently transformational because it affects nearly every policy area within a college, including decisions about internal structures and decisions about external relations. For example, from the perspective of the English faculty, integrating reading and writing courses requires changes in instructors' roles, routines, and responsibilities and may require an alteration to the delivery and content of their instruction. At the same time, the introduction of the Puente program may transform developmental education and counseling by compelling these divisions or departments to reallocate resources toward accelerated programs of study, culturally relevant practices, and transfer-related services. Along these lines, the scale-up of the Puente program to Texas is interesting because it involves more than just the formal adoption of the program to a number of colleges and classrooms; it also involves an alteration of the activity structures, materials, and classroom organization, underlying beliefs, norms, and politics in Texas colleges and classrooms.

Scale-Up Frameworks

What leads interventions to successfully scale-up—to go from being small to being large through the addition of new sites? Little is known about the factors that lead to successful scaling-up of educational interventions in diverse settings. While efforts to scale-up educational innovations are not new, efforts to bring conceptual and analytic rigor to studies of scale-up are. In the literature, studies of the scale-up of policies and programs have sought to create frameworks for guiding the scale-up of successful interventions. The SCALERS model, developed by Paul Bloom and Aarion Chatterji (2009), offers one such framework for describing the elements that are thought to be critical in expanding programs and policies. SCALERS is an acronym each of whose letters stands for an important element associated with the scaling up process. In 2011, MDRC adapted the SCALERS model to make it relevant to community colleges (see Table 1 for a summary of the adapted SCALERS model) (Quint, et. al. 2011). The researchers sought to ascertain which of the SCALERS were especially important determinant of implementation progress. To do so, they assigned quantitative ratings to describe the extent to which SCALERS affected the scaling up of focal strategies in developmental education. The results indicated that: alliance-building, staffing and communicating were each important factors affecting implementation in a positive way. Resources were less frequently cited as key factors affecting implementation.

Table 1
SCALERS Framework

Element	Description
Staffing	The effectiveness of the core team at marshaling resources at its disposal to meet labor needs.
Communicating	The effectiveness with which the core team is able to articulate clear goals and persuade faculty, staff and students to adopt and support the program.
Alliance-Building	The effectiveness with which the core team is able to engage the necessary parties to support the strategy.
Lobbying for Resources	The effectiveness with which the organization is able to secure resources to sustain the infrastructure –staffing space, etc. or advocate for government actions that work in its favor.
Resources or Earnings Generation	The effectiveness with which the core team manages and secures resources to sustain the strategy’s infrastructure. Or, the effectiveness with which the organization generates a stream of revenue that exceeds its expenses.
Replicating Impact	The effectiveness with which the core team can develop institutional expertise and commitment to support the quality of an expanded strategy.
Sustaining Engagement	The effectiveness with which the core team can create incentives that encourages individuals to participate in and value the strategy.

Adelman and Taylor’s diffusion model (1997) is another comprehensive framework for identifying effective approaches to scale-up. This model conceives of scale-up in terms of four overlapping phases: a) formation—where program readiness is created in the new context, b) initial implementation—whereby replication is carried out according to guidance and support mechanisms; c) institutionalization—accomplished by ensuring there are mechanisms to maintain and enhance productive changes, and d) ongoing evolution—accomplished through use of mechanisms to improve quality and provide continuing support. This structural change framework is conceptualized as an intentional effort to improve organizational processes throughout the implementation of new ideas founded on scientific knowledge.

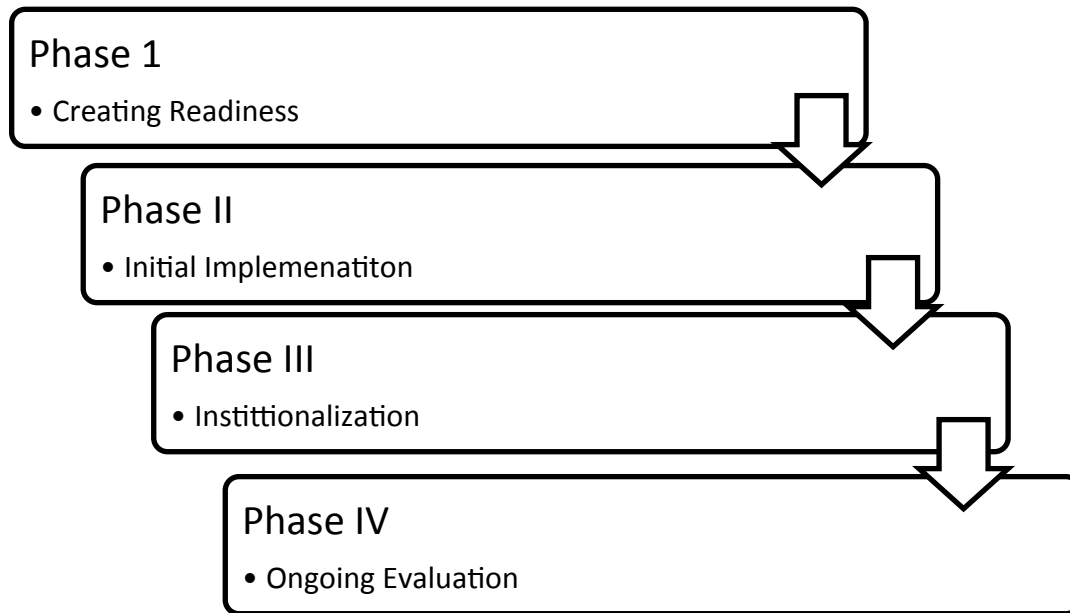


Figure 1. Scale-Up-Phases. Adapted from H.S. Adelman & L. Taylor (1997).

Contextual Considerations

Although each of the frameworks presented above are comprehensive, they rest on the assumption that *any* program can be implemented widely and well in *any* context. Previous studies in K-12 education, however, have found that when reformers bring certain programs into schools, they do so in ways that vary in degrees of success (Datnow et al., 2002; Spillane, 1999; Spillane & Jennings, 1997). At the same time, in the literature there are many examples of calls for action and the lack of response by those that were the target of the action (Spillane, Reiser, & Reimer, 2002). Because individuals draw on their prior knowledge, beliefs, and experiences to interpret and enact reforms, researchers have found that they are likely to "gravitate" toward approaches that are congruent with their prior practices (Spillane 2000, p. 163) or graft new approaches on top of existing practices without altering norms or routines (Coburn, 2003; Cuban, 1993). Consequently, external programs and the changes they bring can appear more disruptive than beneficial.

In the literature on community colleges specifically, studies have established that change initiatives tend to be idiosyncratic and are not easily replicated by others (Grubb, 2012). Responses to external change initiatives can range from minimal response to full-scale reform (El-Khawas, 1995). While the literature on program implementation in higher education is informative about the content of programs and initiatives (Gumport, 1993) and the outcomes (El-Khawas, 1995), few studies have focused on how institutional conditions related to change initiatives (Hearn, 1996). Further, the research literature on organizational change in higher education has tended to focus on whether or not programs work in universal contexts at the expense of examining what drives the success of a program in different cultures or contexts (Kezar & Eckel, 2002). Given the distinctness of the Puente program and of the context of Texas community colleges, more research need to be done to construct theories of scale-up in diverse organizational settings.

Contingency Theory

Contingency theory, a sub-theory of systems theory, provides insight in examining the scale-up of externally developed programs to diverse contexts. The basic premise of *contingency theory* is that program implementation and scale-up is contingent on a matching of programmatic variables to environmental conditions (Bess & Dee, 2008a). From this perspective the context can determine whether programs receive the resources they need, or, it can determine how programs use these resources. The following section reviews some of the many ways to classify internal and external influences in program scale-up, with different elements highlighted depending on the theoretical perspective taken.

External Influences

Recognition of external influences helps to illustrate the complexity of the interaction between programs and their external context (El-Khawas & Walker, 2001). In a literature review, researchers at the Higher Education Research Institute at UCLA categorized the following external influences on colleges: sources of power and control; societal trends and forces; and the normative culture of academia (El-Khawas & Walker, 2001). In its general form, these influences represent Clark's classic "triangle" of forces (1983), including the state, the market and the academic community. These external influences produce both implicit and highly visible forms of influence.

The first component – *sources of power and control* – positions government as a critical influence in the adoption of programs. Sources of power and control "command valued resources and have some authority relationship to universities" and colleges (El-Khawas & Walker, 2001, p.8). In community colleges, these entities include state and local governmental authorities, but also include accrediting agencies, as well as quasi-governmental organizations. Associations representing major professional groups may exert power over community colleges too, often affecting curriculum and professional standards.

The second category, *societal trends and forces*, includes "diverse social, political, economic, demographic, and technological conditions that both constrain and "enable" university [and college] actions" (El-Khawas & Walker, 2001, p.8). . One important contextual factor for a college is the nature of its student population. Substantial variation - whether in the size of the student population or the type of students– affects the context for the implementation of programs. Any changes in the number or type of students to be served may, in turn, affect the decisions made by the program.

According to El-Khawas and Walker (2001), academe's *normative culture* the third significant influence. Institutional theory (e.g. DiMaggio and Powell, 1983) directs attention to the possibility of superficial or symbolic change, which can be an organization's response to external programs. Building on the contributions of institutional theorists, this component is also seen as encompassing the set of cultural beliefs and structures that are upheld by the mainstream academic community. These influences have been well defined in the writings of Burton Clark (1983). They include numerous implicit rules about what is expected at college and universities and how academic programs are to be constructed and delivered. The norms governing the work of college professors and other instructional staff are especially powerful.

Internal Influences

In addition to external influences, El-Khawas and Walker (2001) note that academic units undertaking a change initiative may also be influenced by a variety of internal factors. Broad environmental influences are important, and the three categories of external influence described earlier in this section remain significant as important considerations in program implementation efforts. However, an organization that initiates an innovation must also contend with various within-college sources of influence. Researchers have touted cultural theories for their sophistication in illustrating the internal complexity of change (Kezar & Eckel, 2002). *Culture* can be understood as the "invisible glue" that binds institutions by providing a lens through which to view events, a set of values to motivate action, and an understanding of the institutional environment.

In the literature on organizational change, two primary links between culture and change have been made. The first suggests that institutions need to have a "culture" that encourages change (Curry, 1992). Some argue that it is strategically important for change initiatives to be

seen as meshing with the culture of those actors in the university that hold positions of power. From this perspective, it is crucial that a change effort successfully negotiate an understanding with the institution over the purposes of the change effort and how those purposes fit with the wider institutional goals of the institution.

The second set of ideas suggests that culture or key institutional elements that shape culture are modified as a result of the change process (Chaffee & Tierney, 1988; Eckel, Hill, & Green, 1998). In other words, the outcome of an innovation is a modified culture (Schein, 1990) that, in turn, shapes response to how innovations are implemented. The process of gaining the support of the institutional community can also be interpreted in terms of what Simsek and Louis (1994) have called a “paradigm shift.” A paradigm is described as “the prevalent view of reality shared by members of the organization” (p. 671). As Clark (1987) has noted, a restructuring of “organizational culture,” particularly faculty norms and values, is critical in establishing and sustaining support for institutional change initiatives, yet this assumes a flexibility of people that may be problematic. If a college or subunits in a college are to implement a program such as Puente, then individuals at many levels within the institution must be willing to look closely not just at what they do on a daily basis, but also at why they do things the way they do them.

Theoretical Framework

Levine’s (1980) analysis of several innovation efforts provides valuable insight for studying the scale-up of externally developed programs in diverse contexts. According to Levine’s *institutionalization-termination* framework, two influences considerably shape the prospects for the implementation of innovations within organizations: profitability and legitimacy. Both of these constructs are subjective and are shaped by the organization’s internal and external contexts.

Profitability refers to the perceived economic *and* noneconomic profits available to innovators and the innovation adopters such as security, prestige, peer approval, efficiency and improvement in the quality of life, to name a few. An innovation may be defined as profitable so long as it satisfies the adopters needs or satisfies them better than the existing method. There are two forms of profitability, self-interest and general. Self-interest profitability is that which motivates individual subunits and staff to adopt an innovation. General profitability is that which motivates an organization to choose or maintain an innovation, but is such that neither subunits nor individuals would adopt it themselves.

Legitimacy, in contrast, is a measure of the affiliation between an innovation and an existing context. Legitimacy does not determine whether an innovation will work, but it is a measure to which an innovation is supported and sustained. One factor is whether the innovation is seen as compatible with the existing culture of the organization. Another factor is whether different individuals and groups who have power and authority support the innovation. Much research has shown that, without the support of key actors – college leaders, deans, or chairs of key committees - change initiatives may not take hold. Additionally, if an innovation strategy is too drastic, the existing campus community may not support it. Yet, because innovations are, by definition, departures from traditional practices, the innovation and the host organization must have at least some incompatibilities. These incompatibilities pull the organization in different directions and can threaten the overall strength of the organization. Hence, a key consideration in Levine's framework is the extent to which programs are institutionalized in the new context. According to Levine, *institutionalization* is the process of boundary expansion or contraction that occurs when an innovation is adopted and implemented in an organization. *Boundary expansion* involves the implementation of the innovation by the host, or the acceptance by the host of some

or all of the innovations' differences. In boundary expansion, the merging of the innovation and organization occurs when the organization accepts some or all of the innovations differences and agrees to live with or absorb those differences. Acceptance or absorption involves establishing the innovation as an enclave or diffusing it throughout the organization. *Diffusion* is the process whereby innovation characteristics are spread through the host organization and *enclaving* is the process whereby the innovation assumes an isolated position within the organization.

Alternately, *boundary contraction* involves a constriction of organizational boundaries in a way that excludes changes that are associated with the innovation. Innovations that are perceived as illegitimate are positioned outside of organizational boundaries. This illegitimate label singles out unaccepted practices as inappropriate for the organization. The organization has two available actions: *termination* occurs when an innovation is eliminated, and *re-socialization* occurs where then innovative unit is required to renounce an illegitimate practice and come into closer alignment with the dominant culture of the host organization.

Hypothetical Model

The following conceptual model situates the scale-up of the Puente program within Levine's institutionalization-termination framework (see Figure 2). In the upper right corner, one would find an institution at which the Puente program is found to be both legitimate and profitable to groups in the internal and external context. For example, a college may struggle with low student retention rates in developmental education and the campus may also have a strongly held belief among its faculty and staff that a lack of counseling and cultural validating instructional practices are a part of the problem. This institution may fully implement the program, engaging faculty and counselors to help create a more cohesive program of study that promises to improve transfer and retention rates for Latinos and other underrepresented students.

In turn, the president of this college is likely to commit the needed resources to the implementation of the program because the program will benefit the college, but will not significantly alter the institutional culture. At the other end of the spectrum (the lower left hand corner) is an institution where Puente program is not considered to be legitimate or profitable to key institutional actors. In this case, the college faculty, counselors, administrators are unlikely to take ownership for the program and, over time, the implementation of the program is expected to fail.

High Profitability	Re-Socialization	Diffusion
Low Profitability	Termination	Enclaving
	Low Legitimacy	High Legitimacy

Figure 2. Conceptual Model.

Finally, the scale-up of the Puente program may fall somewhere in the middle of the framework. In some cases, the program may be perceived as legitimate among key institutional actors, but not profitable to the organization. In this case, the program may remain partially implemented within an enclave of the organization, if it is to survive at all. In a final situation, the program may be perceived to be advantageous to students, but illegitimate among key institutional actors. In this scenario, the program may be required to re-socialize and renounce practices that are found to be illegitimate. In the past, researchers have established that efforts to transform the curriculum toward a more multicultural view often fit this situation. If administrators, faculty, counselors, students, or staff believe the curriculum is “multicultural

enough” or do not believe that the curriculum should be culturally relevant, then they are unlikely to implement programs such as Puente with fidelity to the program’s culturally validating model.

In this study, Levine’s framework is used to examine the strategies that support perceptions of the program’s profitability and legitimacy among three main groups: Puente faculty and counselors, college administrators, and state officials. First, it is the role of the faculty and counselors make decisions about if and how to implement the program in their colleges and classrooms. Additionally, it is the role of the college administrators to establish preferences about how to organize and allocate scarce resources to support the Puente program. Lastly, it is the role of the state to supply the preliminary funding to support the growth of the program in Texas colleges. The interactive perspective applied to this study is only one way to understand these stakeholders’ needs and interests throughout the scale-up process. This approach is useful in calculating the benefits of participation to various subgroups including: more robust educational services, improved educational outcomes, and opportunities for further professional development. This technique is also useful for calculating some of the potential costs to the organizations and the individuals that pay much of the price for program adoption and implementation.

Summary

This chapter began by identifying the various dimensions of scale-up. The operational definition of scale-up used in this study suggested that scale-up is comprised of at least two elements: adoption and implementation. Adoption encompasses the quantitative spread of a program to more colleges and classrooms, while the implementation of the program refers to the subsequent changes that occur in colleges and classrooms.

A key theme in this review was the idea that scale-up occurs as interactions between choice and context. This chapter described the way in which internal and external environments can establish support for or undermine the scale-up of externally developed programs. This expanded notion of scale-up complicates the idea that scale-up is simple the replication of research-based programs in new settings. Using Levine's institutionalization-termination framework, the literature review hypothesized that the scale-up of the externally created Puente program depends on the extent to which the program establish and maintain legitimacy and profitability in diverse contexts. This framework was then applied as a means to assess the potential challenges and supports to scaling-up externally created innovations such as Puente in diverse contexts. The following chapter describes the setting, research methods, and research design that circumscribed this study.

CHAPTER 4

RESEARCH METHODS AND DESIGN

This study investigated the scale-up of the Puente program in three Texas community colleges. This chapter begins with an overview of the multiple case study methods and site descriptions of each college that provided data for the study. Next, the chapter describes the multiple research methods that were used to collect data and provides a detailed overview of the study's research design. In the process, the chapter describes the framework used for analyzing the research question. Lastly, this chapter addresses some of the limitations of the study's methodology and research design.

Multiple Case Study Methods

This study applied a case study methodology to explore the scale-up of an externally developed transfer program in three Texas community colleges. According to Yin (2008), the case study approach is “an empirical inquiry that investigates a contemporary phenomenon in depth and within its real life context...when the boundaries between the phenomenon and its context are not clear” (p. 10). In this study, the case study approach was useful in broadening and validating information about the relationship between the context and the scale-up of the Puente program to three Texas colleges. As a bounded system, time, place, and a finite number of participants defined the CTN-Puente program, but internal and external sources of influence determined whether the program received the resources it needed and how the program used these resources.

The use of a *multiple* case study approach in this study underscored the value of analyzing the scale-up of the Puente program in a number of colleges. Comparisons between colleges provided an opportunity to discover variation within different contexts that might

enhance theoretical understandings of scale-up. These comparisons also allowed for an opportunity to replicate findings across contexts with some key distinctions.

The cases presented in this study consisted of three Texas community colleges that self-selected to participate in the CTN-Puente initiative in the 2012-2013 academic year. In comparison to other institutions of higher education, these community colleges share many of the same characteristics. For example, all community colleges are typically commuter schools whose students are more likely to be part-time than are students in four-year colleges. Even after controlling for background, ability and aspirations, community college students are more likely to drop out of school in the first two years than those who attend four-year colleges. Community colleges are also similar in that they provide vocational, career, academic and developmental education. In addition to university transfer programs, community colleges offer an array of career programs that can be completed for associates degrees, certificates, and diplomas. This broad range of subjects distinguishes them from most four-year colleges and universities. Additionally, tuition at community colleges is between one-half and two-thirds what it is at four-year colleges.

Despite these commonalities, community colleges are not entirely homogeneous. Differences are reflected in course offerings, students' activities, and relations with other institutions. For example while all community college student bodies tend to have high proportions of underrepresented and disadvantaged students, there is a range in these factors that reflects the communities in which campuses are located and from which they draw their students. Unsurprisingly, community colleges with student bodies from higher SES backgrounds and better academic preparation have higher transfer and graduation rates than those with less advantaged and prepared student bodies (Wassmer, Moore & Shulock, 2004). In this study,

differences between colleges were apparent in terms of size, program mix, and demographics. The largest college in the study was in a large metropolitan area and the smallest in a rural farming community. The following site descriptions describe the community colleges that implemented the CTN-Puente program during 2012-2013 academic year.

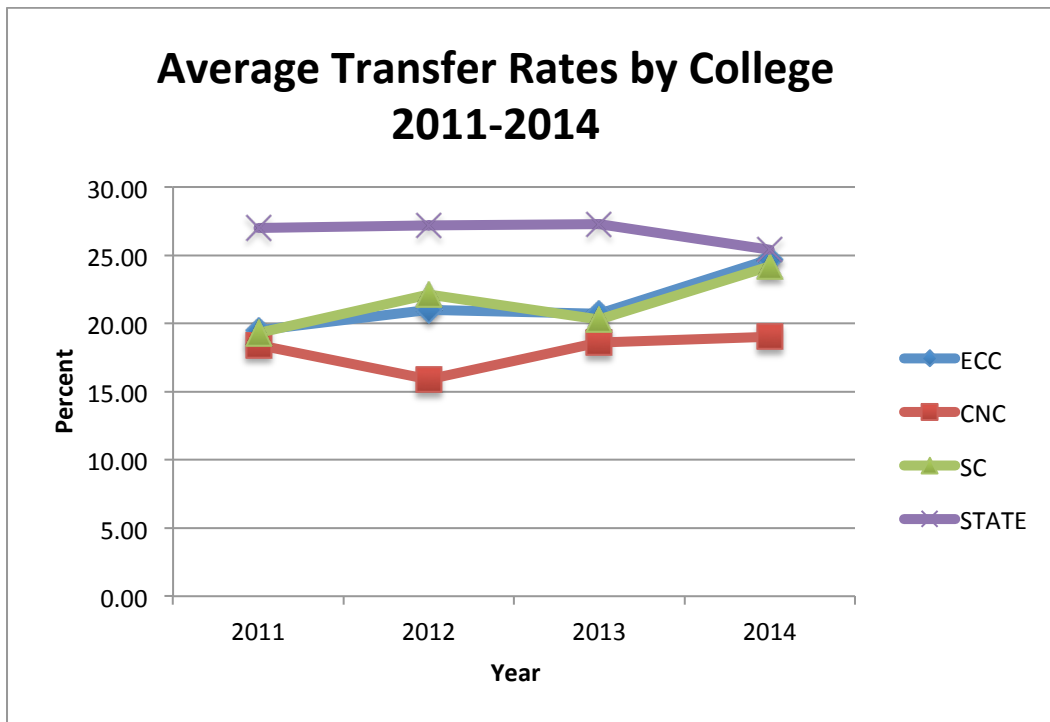


Figure 3. Transfer Rates. Transfer rate derived from THECB, 2011, 2012a, 2013a, 2014. Transfer rates are defined by the THECB as the percentage of first-time undergraduates in a cohort who transfer to a senior institution within six years.

Site Descriptions

Southwestern College

Founded in 1996, Southwestern College (SC) is a large college, with about 132,796 students total. Southwestern College serves Marr and Hondo Counties two rural farming counties in South Texas that straddle the U.S.-Mexico border. The area produces an abundance of crops that require a great deal of hard labor to cultivate and harvest. The agricultural richness of the

region, however, contrasts sharply with the economic limitations of most of the area's residents. Thirty-three percent of the residents in Hondo County and roughly one half of the residents in Marr County live below the poverty line, compared with 18 percent for the state of Texas as a whole. The median household income in the community is \$34,042. Most of the area's residents are poorly educated, including many immigrants and people who are more at home in Spanish than English. 45 percent of the residents of the area had less than a high school education, far worse than the state's average. Only one-eighth of those residents over 25 have college degrees.

In many respects, Marr and Hondo counties have relatively stable environments due to the unchanging nature of working-class agricultural communities. Although there are some prosperous families in the area, Marr-Hondo is a region with many low wage jobs and little economic and social mobility. The region has an unemployment rate far in excess of the state average, with a number of communities at two or three times the state level. On the other side of the Mexico border, the city of Guadalupe struggles with sporadic violent crime and gang-related activities. The 2000 Census reported that the Marr-Hondo metropolitan area has a population of more than 780,087 of whom 91 percent are Latino. The region is heavily bilingual and many businesses communicate with their customers and employees in Spanish.

The youngest college in this study, Southwestern College (SC) was founded in 1996 as a career-oriented college for the working class in the southern region of the state. Prior to the establishment of the college, the southwestern region of the state had low visibility in the state and little political clout in the state capital. State and local officials recruited Southwestern College's president, Dr. Mary White, to the college to help design an institution that would serve as an economic engine for an area of the state that was increasingly economically stagnant. Faculty and staff were recruited to the college only in the last two decades and constituents and

typically share an enthusiasm to improve the college and to advance job opportunities for SC students. However, the college has no system of tenure and the lack of union support means that instructors and counselors have little power to influence the conditions of their work or their work arrangements.

SC is a large college, with about 36,642 students total, and only about 25 percent full time equivalent. The college is a critical asset in the community; it is the only real pathway to a different kind of life for many of the areas young people. SC has a majority of Latino students (85 percent) and the college is designated as a Hispanic Serving Institution by the U.S. Department of Education. More than 87 percent of the students speak Spanish at home. Half of the students are considered low-income, nearly 40 percent are first-generation college students, and 71 percent receive financial aid. Most students who attend Southwestern College choose to attend this college because they have financial restrictions that limit their selection. Ninety percent of the students remain in the local area after graduation, and an even higher percent reside in the state.

Table 2

Composition of Student Body, SW 2012

Ethnicity	Student body (%)
White	2.7
Hispanic or Latino	93.4
African American	0.3
Multiracial	0.0
International	0.2
Other	3.4
Total	100.0

In 2011, more students transferred from SC than from any other college included in this study (see Figure 3). Moreover, in 2012 the college also maintained a higher than average graduation rate for undergraduates enrolled in developmental education (see Figure 4).

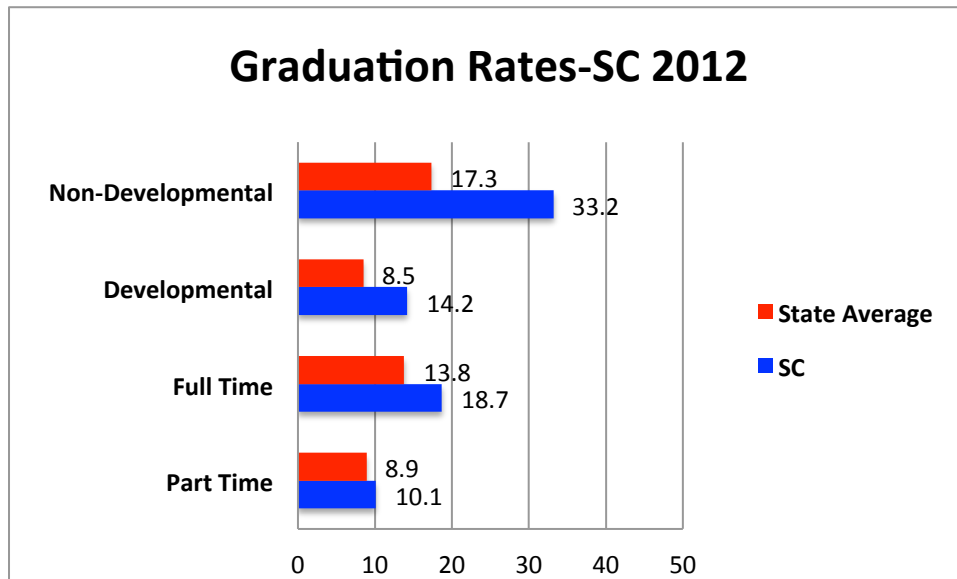


Figure 4. Graduation Rates, SC, 2012.

As an economic development catalyst for the region, SC awards applied baccalaureate degrees, associate degrees, and certificates. Additionally, initiatives at the state have brought about several Early College programs at the college. The college's identification with its working-class population has prompted the adoption and development of several investments in the area of adult, vocational, and technical education. Administrators at SC regularly collect and analyze data on these initiatives to assess their relative effectiveness. An almost constant exchange of information occurs through formal task forces, executive council meetings, and departmental forums. At these gatherings, individuals share strategic information and discussed data-driven solutions to persistent challenges.

Casco Nuevo College

Casco Nuevo College (CNC) is one of five colleges in the Central Texas Community College District that serves San Cristobal, a large metropolitan area in central Texas. The college is located in the southern working class area of that community, fronting a major thoroughfare. The founding of Casco Nuevo College was the culmination of a grassroots movement that began in 1974 toward obtaining post-secondary opportunities for the underserved southern side of San Cristobal. In 1983, the Texas Legislature chartered the college on a large parcel of vacant land on the developing south side of the city and the college achieved full accreditation in 1989.

From the exterior, CNC is an expansive and attractive campus with large grassy areas, fresh academic buildings. Since establishment, consistent increases in enrollment have prompted much growth on the CNC campus. Today the campus houses a state of the art Natatorium/Gymnasium Complex and Performing Arts Center, a Learning Resources & Academic Computing Center, and a fully accredited Family Center. Like many of its companion colleges, CNC was in the midst of expansion and areas of the campus were blocked off for construction during the time that I was there in 2012-13.

The community surrounding CNC harbors mostly low- and middle immigrant communities of immigrants, particularly from the Mexico. The college strives to strengthen its surrounding community through educational outreach that extends into "the heart of the community," a slogan adopted in 1994. A dual-credit program enables students to take courses at Casco Nuevo and earn college credit while still in high school as an incentive to pursue a higher education upon graduation.

Table 3

Composition of Student Body, CNC 2012

Ethnicity	Student body (%)
White	25.0
Hispanic or Latino	69.5
African American	2.8
Multiracial	0.3
International	0.1
Other	2.4
Total	100.0

Historically, Latinos have comprised more than half of CNC’s enrollment, and females have generally outnumbered males. In 2012, 84.9% of CNC’s students were Latino. In 2012, only 7.6 of students in developmental education, below the state average, graduated within 6 years. Of all of the colleges included in this study, CNC had the lowest transfer rates (see Figure 3). This is surprising, given that the college’s website reports that CNC was “among eight community colleges in the nation examined in a Ford Foundation study because its students are highly successful when transferring to four- year universities.” This study, which conducted in the early 2000s, reported that CNC had one of the highest transfer rates in the nation. This reputation stands in sharp contrast to the trends at the college today. Figure 3 shows that, between 2011 and 2014, the college maintained a transfer rate between 15 and 18 percent, well below the state average.

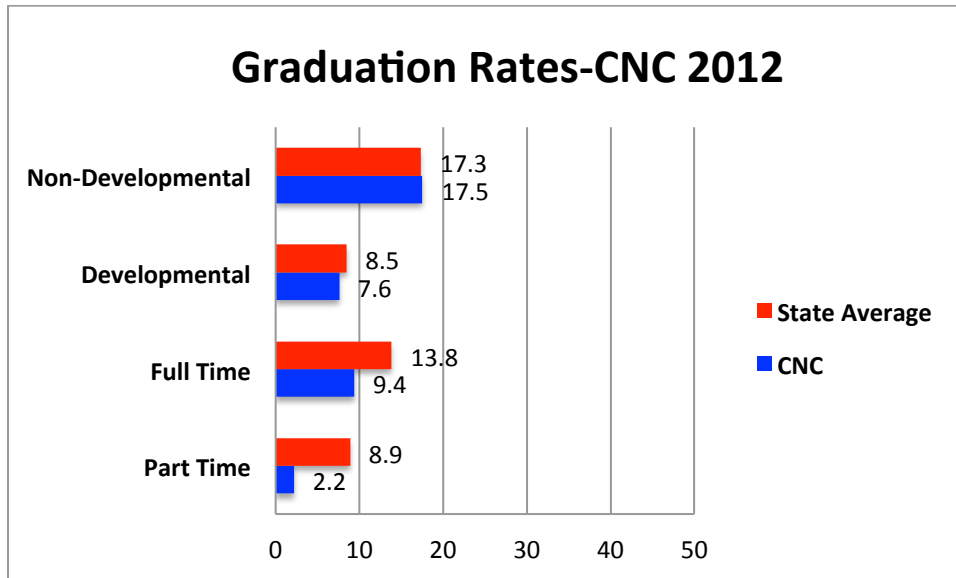


Figure 5. Graduation Rates, CNC, 2012.

While it is unclear what may have provoked the decline in transfer rates, several changes did occur on the CNC campus. For example, the late 1990s, Texas University (TU) offered junior- and senior-level courses on the CNC campus. Eventually, the TU program closed its doors when the Texas University San Cristobal opened on the Southside in 2009. Additionally, while the college was the first college in the state to develop a Transfer Center on campus, it later changed its name to the Center for Academic Transition, indicating a shift away from the transfer focus. Finally, in previous years, the college maintained a reputation as a premiere transfer institution among the communities on the South side of San Cristobal, the decline in transfer rates may have hurt this reputation.

El Cajon College (ECC)

The oldest community college in this study, El Cajon College was established in 1969 in on the western edge of Texas, across the river from the large Mexican city of Dos Rios. The city of El Cajon, from which ECC draws most of its students, has a population of more than 730,000, of whom 80 percent are Latino. Thirty-five percent of the population lives below the poverty

line, compared with 18 percent for the state of Texas as a whole. The median household income in the community is \$36,220. ECC has five campuses and three training centers and serves more than 30,000 credit and noncredit students annually.

Table 4

Composition of Student Body, ECC 2012

Ethnicity	Student body (%)
White	8.2
Hispanic or Latino	84.9
African American	2.1
Multiracial	0.0
International	2.9
Other	1.8
Total	100.0

About 86% of ECC's students are Latino, another 8 percent are White, and 2 percent are Black. Nearly 60 percent are Pell Grant recipients. Approximately 60 percent of ECC students attend college part time, and about 60 percent work in addition to taking classes. Most are first-generation college students unfamiliar with how to succeed in postsecondary education.

Instructors at ECC carry very high teaching loads; they are expected to teach five courses per semester. Moreover, while the college grants tenure status, in the summer all faculty members are compensated at adjunct salaries.

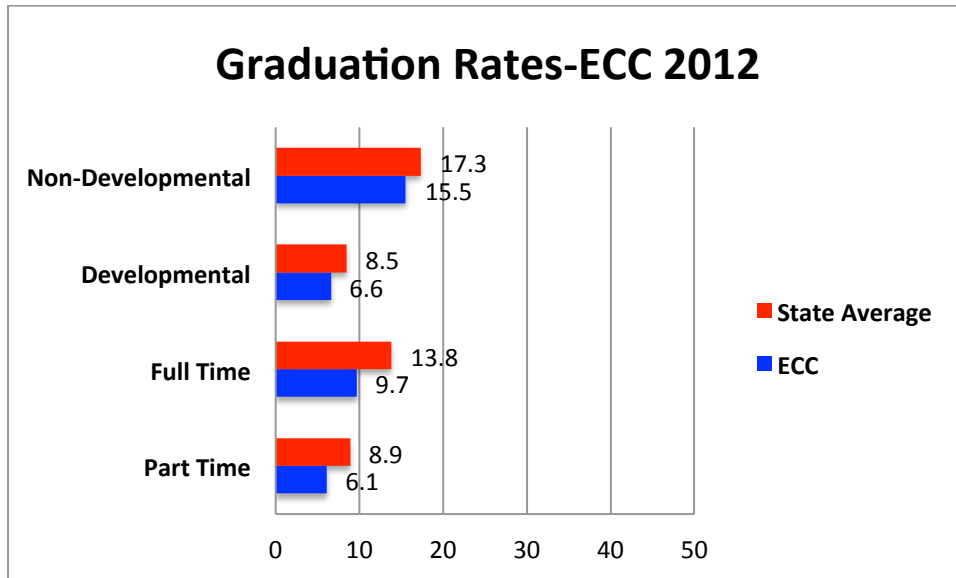


Figure 6. Graduation Rates, ECC, 2012.

The Rio Chico Campus, where the Puente program operates, is located in southeast El Cajon. The campus sits near the college’s central administrative offices, which are housed in a remodeled former manufacturing plant three miles north of the Rio Chico Campus. The Rio Chico campus is the epicenter of college activities. Though many of the campus buildings are older, on my visit in 2012 and 2013 I noticed that several buildings were under construction. More over in 2012, they had just completed the campus’ first student union at ECC, which provided spaces for students to study and relax on the Rio Chico campus. Additionally, the Rio Chico Campus also houses an Enrollment Services Center to receive students seeking admission, financial aid and registration.

The culture at ECC is best classified as managerial; it is characterized by strong senior administrative directives, driven by externally established goals, plans and assessment, is cognizant of outside forces pressing the institution, and strives to meet customer needs. At the same time, over the past decade, ECC had undergone several changes in senior leadership. In 2012, during the time that the campus adopted the Puente program, the college was under the

direction of the Interim President Clark. In addition to Puente, Dr. Clark provided executive leadership in the adoption and implementation of several initiatives designed to improve student outcomes in developmental education and other areas.

Of all three colleges, ECC had been a part of the most initiatives designed to improve student outcomes in developmental education. Researchers outside of the community colleges had conceptualized most of these initiatives. After decades of improvement efforts, however, few programs had become normative practices at the college. According to Dr. Mark Kraemer, a renowned educational researcher at the University of Texas at Austin, the college is in danger of becoming “burned out on initiatives.” Between 2011-2014, ECC maintained transfer rates between 20-25% (see Figure 3). This is just above the average of other colleges in their cohort peer group. In contrast, the three-year graduation and persistence rate for first-time full-time undergraduate students requiring developmental education was only 6.2%, slightly below the state average (see Figure 6).

Data Collection

This section reviews the study’s plan for data collection. In this study, the multiple case study approach involved a number of strategies for collecting information including: surveys, interviews, participant observations, and document analysis. Because each type and source of data has strengths and weakness, using a combination of sources increased the study's validity as the strengths of one approach compensated for the weakness of other data-collecting approaches. By reviewing scale-up activities in three colleges and looking for patterns, connections, and common threads, the study linked together seemingly disparate sources of data. From this viewpoint, program scale-up was treated as an ecological phenomenon.

Survey and Interview Research

Informal interviews were an important source of information in this study. These “interviews” were spontaneous informal conversations that occurred in the observational setting. As Hammersly and Atkinson (2003) advise, I did not place much distinction between solicited and unsolicited exchanges. Instead, I used informal questioning and conversation to gain insight into the “meaning-perspectives” of actors in the field and the larger cultures and subcultures to which they, and their institutions, belong. Also, as I was aware that these “interviews” might influence the actions of participants in the setting in undesirable ways, I limited the extensiveness of these informal interviews and used formal interviewing in settings outside of the setting whenever possible.

Additionally, survey research was conducted with the Puente team members at each of the community colleges. The survey collected data about program implementation, scale-up after the first year of implementation. The questions described expectations about the instructors and counselors experiences in the CTN-Puente program, as well as their attitudes about college and transfer. The survey was distributed online via Survey Monkey in the month of June of 2013. This method was used to structure the content analysis of themes and provide anecdotal details about the scale-up process on each campus. Surveys are found in Appendix A.

Lastly, formal interviews were an important source of information in this study. In these interviews, people were interviewed for a limited period of time and the questions were derived from a previously established protocol. Though structured, I tried to conduct these interviews as a guided conversation, rather than a rigid query. In these interviews, I gathered information related to institutional and cultural challenges in the scale-up of the Puente program and strategies and factors that contributed positively to perceptions of the Puente program. I did not, however, pose these questions related to program legitimacy or profitability directly to

informants. Instead, I tended to these lines of inquiry while putting forth questions in an open-ended format. For example, I asked respondents about their views on key events or outcomes.

Researcher's Perspective

Because a case study should take place in the natural setting, I assumed a variety of roles within the case study and participated in some of the events that I was studying. These roles included, but were not limited to:

- Being a member of the 2012 Texas Puente team
- Performing a functional role in knowledge development and information dissemination for the Catch the Next-Puente program
- Acting as a link between Puente-CTN Texas and Puente California

In accordance with these roles, activities ranged from casual social interactions with the Puente teams to purposeful contributions to the Puente knowledge development teams.

- Participation in the Puente Summer Training Institute (PSI) in Berkeley, CA
- Attendance at monthly phone conferences
- Site visits to Texas Puente colleges
- Formal and informal interviews with program stakeholders

In addition, between 2008 and 2012, I was a Research Associate on a Ford-funded study of the programs and policies that support community college transfer among African American and Latino students from low performing high schools with the Civil Rights Project/ El Proyecto Derechos Civiles at UCLA. The results of this study found, among other things, that the Puente program was a focal point of transfer support for low-income minority students at community colleges with above average rates of transfer. In presenting this research, I have inevitably assumed an advocacy role for the Puente program. In order to reduce the influence of my biases

in this study, I only shared my previous work with study participants when I was asked to do so. Additionally, I refrained from voicing my personal opinions of the program with study participants.

Throughout data collection, I sought to systematize observations by taking notes—recording key phrases, questions, environmental details, events, and dialogues that occurred in the observational setting. In addition, I reviewed my notes and recorded my thoughts and reflections. In this way, I sought to develop a “disciplined subjectivity”, or a rigorous self-monitoring, self-questioning and reevaluation throughout the research process (McMillan & Schumacher, 1997). In addition, I utilized member checks to establish validity. During these checks, I presented information to individuals involved in the study to assure that the information was accurate. Such activities sought to minimize the bias in my research.

Research Design

The research design for this study was guided by the principles of a qualitative research study which “is created by the researcher, is molded by the method, and is responsive to the context and the participants” (Morse & Richards, 2013, p. 66). In conducting qualitative research, the researcher is intensely involved in the experience with the participants (Creswell, 2002). Design decisions center on what is being studied, with whom, and under what circumstances (Janesick, 1994). Accordingly, the pacing of the study included three phases of data collection. The phases were not linear, but overlapped and were intended to respond to local situations, conditions, and stakeholders' needs.

The first phase involved observation as a way for me to get to know the context and identify key stakeholders in the scale-up process. Next, Phase 2 involved the active data gathering on program implementation on each campus. Lastly, Phase 3 assessed strategies and

factors that contributed positively to program implementation and the perceptions of program legitimacy and profitability held by individuals in various subgroups during and after the first year of implementation. In this approach, both quantitative and qualitative data were key. Qualitative research was central to gathering information from participants who shared their knowledge and ideas. Quantitative data from both the site documents and survey results was also used to create a picture program implementation on each campus. The data were collected using multiple research methodologies in order to reflect the multifaceted nature of the research question.

Phase One: The Context

The first phase of research identified the people, material items, and activities that circumscribed the adoption of the Puente program on each campus. Research activities centered on participant observations of the Puente Texas PSI training, observations of state-level planning meetings, and subsequent interviews with key stakeholders. A basic task throughout this first phase of research was identifying the stakeholders in the internal and external context of the each college.

Ian Mitroff (1983) defines stakeholders as those individuals in the environment surrounding an organization that have some reason to care about what happens to it. This study used a number of methods to facilitate this process. First, through the social participation method, I sought out people who took an active role in activities related to the adoption and implementation of the Puente program. To begin, these individuals comprised the participants in the Puente foundational training in Berkeley, CA in March 2012 including: faculty, administrators, and counselors from the three Texas colleges, the Catch the Next leadership team, and the Puente leadership team. At the weeklong Puente Training Institute in Berkeley, CA

and March (2012) and site visits to each Texas campus in April (2012), the early observation schedule allowed me to build relationships with many key stakeholders in the field setting. I also paid careful attention to the individuals responsible for managing “cross-boundary” relationships between Puente practitioners and influential groups in the external and internal environment.

In the Texas Puente initiative, stakeholders were made up of different external and internal groups. External stakeholders included a range of individuals at the state and district offices. Internal stakeholders included those in management, the operating core, administrative staff, and support staff at each college. Finally, boundary-spanning personnel included individuals in the California Puente and Catch the Next organizations that helped to manage a range of cross-boundary relationships between the internal organization and external stakeholders. These individuals also served as the external representation for the Puente and provided leadership within the Puente program.

The first phase of research also sought to establish an understanding of the action setting for the implementation of the Puente program in Texas. Data collection involved site visits to each Texas community college campus. On these visits, I observed organizational meetings and looked for meaning in these events. In addition, I developed written observations that described the players (who was in the game), the power (how much clout each player exercised), and the interests (what each player wanted). In addition, I collected state- and campus-level documents and demographic data that further contextualized the Puente program within the institutional and cultural contexts.

Phase Two: Program Adoption and Implementation

The goal of the second phase of study was to determine the process by which the Puente program was adopted and implemented on each Texas campus. Levine’s

institutionalization/termination framework suggested that implementation would either occur through a process of boundary contraction or expansion. Colleges would either incorporate Puente's model or re-socialize practices to create compatibility between the program and the host organization. Ultimately, owing to the dominant position of the institution, I predicted that the Puente program would adjust and be brought into closer alignment with the dominant culture of each institution.

I used various data collection techniques to test this hypothesis. First, I drew on campus level Puente data to calculate the *spread* of the program to classrooms and colleges—or the quantitative dispersal of a program to classrooms and colleges. Second, based on observations, surveys, and informal and formal interviews, I examined the *depth* of program implementation, or the nature and quality of program adoption and implementation. At each college and at various Puente planning meetings throughout the state, I participated in site visits and conducted formal and informal interviews with state officials, Puente administrators, and Puente faculty and counselors. The central questions I sought to address were: how, if at all, did encounters with the Puente program cause individuals and institutions to reconstruct practices or policies? And how, if at all, did individuals and institutions alter the program in ways that reinforced pre-existing conventions?

Phase Three: Supports for Scale-Up

According to Levine's theoretical framework, both legitimacy and profitability determine the extent to which programs are institutionalized by their host organizations. Hence, the goal of the third phase of data collection was to examine the strategies and conditions that contributed positively to perceptions of profitability and legitimacy among key stakeholders in each Texas college during and following the first year of implementation. These stakeholders mainly

included: Puente faculty and staff, the Puente and CTN organizations, and college and state officials. The intention was to meet with representatives from different subgroups to ensure that I had many opportunities to hear different perspectives in order to test the reliability of personal reports and augment the frame of reference.

Data Analyses

Following the third stage of data collection, I relied on two primary tools to organize and analyze the data: the research questions and the theoretical framework generated during the conceptual and design phase of the study. According to Patton (2002), there is no recipe for transforming data into findings. As the principal researcher, I had to make sense out of the information gathered throughout the data collection including observations, interviews, and field notes. These sources of data are complex, and I sought to reduce their complexity through two main approaches:

- Categorical analyses—which identified and compared emerging themes.
- Narrative analysis—which used rich data collected during the data collection process to illuminate the themes and tell a story.

My first step was to create coding schemes to reduce the volume of data and focus on the data that could help to identify patterns and communicate the essence of what the data revealed (Patton, 2002). To this end, surveys, interviews, and site documents were first coded according to the dominant themes that were expressed by the participants during the process of program adoption and implementation. This framed the data reporting and represented the first-order analysis.

Later, I sought to derive an explanatory framework to put the study into a theoretical perspective through second-order analysis (Patton, 2002). Specifically, I used the software tool

NVivo to organize the data according to the themes of profitability and legitimacy. Perceived supports to profitability were color-coded blue, while key supports to legitimacy were color-coded green. These methods established the strength of each theme, given its frequency and emphasis. This second order analysis helped develop my research in a theoretical ways, where the data were reviewed for underlying explanatory dimensions related to strategies that supported scale-up. After establishing evidence of trends, I made diagrams to depict the scale-up process at each college. As discussed previously, these methods added reliability and validity to the research by allowing for means of looking for potentially disconfirming evidence.

Timeline for Data Collection

Table 5 depicts the timeline for data collection. Although this timeline appears linear, the phases of data collection overlapped as events occurred in the field. During the course of fieldwork, data collection activities adjusted to extant circumstances. For example, the timing of my site visits did not always correspond to times when Puente related events such as professional development conferences, leadership planning meetings, and Puente related activities were occurring. When I noted a deficiency of data at one or more colleges, I altered the data collection plan and timeline to compensate for this gap. Also, it should be noted that while the official timespan of this study ended in the winter of 2014, my involvement with the CTN-Puente sustained through 2015. I continued to participate in the Research and Evaluation team and to attend monthly conference calls. Additionally, in the summer 2014, I assumed a position as the Director of Research and Evaluation for CTN. In this role, however, I did not actively collect data for use in this study. Instead, allowed new information to help contextualize and triangulate the data that I had previously collected over the course of this dissertation study.

Table 5
Data Collection Timeline

Phases	Date	Activities
Phase One	April (2012)	<ul style="list-style-type: none"> • Attend Puente 5-day foundational training in Berkeley, CA • Visit to Texas Colleges: Participant observations, informal interviews • Participation in monthly CTN conference calls
	May-August	<ul style="list-style-type: none"> • Visit to Texas state and college level Puente planning meetings • Participation in monthly CTN conference calls
Phase Two	September-December	<ul style="list-style-type: none"> • Visit to Texas: Participant observation at professional development meetings and Puente classes and site visits with formal and informal interviews • Student surveys • Participation in monthly CTN conference calls
	January-May (2013)	<ul style="list-style-type: none"> • Visit to Texas: Participant observation at professional development meeting, formal interviews, informal interviews • Participation in monthly CTN conference calls
Phase Three	June-August	<ul style="list-style-type: none"> • Assess student and program outcomes • Instructor/counselor surveys • Participation in monthly CTN conference calls
	August-November	<ul style="list-style-type: none"> • Formal interviews with instructors and counselors • Formal interviews with CTN a and Puente leadership • Participation in monthly CTN conference calls
	November-January (2014)	<ul style="list-style-type: none"> • Member checks • Participation in monthly CTN conference calls

Challenges and Limitations

As case studies, the main challenge in this study was becoming too specific to be useful to others. As Hearn has noted (1996), idiosyncratic observations are often of little use to practitioners and policymakers. On the other hand, some scholars of organizational change suggest that meaningful insight to understand the change process can only come from context-based data (Bergquist, 1992). Context-based data may help researchers understand why and under what circumstances scale-up strategies worked at a certain institution at a particular time

(Bergquist, 1992). The challenge in this study was finding a middle ground and identifying conclusions informative at a level that could guide future change initiatives. This task was difficult, however, because appropriate levels of detail were not apparent.

Moreover, as Shavelson & Towne (2003) note in their influential book on research design in education, the scientific implications of case studies are not generalizable to other locations or people. Hence, while this investigation highlighted the fine details of the scale-up of the Puente program within particular organizations, it could not draw causal conclusions about universal challenges in scaling-up external created innovations. Instead, the behavioral perspective applied to this study aimed to enable inferences regarding potential strategies for supporting the scale-up of externally developed programs to new state and campus contexts.

Finally, this study was restricted by its timeline, which spanned from the formation (six months prior to the start of the academic year) through initial implementation (the first academic year) stages of scale-up. This design did not allow for an assessment of the sustainability of the program over the long run. At a minimum, this design provided an indication of some preliminary trends.

CHAPTER 5

DATA ANALYSES

Each of the data sources discussed in the last chapter is brought together in this chapter to support an examination of the research questions stated in chapter one. Operational definitions, sources of data, and the findings of the research are identified. This chapter draws from data from three community colleges. Tables and graphs are used to present the relevant findings of this study and each section includes a discussion of how responses to the research question are supported by the data. The first section describes the adoption and implementation of the Puente program within the institutional and cultural context of each college. The section that follows draws on demographic, observational, interview, and survey data to assess the factors that facilitated program scale-up for different groups' stakeholders.

Case Studies

This section addresses the first research question that guided this study: How was an externally developed Latino-focused transfer program scaled-up in a new state and campus context? To answer this question, this section brings together evidence from a variety of sources including content analysis, interviews, surveys and existing college documents. The case studies contribute insights about the process and the outcomes scale-up from the perspectives of CTN, the California Puente program, the state, the colleges, and the practitioners at each Texas college.

Building the Foundation: Catch the Next and the California Puente Program

The impetus for the scale-up of the Puente program in Texas community colleges began when Mike Walden, a self-described entrepreneur, educator, and storyteller, commissioned a study of programs that were designed to improve rates of college completion among Latino students. Prior to commissioning the report, Walden's life work had been dedicated to collecting

and conveying, “stories that change lives” through print and film media. Walden had been an award-winning executive producer of broadcast television and the founding director of an organization that created public digital learning tools for teachers. In addition, he had written and published a book about “everyday American heroes”.

Despite these notable accomplishments, Walden was troubled by “the fleeting nature of media in the face of real social and economic issues”. He was particularly concerned with media’s inability to effectively address the link between low rates of college completion among Latinos and the nation’s declining economic competitiveness. Walden’s concern for Latino student achievement was personal; he had worked as bureau chief for a major news outlet in El Salvador during the country’s civil war and he maintained close ties to the Latino community in the United States. In 2010, this dissatisfaction led Walden to personally commission a report to search for “cost-effective solutions” to the Latino college completion gaps at the national level. He was surprised when the results of this study pointed to the Puente program as the *only* program with demonstrated results that worked with the existing resources of colleges and high schools.

In an interview in late 2013, Walden spoke of how his early work in media related to his interest in the Puente program:

I call myself a storyteller. But, as I have become older, I have become more interested in the hands on interaction of people. If you’re interested in behavioral change and impact, media is not ideal. It’s hard for a single piece of media to have the kind of impact that is needed to create change.

...My interest in Hispanic politics came from the years I spent in Central America and my relationships with the Hispanic community in the US. I look at the issue of politics as critical to the economic competitiveness of America in the 21st century. Do we want an economy of college dropouts? That is a very bad place to create prosperity.

...I was drawn to Puente because I commissioned a study of Hispanic student success. I was surprised that there were so few scalable programs that were effectively working on this issue. The issue is often very political in nature; it’s about getting more resources for Hispanic students. That has been a priority, but that’s a different thing than

being a practitioner and changing *practice*. The researcher that conducted this study promoted Puente as the ideal model to scale-up. It had extensive data demonstrating results at the high school and community college level. It invested into existing resources in the public education system. So much is tilted toward niche efforts, like the charter school movement...it is important that I believe that the Puente model can be scaled-up. The reason that I believe this is because it's cost-effective. It doesn't add on lots of new undertakings or staff. If you're looking at thousands of dollars per student, that is not a good model to scale.

Unlike niche programs that did not address the majority of those that could benefit from the services, Walden came to view the Puente program as a scalable solution to the Latino college completion crisis and he invested his time and his money in testing this hypothesis. In 2012, Walden founded the Catch the Next (CTN) organization to “empower at risk students to graduate and enter the work force” and he recruited a cadre of renowned Latino scholars and key Latino political figures to serve on the board and to serve as partners in this initiative.

Upon the establishment of CTN, Walden appointed Dr. Rosa Maria Campos to serve as the Educational Director. Dr. Rosa Maria Campos came to CTN with extensive experience in higher education leadership, having served as Assistant Dean of Yale College and a member of the faculty where she established and served as Director of the Asian Chicano Cultural Center at Yale, the Chicano Boricua Studies Program, *Esfuerzo Unido*—a service learning partnership between the college and the local municipality. In addition, Dr. Campos had previous experience helping institutions build their capacity and identify promising practices to take to scale. Through her work with the Lumina and Gates Foundations on the Achieving the Dream (AtD) initiative, she had served as a Research and Engagement Coach to over 80 colleges across 23 states, including school districts and community colleges in South Texas. Like Walden, Dr. Campos, was aware of and personally committed to the issue of Latino student achievement in the United States and she attributed her own academic accomplishments to the support and mentoring that she had received as student.

The leaders of the Puente program responded cautiously to Walden’s initial requests to partner with CTN in the scale-up of the Puente program outside of California. Among other things, they feared that CTN would not be able to preserve the integrity of the Puente program if they replicated the program outside of California too quickly. Walden recalled, “They weren’t convinced that we could implement Puente. They used the term ‘Puente light.’” To be fair, at the time that CTN was establishing their partnership with Puente, the California Puente program was in the midst of their own organizational changes. In the fall of 2012, the program was scheduled to relocate from its almost 25-year-old home at the UC Office of the President to the University of California at Berkeley. The Puente leadership team anticipated lay offs and feared that an ill-timed partnership with CTN would adversely impact their already under-resourced sites in California. Moreover, while Walden had made it clear that he appreciated the Puente program, he had also communicated his intentions to use the program as a *model* for facilitating change rather than a narrowly tailored prescription for change. Walden sensed apprehension toward this approach to scale-up and explained:

Puente has had tremendous fidelity to its model for the past 30 years. Tinkering with the model, in their view, is inviting problems...our approach is, ‘let’s work together’....But change is a very difficult thing to accomplish when people think they are fighting for survival. Experimentation could be perceived as giving way to other changes.

Ultimately, members of the Puente Board of Directors and administrators at the UC Chancellor’s office—which provides annual funding for the California Puente program—encouraged the Puente leadership team to reconsider their stance toward CTN. Specifically, they framed the size of the Puente program as a barrier to the program’s future success and they challenged the leaders of Puente to explore options for scaling-up. After careful consideration, the Puente administrative team acknowledged their limited capacity to launch a scale-up effort of their own accord and they pledged to partner with CTN to scale-up the program in colleges

outside of California. It was agreed that CTN organization would secure resources for the development and refinement of the Puente program in new contexts, while the California Puente program would provide the requisite technical expertise, resources, and authority necessary for the diffusion of the Puente model externally.

Initial Engagement with Texas Colleges

As opposed to a top-down approach, Campos and Walden first sought to establish connections with community leaders in Texas. This was an important first step in creating the kind of change that they believed in; it was, as Walden put it, “an approach that started from the bottom up”. Both Walden and Campos had previous experience documenting and facilitating this kind of change. In 2011, Mike had written and published a book about “everyday American heroes” that validated the power of civic activism in community transformation. Accordingly, Walden recalled that their criteria for ideal sites for scale-up were places that already had an active team of leaders in place. He explained:

We sought out the local champions. You can have all kinds of resources, but if you don’t have ownership at the local level, then you cannot create change. So, our first contacts were with community leaders.

Dr. Campos was key in convincing Walden to target Texas as the first state for program implementation. Initially, Walden had wanted to focus scale-up efforts in the New York City public school system. As a long-time resident of New York City, Walden was aware of the need for such programs in New York City Schools. Yet, he was also cognizant of the challenges of working in a school system with entrenched political issues and other barriers to reform.

Based on her work with the AtD initiative, Dr. Campos believed that there was a unique opportunity to take the Puente program to Texas. Walden noted:

In Texas, there are a large group of educational leaders that are behind change.... change is a natural state for these institutions. They are not thinking that this is odd. Change is not as threatening when you are in a place of constant change.

During her work with AtD, Dr. Campos met Dr. Roberto Pavilla—a Latino superintendent in Southwestern Texas who had facilitated several *extensive* change initiatives in high schools throughout a low-income school district in Marr County. One of the initiatives that Dr. Pavilla had implemented was an Early College program that partnered with Southwestern College to promote high school graduation and college enrollment at every high School in the Marr County District. Data suggested that the initiative had produced positive results in terms of rates of high school graduation and college enrollment, but there was still room for improvement.

As expected, Campos and Walden found an eager partner in Dr. Pavilla and he quickly signed a Memorandum of Understanding with CTN that committed the Marr County School District to work with CTN to implement the Puente program in the 2012-2013 academic year. Like the Early College initiative, Dr. Pavilla wanted to implement the Puente program at all of the high schools within his school district. For the California Puente program, this kind of expansion was unprecedented. Given the shortages facing the Puente program in California high schools, members of the Puente high school program asserted that they simply did not have the resources to provide the training and support necessary for the implementation of the Puente program in Texas high schools. Despite their best efforts to arrive at a compromise, the leaders of the high school Puente program insisted that they were not prepared to support anywhere near the level of growth that Dr. Pavilla sought.

As negotiations with the Marr County School District stalled, Dr. Campos reached out to her community college colleagues from Achieving the Dream. At a national conference on Latino student success in San Cristobal, Texas, Campos connected with Dr. Lucia Camacho, an old friend and an influential administrator at Southwestern College. As a Latina who was born

and raised in rural Marr County, Dr. Camacho was amenable to Walden and Campos' efforts and she envisioned the positive impact that the Puente program could have at SC and in community colleges throughout the state. Dr. Camacho agreed to serve on the board of CTN and also to serve as an early advocate for the program in the Texas community college system.

At the conference, Dr. Camacho put Dr. Campos in touch with Dr. Paul Chacon, a young Latino administrator at Casco Nuevo College who was ingrained in several of the high profile students' success initiatives in developmental education in Texas. Dr. Chacon was aware of many grant opportunities at the state and national levels in the area of developmental education and he encouraged Dr. Campos to continue to focus on community colleges, instead of high schools. After the conference, Dr. Camacho also put Dr. Campos and Walden in contact with the Vice President of Instruction at El Cajon College, Dr. Gina Russet. At the time, the Puente program went along with her work; she was running a summer bridge program, and Dr. Russet thought that Puente would complement this work. Moreover, due to the enrollment growth as well as increases in emphasis on first-generation and Latino populations and establishing a college-going culture at ECC, Dr. Russet believed that it was an opportune time to bring the Puente program to ECC.

Because they each had the respect of many long-standing faculty, counselors and staff members, Dr. Chacon, Dr. Russet, and Dr. Camacho garnered early support for the Puente program at their respective colleges. In the fall of 2010, they successfully recruited a small cadre of faculty members and mid-level administrators to visit the Puente program in Riverside, CA.

Walden reflected on the importance of this early support to CTN's scale-up efforts:

In Texas, we found an extraordinary team made up of some relatively newly minted Ph.D.'s that are from this area and returned because they wanted to give back. As one

person put it, he left a comfortable position at another college because, '*la causa esta aqui*.'⁶ [Translation: 'the cause is here'].

In 2010, faculty and administrators from CNC, ECC, and SC travelled to Riverside, California to participate in a 2-day Puente training program. On this trip, they developed an understanding about the fundamentals of operating Puente program including student recruitment and faculty training. Above all, however, the visit gave them an opportunity to grasp the impact of the program on the lives to Latino students in California colleges. Ultimately, the visit to Riverside secured their passion and commitment to establishing a Puente program at their own colleges. As one instructor recalled, "In Riverside, when we met, we were so inspired. We didn't look back."

Despite this initial enthusiasm, efforts to scale-up the Puente program lost inertia when the teams returned to their community colleges. The program faced both political and technical impediments. First, although the CTN-Puente program had buy-in at the administrative level and it had a passionate cadre of individuals interested in program implementation, there was competition within the broader community college. Each college had other, higher profile, change initiatives in the pipeline including the 'Foundation of Excellence', which was funded by Jobs for the Future and 'Completion by Design' which was funded by the Gates Foundation. At the same time, administrators in Texas colleges were aware that Coordinating Board was moving toward implementing new standards in developmental reading and writing and they anticipated a flurry of activities related to this transition. The leadership team at each college simply did not want to commit time or resources toward the adoption and implementation of yet another change initiative.

⁶ The term *la causa* makes reference to the late 1960's civil rights movement, which sought to improve the lives of Latin American farm workers who battled racism and indecent working conditions.

A lack of secure funding was the second barrier to the adoption and implementation of the CTN-Puente program in Texas colleges. In a Puente planning meeting on the CNC campus in early 2012, Dr. Charon counseled Campos and Walden, “The more grants that you bring, the more influence you will have” adding, “once the major players start coming around, then everything falls into line.” Walden acknowledged the financial challenges facing CTN-Puente. As he put it, “College presidents cannot just start programs; they need to know where the money is coming from.” While Walden and Campos were “in talks” with some major national philanthropic organizations, by the fall of 2011, they had not secured any formal commitments. This struggle could be attributed to a couple of things. First, CTN faced the Catch-22 of modern philanthropy; programs are more likely to get funded if they already have funding. Second, the CTN-Puente program was entering into a crowded field in Texas; several of the major philanthropic organizations were already funding developmental education initiatives and, in the midst of so much activity, it was difficult to set the CTN-Puente program apart.

Soliciting Support from the State

In the fall of 2011, sensing that discussions with the larger philanthropic organizations were coming to a halt, Walden and Campos turned their attention toward the state. As, Walden recalled:

We were in negotiations with Texas colleges, because we felt that this was the group that we wanted to work with, we leveraged that to get introductions to some of the key members at the state levels of the education policy team, principle among them the THECB. The Coordinating Board had been an extremely active entity in setting education policy for the state. Many states have weak state level education policy makers, they may set the curriculum and a set of books that are ok or not ok, but its fair to say that California and Texas share this, in that there are very important state-level entities that are influential in determining high-level policy.

In Texas, many efforts have been directed toward addressing the problem of low retention rates in developmental education problem. Over the past decade, with the support of the

Achieving the Dream Initiative (AtD) sponsored by the Lumina Foundation and the Developmental Education Initiative (DEI) funded by the Gates Foundation, Texas community colleges had been a part of many initiatives to “re-mediate” remedial education in hopes of improving student outcomes in divergent areas (i.e. transfer rates, certification completion, retention, associate’s degrees completion, etc.).

As a result of the Closing the Gaps initiative, in 2009, the Coordinating Board had drafted a Developmental Education plan that consisted of the following six goals (THECB, 2012b, p.86):

1. Identify and fund innovative projects to improve the access, acceleration, and success of students who need developmental education to achieve college readiness, with a specific emphasis on non-course competency-based remediation efforts.
2. Improve the availability and quality of academic advising and counseling services for developmental education students.
3. Increase the preparedness of developmental educators.
4. Improve the quality and effectiveness of developmental education programs in the state of Texas.
5. Improve the assessment and placement of first-time-in-college (FTIC) students into developmental education.
6. Improve alignment of adult basic education with community colleges and career technical education.

The plan articulated a vision and enhanced framework for addressing the population of underprepared students in Texas higher education. One feature of this plan was that, in 2010, the

THECB agreed to collaborate with select community colleges and universities to launch the Developmental Education Initiative (DEI)—an intervention designed to identify and implement innovations that could fundamentally reform a system that was failing students. The THECB invested a large amount of money in these efforts.

The Developmental Education Initiative involved 15 colleges, of which ECC and CNC were two. Based on evaluation results from the Developmental Education Demonstration Projects, the Coordinating Board identified a number of promising practices to be scaled and further evaluated (THECB, 2013b). Among other things, the promising practices identified in the Developmental Education Projects included:

- **Advising**
 - Use of a holistic advising protocol in addressing individualized needs (e.g. Considerations for prior academic coursework, non-cognitive factors such as motivation, and family-life issues)
- **Accelerated Instructional Strategies**
 - Integrated reading/writing
- **Faculty Development**
 - Comprehensive, year-long professional development program for faculty and staff supporting integrated reading/writing

While the DEI provided a conceptual framework for addressing the issue of student success, it did not lead to the proliferation of innovative programs, practices, and policies in colleges throughout the state. Hence, despite having invested large sums of money in facilitating change, the DEI did not have the kind of impact on student outcomes that intended in the Closing the Gaps. In response, in 2011, Senate Bill 162 redirected the Coordinating Board to develop a

new statewide developmental education plan “to serve students who require developmental education in an effective and cost-effective manner” (THECB, 2012b, p.20). Additionally, they appointed Dr. Martha Daily to the position of Director of Developmental Education to oversee this work. In early 2012, led by Dr. Daily, the THECB created the 2012-2017 Developmental Education Plan, which built on the goals of the previous Statewide Developmental Education Plan, adopted by the Coordinating Board in 2009 and set forth the following vision (THECB, 2012b, p.26):

By fall 2017, Texas will significantly improve the success of underprepared students by addressing their individualized needs through reliable diagnostic assessment, comprehensive support services, and non-traditional interventions, to include modular, mainstreaming, non-course competency-based, technologically-based, and integrated instructional models.

Notably, this vision proposed to fast track several “effective practices” in developmental education. Yet, it remained unclear how this could be done. Ultimately, this culture of uncertainty created a unique opportunity for CTN-Puente. Walden considered:

It turned out that the timing of our entry into Texas, we didn’t know this, but it happened to be a stroke of good luck that they were looking at the near term deadline for a policy for a process that they call Closing the Gaps which had been promulgated in the early 2000s...It was a long initiative designed to close the achievement gaps, and they were finding that there were huge problems and the at they were nowhere near reaching the goals that had been set, and this was causing them to reexamine the policies that they had been pursuing. They had greater interest in new policies.

...From the beginning, we pitched Puente and the scaling-up of Puente as a situation of evidence driven decision-making and we found in the Coordinating Board a receptive audience. Commissioner Paredes had been at UCLA, he knew of Puente...So we were not coming to him cold. In addition, Dr. Daily, the new appointee to the head of Developmental Education at the Coordinating Board, was very impatient to get things done.

The Puente program clearly overlapped with several of the strategies backed by other developmental education initiatives including: paired student success and developmental education courses, instructional redesign with student supports, accelerated instruction, and case management counseling. Moreover, Campos and Walden emphasized that CTN-Puente already

had a plan in place for implementation and the evidence to back their plan up. Given the circumstances, Dr. Daily and officials at the Coordinating Board elected to fund the Puente program and offer it to colleges as one option for scaling-up accelerated models of instruction and enabling successful outcomes leading to the award of more certificates, transfers, and degrees, along with other workforce and personal enrichment goals. In particular, they were interested in the role that the Puente program would play in providing the professional development to support the state-initiated transition toward Integrated Reading and Writing.

Walden confirmed:

The advantage that we had was that we had already put out a plan of action that included a series of professional development sessions conducted by Puente and coaching and coordinating role that CTN would do, so we had already mapped out an action plan. We actually had a timeline. This was something that helped us with the coordinating board and the community colleges.

While the Puente program was compatible with many of the state defined goals, there were aspects of the program that were less appealing to state officials. For example, the Coordinating Board made it clear that they were interested in promoting the AA degree instead of transfer. In fact, they explicitly removed all references made to transfer within CTN's initial request for funding. Walden observed:

The state made it *extremely* clear to me that they did not want to have people skipping the AA degree in order to advance to a four-year degree. It is just as important to them to have 2-year degrees as it is to have 4-year degrees. They made it quite clear that their money would be devoted to getting the degree at the community college level.

In addition, because the state was looking at strategies that would have a large-scale impact on student outcomes in developmental education, they stressed that they were not interested in a program that would serve only 25-30 students per campus, per year and they urged CTN-Puente to begin with at least 500 students. This would have required training over 30 instructors and counselors; the California Puente program simply did not have the capacity to

support this kind of growth. After negotiations between CTN, Puente, the THECB, and the Texas community colleges, the number was reduced to 200 students—50 students at SC, 50 students at CNC, and 100 students at ECC. In comparison to California, these numbers were still very large. In the spring of 2012, the Coordinating Board awarded CTN half a million dollars to implement the Puente program in Texas colleges. This money from the state was the key element to getting started on the community college campuses. It was, however, only one of the essential ingredients in the scale-up process.

Advancing Toward Implementation

As Walden and Campos predicted, securing state funds changed the conversation at the community college level. In the spring of 2012, Walden and Campos informed each college that they would be able to pay for a team of instructors, counselors, and administrators to a 5-day training institute in Berkeley, California. Because there was already a group of people, including the college presidents, who were supportive of the program on each Texas college, they were able to move into action quickly. Walden reflected:

It was a snowball effect. We had a core of individuals who were interested in and committed to the program, and bringing the [state] money changed everything. We already had put out a plan and we had a timeline. This was important.

The sections that follow describe the context for the adoption of the Puente program at each Texas institution.

Casco Nuevo College

At Casco Nuevo College, Dr. Chacon the counselors and instructors who had a chance to visit the Puente program in Riverside, California served as the primary supporters for the CTN-Puente program at CNC. At a Puente planning meeting at CNC in the spring of 2012, President Estrada was anxious to talk about CNC's reputation as one of the most successful community

college with respect to student success in developmental education. Having achieved results with previous initiatives, President Estrada made it clear that she was not only interested in what Puente would bring to CNC but what CNC would bring to Puente. Like the state officials, President Estrada asserted that CNC was tired of pilot projects stating, "I don't believe in institutional change in small pockets, if it's good for some students, then its good for all students." This strong leadership style was characteristic of President Estrada and it set the tone for the adoption of the Puente initiative at CNC.

Although college administrators elected to adopt the Puente program, they made it clear that they intended to use the program as an impetus for expanding effective practices in developmental education. President Estrada maintained, "The screaming voices of research suggest that we need to go to scale...anything that we do here, we do to scale. I want everyone to carry the responsibility for change." In this way, President Estrada signaled that she planned to use the Puente program as a strategy that would stimulate widespread change at CNC. This strategy re-oriented the Puente program to its setting to be understood by the college constituents as a *symbol* of change that was to occur in the greater college community. Dr. Estrada was so convinced of Puente's capacity that she volunteered on the spot to serve as a member of the Board.

Despite President Estrada's strong leadership, a linear map of program adoption and implementation at CNC would be misleading. President Estrada's decision to adopt the Puente program was critical to the implementation of the program, but it was a building block upon which further decisions were made. The Puente colleagues were key to establishing support for the implementation of the Puente program. At CNC, Dr. Maravilla, the Dean of Counseling, recruited an enthusiastic cadre of experienced faculty members to participate in the Puente

initiative. The team consisted of Mr. Ramon Gomez, a well-regarded author of Mexican American literature with strong teaching record in the Academic English department, and Dr. Richard Alvarez, a highly-esteemed Latino counselor with a long history at the college. In addition, Dr. Maravilla recruited Priscilla Santos to serve as an instructor of Developmental Education. Because Mrs. Santos was not credentialed to teach the college-level composition course that was offered in the second semester of the Puente program, however, she eventually shifted to become the Mentor Coordinator.

El Cajon College

At ECC, the senior leadership was in transition when the Puente program finally arrived at ECC campus. The senior leadership, including the interim president Dr. Roger Clark, was lukewarm toward Puente. He agreed to participate in Puente initiative since support for the program would be provided by the THECB, however, at a planning meeting on the campus in 2012, Dr. Clark made it clear that the college would not provide any supplemental funding or resources. Additionally, Dr. Clark indicated that he expected to Puente program to serve at least 100 students.

These terms strained, but did not extinguish support for the Puente program at ECC. In the spring of 2012, Puente recruited Dr. Cristina Villanueva, the Director of Student Services, to serve as the Puente Coordinator at ECC. This work aligned to the work that Dr. Villanueva had already been doing with other initiatives at ECC including the Developmental Education Demonstration Projects, Early Alert, Math Emporium, Adult Basic Education, learning communities, developmental education council, start right, and summer bridge. According to Dr. Villanueva, there were at least twelve programs running concurrently at ECC and, she was “used to getting grants and working along these lines in many areas.” Puente just expanded this work.

Under the leadership of Villanueva, ECC recruited a dedicated cadre of young, talented, and extremely dedicated Latino and Latina faculty and counselors to facilitate the implementation of the program at ECC. Carlos Lira and Paco Heredia served as the Puente English instructors. Both were highly regarded young teachers who were dedicated to supporting Chicano and Chicana scholarship at ECC. Prior to their engagement with Puente, both Lira and Heredia taught English composition courses in the Department of English, neither of them, however, had ever taught developmental education courses. Villanueva also recruited Sydney Lopez and Lisa Amador to teach the Learning Frameworks (i.e. College Success) courses. Both women were instructors in the Department of Education and neither had any training as counselors or advisors. Ms. Amador was a well-established tenured teacher at ECC, while Lopez was a long-term adjunct faculty. Finally, Villanueva recruited Susie Marcos, a soft-spoken and highly esteemed counselor to serve as the official Puente counselor and adviser. Villanueva had worked with Susie on other student service interventions at ECC, and she was confident in Ms. Marcos' ability to support the mission of the CTN-Puente program. This team met for the first time at the spring 2012 at PSI training in Berkeley, CA. Prior to the training, the team members had very limited contact with each other.

Southwestern College

SC was the last college to formally commit to joining the CTN-Puente initiative. In 2010, Dr. Camacho left SC to work at a community college in another part of Texas and CTN lost their principal advocate for the program. Despite this, once the state backed the Puente program, the CTN-Puente program caught the attention of President Mary White. CTN-Puente appealed to President White's accentuated concern for improving rates of student success in developmental education, particularly in terms of certificate and Associate's degree completion. The

attractiveness of the program was particularly strong because it overlapped with the state backed trend of phasing out lengthy non-credit developmental education courses in exchange for accelerated forms of instruction. On a site visit to SC in April of 2012, President White expressed her confidence in Puente program confiding that she had “a strong intuition about the program.”

President White and other administrators at SC, however, also had hesitations. Cognizant of outside forces pressing the institution, they were skeptical of the program’s ability to meet market demands especially given Puente’s small cohort model. As Dr. White put it, “We have so many projects that we do at a very small scale. I don’t know why we can’t get the “N” up by investing in more [cohorts].” Dr. White argued in favor of widening the eligibility pool to include non-transfer oriented students and starting the initiative with more cohorts. Other administrators seconded her proposal, stating, “At SC, we like to begin with the end in mind.” Dr. Trujillo, an administrator at the rural Marr county campus, also expressed concerns related to the compatibility of the program with the cultural context of the college. Specifically, Dr. Trujillo feared that the Chicana and Chicano literature might not be representative of the experiences of Marr county residents who mostly identified themselves as Mexicans or Mexican Americans.

Despite their hesitations, Dr. White and the administrative team at SC elected to adopt the Puente program in the spring of 2012. Because they were already recipients of state funding for Developmental Education projects, they applied those funds toward the Puente program. Dr. Marta Saegen, the Dean of Academic Services, was asked to serve as the Director of the Puente initiative. Under the direction of Dean Saegen, SC recruited five members to the CTN-Puente team. Paloma Garza and John Miller were recruited to serve as Puente English instructors. Ms.

Garza was a young faculty member at SC with a background in creative writing and a MFA from Cambridge University in England. Although she had live all over the country, she had extended family in the area and she worked in the Department of English at the rural Dos Rios campus. In contrast, Mr. Miller was an instructor in the Department of Developmental Education. Although he was born and raised in the Midwest and he was of Anglo American decent, he had lived and worked Southwestern Texas for many years and considered Texas his home.

Finally, Dean Sagen recruited Salome Martinez, Susan Hernandez, Liliana Perez, and Pedro Diaz to oversee the student service portion of Puente. Ms. Martinez and Ms. Perez, a counselor and an instructor from the Department of Education, taught the Learning Frameworks course. In contrast, Ms. Hernandez, the transfer adviser at SC, would provide advising services to Puente students outside the classroom. Finally, Pedro Diaz, an instructor in the Criminal Justice program and a former police officer, served as the mentor coordinator for the program. Each team member had several years of experience in the field and most were, or had been, involved in other campus-based initiatives such as caseload counseling or curricular redesign. All but two of the seven team member were female and three team members were Anglos and/or non-Spanish speakers. With the exception of Dean Saegen, none of the participants had previously heard of the Puente program, nor had they worked with each other on a regular basis at SC.

Building the Team

The 2012 Puente team members were an accomplished group of community college instructors, counselors, and administrators. Prior to their engagement with the Puente program, approximately three quarters of the Puente team members indicated that they had received recognition from their colleges for conducting “outstanding” work at their colleges. The

opportunity to engage in a professional development program in Berkeley, CA appealed greatly to most of the team members who were invited to join the Puente program. Most had never been to California and they welcomed the chance to visit San Francisco and the University of California at Berkeley. The main reason that these individuals attended the Puente training, however, was because of their commitment to their students. This sense of responsibility made them attend trainings where they were not sure what they would learn or if would be beneficial. Prior to the Puente training, most of the team members had participated in other workshops outside their colleges related to underrepresented minority student success or on developmental education. Given the enthusiasm of their colleagues who had visited the Puente program in Riverside, CA, some of the team members expected to benefit from the training.

The Puente Spring Institute (PSI) training was held at hotel in a remote area of Berkeley that was situated on a bay and surrounded by hiking trails. The setting was a stark contrast to the hustle of the surrounding urban area. I attended the PSI training as a full participant and I flew in from Los Angeles on the first day of the training.

Upon my arrival, I was greeted with a large binder full of Puente related material and a nametag and ushered into a large conference room on the second floor of the hotel. In the conference room, the Texas Puente team members were seated around long tables organized in a horseshoe shape. At the front of the room, the CTN-Puente leadership team was giving a PowerPoint presentation that provided an overview of the mission and the goals of CTN and the Puente program. During the presentation, they introduced Mike Walden, Dr. Rosa Maria Campos, and members of the Puente California team. These individuals included Sofia Leon, the Director of Community College, Josie Ramos, the Director of English Instruction for the community college Puente program, and Juan Chacon, the Executive Director of Puente.

At lunch, I had a chance to introduce myself and give a brief overview of my background and research interests to Walden, Chacon, and the other members of the CTN-Puente leadership team. Walden's enthusiasm for the initiative was palpable and he graciously welcomed me to the CTN-Puente team. Given Puente's documented success in California, Walden informed me that he intended to continue to promote the CTN-Puente program as a data-driven initiative and he believed that the presence of a UCLA researcher would contribute to this effort. After lunch, we returned to the conference activities.

For the next five days, the content of the training addressed the following topics:

- The mission and fundamentals of the Puente program
- Bringing students and their families into the program
- Building on student's academic and cultural capital
- Building a sustainable mentor program
- Laying the foundation for a strong teamwork and campus advocacy

Each day, the training began with breakfast in the conference room at 8am, followed by a group activity and presentations conducted by different members of the California Puente team. On several occasions, Puente instructors and counselors from California colleges came in to speak about their experiences implementing the Puente program at their colleges. One Puente counselor spoke of the challenges that she had faced implementing the program at a college that was staffed by predominantly Anglo American faculty and counselors. Although the Puente program had the support of the college president, the Puente counselor found that many of her colleagues were not receptive to Puente's practices. In particular, they disapproved of the practice of bringing Latino family members onto campus and into the counseling office. In response, the counselor strategically placed several chairs outside of her office door and invited

family members of Puente students to visit her as often as necessary. With this gesture, she sought to remind her colleagues that the college, in fact, served a very diverse student population.

The training ended each day around 4:30 in the afternoon. Before we left, we were asked to record our reflections on the day in a blue notebook and turn it in to Josie or Sofia. In the morning, they returned our blue books to us with written feedback. Occasionally, Sofia or Josie would anonymously share a reflection or a quote from one of the journals to facilitate a discussion or to address a concern.

For the first two nights, we also held working dinners in the hotel conference room. Over the course of the meal, guest speakers came in to share their experiences and insights with us. One night, we had a particularly inspirational visit from Carlos and Miguel—a Puente mentor/mentee team. Both Carlos and Miguel were Latino males who had grown up in low-income neighborhoods in the bay area. Despite sharing similar backgrounds, the two found that they had little else in common; Carlos was sociable thirty-something who worked as an administrator at a local non-profit, while Miguel was a soft-spoken young man who was artistically inclined. Given their differences, Carlos said that he wasn't confident that he would be able to 'reach' Miguel.

Despite their initial doubts, Miguel and Carlos continued to engage with each other through Puente related activities. Carlos recalled that a turning point in their relationship occurred when he invited Miguel to performing arts event in the local community. At the event, Carlos learned a great deal about Miguel's passion for music and, as a result, the two grew closer. While Miguel admitted that his professional path was still unclear, he was taking music

classes at the community college and he was committed to completing his college degree.

Without the support of his mentor, Miguel did not think that this would have been possible.

Aside from teaching the nuts and bolts of the Puente program, the PSI training gave the team members a chance to experience the program as students. As one instructor put it:

They took us through the program as students. When you get to these points, you've lived the experience. This is the core of Puente, empathy. In the training, we were all treated as individuals.

For example, at the PSI, we were assigned to work in a small learning community, or a *familia*. Each day, we met with our Puente *familia* to write, discuss pieces of literature, and reflect on our learning. In our *familia*, we also practiced using some of Puente's distinctive pedagogical devices such as identifying "strong lines" in pieces of written work. When someone shared a piece of writing with our *familia*, each person would write down one "strong line" and one thoughtful question for the author to reflect upon. Based on this feedback, the author would then write a second draft. This strategy proved to be a very effective tool for engaging in the writing process without fear of criticism or reproach.

The third and the fourth day, the PSI training was held at the faculty center on the UC Berkeley campus. In this setting, we were encouraged to consider the transfer mission that is at the heart of the California program. The Puente teams were thrilled by the opportunity to spend time on UC Berkeley campus; when we were not in meetings, they could be found out sightseeing or shopping for UC Berkeley gear. The faculty center at UC Berkeley also offered an attractive setting for the Puente teams to reflect on how the Puente training related to their work at their own colleges. On the last day, each college cohort was asked to present an action plan for the implementation of the Puente program in the 2012-2013 academic year. Despite having relatively little time to prepare, the presentations were coherent and extremely well executed.

At the PSI training, when we were not participating in group activities, I spent most of my time observing, listening to, and speaking with the Puente trainees. Generally, I felt at ease with the group and I enjoyed their committed, yet, good-natured approach to their work. As a former bilingual elementary school teacher in the Austin Independent School District, I had my own understanding of the educational challenges facing Latino students in Texas schools and I found that my experience helped me relate to the perspectives of many of my Puente colleagues. Most team members spoke openly with me about their professional and personal perspectives on topics related to Puente and Latino student achievement. On our nights off, I went to dinner with several of the team members and I found that, though I was largely unfamiliar with the San Francisco, they looked to me for guidance on how to navigate the area.

Despite the enthusiasm that I observed, I also heard the Puente team members voice some real concerns. Chief among these concerns were technical issues related to release time, course credits, and how to deliver the learning frameworks course. For many Puente team members, the lack of time –of paid release time, reduced teaching loads, or any other way to engage in planning –was perceived as a major difficulty with the Puente model. But they perceived other challenges as well. One instructor at SC with several years experience teaching Developmental Education wondered how, if at all, the Puente curriculum aligned to requirements that had been established within the college’s Department of Developmental Education. He was concerned that other developmental education instructors might perceive that their work was being “shoved aside” for Puente.

At ECC, where the program planned to serve 100 students, the team members worried that they would not have enough managerial and administrative support. For example, the college had not designated a Mentor Coordinator to work with the program. Moreover, the only

counselor that was assigned to work with the program was not given release time from her other counseling duties. Hence, the ECC Puente team feared that they would not be able to fulfill the requirements of the Puente program with fidelity to the model. Finally, several team members from colleges on the Mexican-U.S. border (ECC and SC) wondered if and how the program would serve their many border crossing students.

Moving into Action

By the late spring, Puente team members were working at full speed to prepare for the implementation of the Puente program in the fall semester at their colleges. This required a great deal of housekeeping: instructors had to design the course syllabi, order textbooks, and coordinate their assignments. In addition, administrators were working on securing approval for the Puente courses and writing the course descriptions. This was not a straightforward process on any of the colleges. At SC and CNC, Dean Seagan and Dr. Castillo were trying to make the Puente Learning Frameworks course an academic elective in the humanities division. On both campuses, this was proving to be controversial because it took a course away from other academic divisions and it introduced new courses into established fields of study.

In addition, because several of the instructors who were to implement the learning framework course were not trained in counseling and advising services, they had to develop a plan for delivering the course without daily presence of an counselors or adviser. While the Puente training had given the instructors a good understanding of the Learning Frameworks course, they provided no training or advice for Puente counselors and advisers that worked outside of the classroom. Moreover, the external counselors found that they had little understanding of how best to support the Learning Frameworks classes outside of the classroom.

On my site visits, I found that, above all else, the Puente team members at each college were absorbed with student recruitment. Students were recruited to join the Puente program based on their placement test scores on Accuplacer or having successfully completed a developmental English course at the level below the INRW course. In addition, students were required to demonstrate readiness to undertake active participation in the program and complete their developmental English coursework in the first semester. Students typically demonstrated this readiness by consulting with a Puente counselor and signing paper that pledged their commitment to actively participate in the program.

Having gotten off to a late start, the Texas Puente teams at each campus pursued multiple avenues for student recruitment. For example, at SC, they were running an announcement on a plasma screen in a high traffic area of campus that read, “Are you ready to cross the bridge from developmental education and start earning college credits? Ask me about Puente.” The team at SC also sent letters out to Puente eligible students and they set up and staffed informational booths in busy academic buildings during peak hours. Although the Puente teams hoped to receive external support for recruitment from the general counseling office and the broader campus community, most colleges found that this support did not materialize. The Puente counselor at ECC lamented:

I gave them [the general counselors] a flyer and told them about the program. I later found out that they weren't referring students to me. That is why I did so many orientations apart from the NSOs.

Consequently, all of the colleges had to host Puente informational sessions at new student orientations in the evenings and on the weekends. At orientation sessions, one instructor at ECC drew attention to the program by walking into the room with a pile of books and dropping them on a table. “Just miles away”, he explained, “these books are banned in college classrooms. In the Puente program, these books will form part of our core curriculum.” Student recruitment

continued through the summer and up until the start of the fall semester. Though time consuming, recruitment efforts proved to be largely successful at all three Texas colleges.

The Puente cohort at SC consisted of 57 full time students enrolled in the first year of the Puente program. To describe the students’ demographics, the tables below calculated the percentage of students by gender, race ethnicity and educational goals (see Table 6). This information revealed that of the students, who participated in the 2012 Puente cohort, approximately 51 percent of the students were female and 37 percent were male. Ninety seven percent of the cohort identified as either Mexican/Mexican-American/Chicano/a or Latino/a. Over 70 percent of the cohort indicated that they intended to transfer to a four-year university. Of these students, only 5 percent indicated that they had most of the information that they needed about preparing to transfer.

Table 6
Characteristics of Puente Students, SC 2012

Characteristic	Category	Number of Students	%
Gender	Male	21	37
	Female	29	51
	Total	57	100
Ethnicity	Mexican, Mexican American, Chicana/Chicano	29	51
	Other Hispanic or Latino	26	46
	White	0	0
	Other or Unreported	1	2
Employment	Not Working	38	67
	Working < 20 hours per week	3	6
	Working > 20 hours per week	16	29
Educational goal	Transfer	41	72
	Not transfer	12	26

At SC, The Puente cohort consisted of 56 full time students enrolled in the first year of the Puente program. To describe the students' demographics, the tables below calculated the percentage of students by gender, race ethnicity and mother and fathers level of education (see Table 7). This information revealed that of the students, who participated in the 2012 Puente cohort, approximately 67 percent of the students were female and 33 percent were male. Ninety eight percent of the cohort identified as either Mexican/Mexican-American/Chicano/a or Latino/a. Eighty-four percent of the cohort indicated that they intended to transfer to a four-year university. Of these students, only 10 percent indicated that they had most of the information that they needed about preparing to transfer.

Table 7
Characteristics of Puente Students, CNC 2012

Characteristic	Category	Number of students	%
Gender	Male	18	33
	Female	37	67
	Total	56	100
Ethnicity	Mexican, Mexican American, Chicana/Chicano	29	32
	Other Hispanic or Latino	37	66
	White	9	16
	Other or Unreported	N/A	N/A
Employment	Not Working	28	50
	Working < 20 hours per week	7	12
	Working > 20 hours per week	21	36
Educational goal	Transfer	46	84
	Not transfer	9	16

Finally, the Puente cohort at ECC consisted of 98 full time students enrolled in the first year of the Puente program. To describe the students' demographics, the table calculated the percentage of students by gender, race ethnicity, and educational goal (see Table 8). This

information revealed that of the students, who participated in the 2012 Puente cohort, approximately 58 percent of the students were female and 37 percent were male. Ninety percent of the cohort identified as either Mexican/Mexican-American/Chicano/a or Latino/a. Over 80 percent of the cohort indicated that they intended to transfer to a four-year university. Of these students, only 10 percent indicated that they had most of the information that they needed about preparing to transfer.

Table 8
Characteristics of Puente Students, ECC 2012

Characteristic	Category	Number of students	%
Gender	Male	36	38
	Female	57	62
	Total	93	100
Ethnicity	Mexican, Mexican American, Chicana/Chicano	67	72
	Other Hispanic or Latino	18	19
	White	6	6
	Other or Unreported	2	2
Employment	Not Working	53	57
	Working < 20 hours per week	13	14
	Working > 20 hours per week	27	29
	Unreported	N/A	N/A
Educational goal	Transfer	85	91
	Not transfer	8	9

Integrated Reading and Writing and English 1300

To understand the developments in the Puente classrooms, I interviewed administrators and instructors. Due to time restrictions, the research design of this study did not plan for classroom observations. I was, however, able to conduct observations in a few Puente classes in

the spring semester of 2013. Consequently, I relied heavily on faculty reports of their classroom experiences.

As previously described, the Puente program is more than a method for delivering a developmental curriculum. The cornerstone of the Puente framework is an orientation about the role of culture, family, and identity in learning. Puente's instructional strategies are based on the premise that students who lack standardized language and literacy skills can quickly develop these skills by interacting with culturally relevant texts. Moreover, in the Puente classroom, reading and writing are inextricably connected. Sustained interaction with culturally relevant material helped to strengthen students' critical thinking skills, their motivation, and their confidence. These skills are transferrable to other academic areas. This philosophy is dramatically different from the typical remedial pedagogy that focuses on teaching skills that are devoid of context and meaning.

Given the pedagogical differences between Puente and traditional approaches to developmental education, I expected to find variation in the extent to which instructor used the Puente tools and strategies based on instructors' backgrounds. For example, I expected that instructors with a background in Developmental Education would be less likely to incorporate Puente's strategies into their practice. These expectations, however, were largely unconfirmed.

Instead, I found that, over the course of the year, instructors with more experience or conviction to Puente's pedagogical methods asserted themselves as leaders among their Puente colleagues. In an interview, John Miller, an instructor who had previously taught developmental education and had no background in Chicana or Chicano literature, acknowledged his reliance on his Puente colleagues at SC. He concluded:

Pretty much, I taught the same curriculum as what Paloma sent over. The reason for that was, the summer before I started Puente, I was busy wrapping up my work as the

Director of Developmental Education. As we saw the new materials that we might use, there were too many choices.... I followed Paloma's lead and I thought it worked out fine.

It was important for John that the Puente program used "proven techniques and literature" and that he had a clear path to follow. As he put it, "the cultural literature and the learning community have track records. They have a high success rate." Above all, John believed that the program had strengthened the "affective domain of feelings and attitude, which he called "a weak area of my teaching." John noted that he found validation for the use of these practices in the classroom. For example, in the first semester of Puente, John maintained his best attendance record of any Developmental English course that he had taught at SC.

While the implementation of the Puente curriculum expanded John's instructional practices, it had the opposite effect on other instructors. Carlos Lira, an instructor at ECC with a background in Chicano and Chicana literature and creative writing, reflected upon how the delivery of the Puente courses restricted his teaching style:

It changed my approach. It made me more strict and more serious. I don't take myself seriously, but I take what I do seriously. In Puente, I didn't feel like I had time to let down my guard. I have a creative background and I sacrificed some of this for Puente. We weren't all that spontaneous; we were a little more direct and serious....

Other instructors experienced Puente's pedagogical practices as an affirmation of their own, previously established, beliefs. For example, in an interview, Ramon Gomez, an English instructor at CNC believed that his instructional practices had not changed significantly since he already used some of the Puente inspired texts and writing assignments prior to his entry into the Puente program. He reflected:

Most readings, I had done in other courses. It just fit.... The model worked well for me, it was like my hand fit into a nice glove.

For Mr. Gomez, it was less that the Puente program changed his instructional approach, but that it changed the courses that he taught. According to Mr. Gomez, the developmental

courses at CNC were typically taught by the “newbies”—adjunct faculty members with little teaching experience. Teaching in the Puente program afforded Mr. Gomez a unique opportunity to develop his “advanced” pedagogical practices in classes with students who were less prepared academically. Though the transition was challenging, Mr. Gomez believed he had been largely successful in his efforts.

On the few visits that I did make to Puente classes, I noticed that students in seemed fully engaged for most of the class period. Indeed, all five Puente English instructors thought that their Puente classes were among the best teaching that they had ever done, both in developmental classes and in college level English courses. When asked to what they attributed the success, most of the instructors attributed their success to Puente’s instructional model and to their own hard work. Carlos Lira answered:

I don’t want to sound immodest, but Paco and I threw ourselves into this. We spent an enormous amount of time developing the course. Pushing the students. We’ve never spent this much time. It was a concerted effort.

For Paloma Santos, the improvements that occurred had much to do with the Puente model. She explained:

The model gives the potential to bridge the academic courses to the developmental. Because you have them the whole year, you don’t have to focus too much on learning outcomes. I think that the culturally relevant text, the writing, its holistic. If you’re thoughtful, you can create a powerful curriculum that changes the way that students see college and themselves.

Counseling

The counseling function, whether it occurred in the classroom or was a critical resource for academically underprepared community college students. Yet, as noted, counselors at each community college were tremendously understaffed. Each college had between four to eight dedicated counselors. Counselors, however, were divided across campuses and, in turn, counselor to student ratios varied from as low as 800 to 1 up to 2200 to 1. Given the resource

limitations of the counseling staff in Texas college, serious modifications were made to the Puente model: the counseling course was taught for one, not two, semesters and two of the three colleges recruited instructors outside of counseling to staff the counseling course. One Puente administrator observed:

We're trying to have this model from California, but we have to work with what we have. We don't have the money to assign counselors to work with the program; the money is not there.

Given the differences between the counseling instructor's backgrounds, I expected to find variation in the extent to which counseling strategies were incorporated into the curriculum. This expectation was confirmed in my interviews; the counseling and advising practices differed based on how the program was staffed.

For example, Susie Marcos, the Puente counselor at ECC, worked with Puente students exclusively outside of the classroom. In her approach, Susie used case management strategies with her Puente students, which she did not do with her regular students. While Susie believed that her approach was effective, it required a lot of time and support. Susie explained:

I just have to manage my time and be very organized. I'm doing these projects and I also have to be in counseling. With these students I work on appointments. My other students, I don't. Here in the front they know how I work with the Puente students, so they call me.

Susie admitted that, at times, she had to sneak out of her office hour and work over her lunch break to meet with her Puente students

In Susie's opinion, although the counselor was central to the Puente model, she found no support at ECC for counselors to actually work with Puente students. Eventually, the campus hired an adviser to support Susie, but she had a hard time getting the adviser an office and the adviser that was hired had little experience in advising. When they did secure an office, Susie lamented that the adviser wasn't in a good location and the students had a hard time finding her. Despite these challenges, Susie said that her involvement with the Puente program had been

important to her because it “allowed her to connect with students’ backgrounds and experiences” in a new way.

The counselors that were able to teach the Learning Frameworks course (i.e. the College Success course at ECC) had a much higher level of satisfaction with the roles that they played in the implementation of the Puente program. Dr. Richard Alvarez, a counselor at CNC, said that the program allowed him to rediscover the “art of teaching.” Moreover, he believed that curriculum was having an impact on students’ motivation. Dr. Alvarez observed:

When students become passionate, it changes the way that they learn. We realized that there is a lot of history that’s not being taught to students: that their pride is not their pride. We come from a culturally rich part of the state and city and we also come from a place where knowledge is textbook driven and the history and culture of the indigenous people are not written into these textbooks. We lose sight of this. Puente gave us permission, again, to revisit the cultural history of the people that we are teaching. Students are a product of their community...a student came in. Her last name is Aragon. We were reading a book and the student’s name was in the book. Her history was there. What’s the connection to some book that tells the history of Chicanos in Texas, New Mexico, and California? It puts things in a different perspective.

While the classroom based counselors generally found greater satisfaction in their role within the Puente program, they too faced challenges managing their time. They were involved in Puente based campus events, recruiting, and weekly progress meetings with Puente team member—elements that proved to be very time consuming. Consequently, Puente counselors, both in and outside of the classroom, indicated that they had to reschedule things or put certain things on hold in order to be involved with Puente activities. As Dr. Maravilla, the chair of counseling at CNC, explained:

I had to juggle things differently; I had chair duties and I’m a counselor. What I did was let things revolve around it [Puente]. I wanted to do it right. I was prioritizing it.

In her reflection, Dr. Maravilla implied that she might not be able maintain the same level of the commitment to the program in the future. The majority of Puente faculty and counselors shared this sentiment.

In my interviews, each Puente instructor recognized that Puente counselors had worked above and beyond the call of duty at their campuses. As a result, most instructors tried to find ways to support the work of the counselors. For example, an instructor at ECC reflected on how his partnership with the Puente counselor motivated him to strengthen his relationships with his students:

My first semester, there were 7 students that I did not connect with... They thought that I wasn't teaching them how to write. Lisa [the Puente counseling course instructor] came back and talked to me about it. First, those students were not enjoying the class. As Mexican nationals they may not have felt included. I reached out to a girl that I wasn't connecting with and she said, "You remind me of my dad". This was a source of pride for me because I connected with her. I knew she would do extra things to help Puente. I feel that this is our strength... I don't want to pretend to know their stories but I believe that writing is a place for healing.

The collaboration between counselors and instructors was, in fact, much more intense than in non-Puente classes; teams typically discussed student progress weekly in person or on the phone. While some teams admitted that the quality of collaboration had not been perfect they attributed their strife to part of their growth. Dr. Guzman, an administrator at ECC with a background in organizational psychology, explained:

We've done Forming, Storming, Norming, and Performing. Initially, things were good. Then, we had our issues. Its intense and it's a challenge. It's difficult to get everyone together, but in the end we accomplished a lot.

In the end, Dr. Guzman believed that she had seen "a new willingness in the faculty to engage and do things".

At the same time, while the instructors of the college success course were less trained in providing personal counseling, they did feel that they were effective in helping students develop a clear vision of their goals, guiding them in connecting their daily activities to their long term goals, and supporting them in building college success skills, including time management, self

advocacy, and study skills. This type of coaching appeared to have been an effective method of providing student support services in the classroom, despite the limited counseling time.

In sum, the approach to counseling in Texas colleges, though clearly less comprehensive than the California Puente model, was essential in the implementation of the Puente program in each Texas college. The Puente counselors made personal and professional sacrifices to contribute to the program. At the same time, English instructors and instructional “coaches” that taught the college success courses supported the work of the Puente counselors by applying some of the knowledge that the counselors brought to discussions about teaching and learning. In turn, Puente counselors felt supported by their colleagues and this helped them sustain their commitment to the program.

Mentoring

The mentoring component was the most unevenly implemented component at across the three college campuses. At ECC, where the college served 100 students, without the support of the mentor coordinator, mentoring was shaky at best. Instructors spent large amounts of time recruiting mentors to the program, to mediocre ends. Only about half of the students partook in one-on-one mentoring in the first year. In addition to challenges in mentor recruitment, team members indicated that turnout at the mentoring events was low. Susie Marcos explained:

Students showed up and mentors showed up, but not always. At one event, 7 out of 20 [students] showed up. I think that with more students, it was harder.

As Ms. Marcos suggested, the mentoring component at ECC was particularly challenging because of the size of the program. Yet, at SC, where the program enrolled only 50 students and employed a mentor coordinator, mentoring was equally challenging. The central challenge at SC was finding enough college-educated community members to serve as mentors. Hence, by the

end of the first year, both ECC and SC were planning to make serious modifications to the mentoring program, including increasing the number of students assigned to each mentor.

In contrast, at CNC, where Priscilla Santos served as the mentor coordinator, the implementation of the mentoring program was strong. As a long-term resident of San Cristobal, an employee at CNC, and an active participant in a large church community, Ms. Santos had many connections in the college and the community. Moreover, Ms. Santos had personally benefitted from mentoring in her own life: with the support of her mentor, Ms. Santos had finished her college degree as a mother of two and built a meaningful profession at CNC. Hence, for Ms. Santos, the work as the mentor coordinator for CTN-Puente was a natural fit; she believed in the power of mentoring. Given her commitment and her networks, the work came naturally to her. Ms. Santos observed:

The mentors really came to me. I hand picked them... I was observant. I just had an enormous sense of satisfaction knowing that the students were satisfied with their mentor matches.

Ultimately, Ms. Santos was so inspired by the mentor-mentee relationships and the stories of the mentors that she compiled and published a book on the mentors' life stories.

While the delivery of one-to-one mentoring was clearly a challenge, several instructors indicated that students were mentoring other students within the program. For example, Mr. Gomez and Mr. Lira explained:

There is that support group in the classroom. Students become little mentors themselves. This was the concept of the *familia*; it translated to academic support and camaraderie.

Students are now advocates for the program. They make sure to tell other students.

We had students that you were reluctant to speak English. When I came to teach here, I didn't know how to help students who were college level, but didn't speak English. It's a barrier. They just don't have the confidence. With Puente, I was happy to have the opportunity to cross the barrier with them; I would get the students earlier. You don't have the space to deal with that in college level composition. You assume that they can do things. When I made the *familias*, I put a strong English speaker in every *familia*. It helped; students needed the peer mentoring.

In the end, the commitment to matching students in one-on-one mentors waned in the first year at two of the three Texas colleges. Despite this, each college developed a commitment to the *idea* of mentoring. Instructors and counselors encouraged students to support each other in and out of the classroom and they modeled this in their own practice. In the end, two colleges sought to build a more viable mentoring program by increasing the student to mentor ratio.

Transfer

While the Texas CTN-Puente program did not formally espouse the transfer mission, all Puente team members indicated that they had encouraged their students to go on to a four-year college. As Walden observed, “It is fair to say that they have drunk the cool-aid, they believe in the mission of Puente.” Puente teams supported the mission by making resources available and taking students on field trips to four-year universities. At the same time, they talked to their students about their different career options and about various strategies for getting a baccalaureate degree. For example, at CNC Puente counselors described to students a process whereby students could start their studies at the 4-year institution and work backwards towards their AA degree at the community college. At SC, the Puente transfer adviser planned to make private meetings with the representatives from universities at the college’s annual Transfer Fair. While some students were more receptive to transfer information and activities than others, the Puente teams made sure that it was always available. In this way, Puente teams advanced the AA degree, which was the priority of the state and the college, but they empowered students to pursue their studies to the fullest extent.

For Dr. Alvarez and Mr. Gomez, the transfer mission of the Puente program was a particularly significant; it represented a return to a time at CNC when faculty and staff worked collaboratively to support student transfer with great success. Gomez and Alvarez likened the

Puente program to another initiative that they took part in many years prior – a program that followed a cohort model similar to Puente. They recalled attending football games with their students at UT San Cristobal and meeting regularly to discuss student transfer. According to Gomez and Alvarez, political moves at the state and local levels had since reduced the college's focus on transfer. Namely, the contact hours in high demand occupational technology programs were reimbursed at much higher levels than those in the academic fields and state funding was awarded for the number of AA degrees awarded, but not for transfer. While the implementation of the Puente program did not disrupt these conditions, it did inspire individuals to renew their commitments to transfer.

Student Results

While this study was not a formal evaluation of the Texas CTN-Puente initiative, student data is presented in this section as an indicator of program implementation. Since Puente's theory of action is buttressed by empirical research, the implementation of the program was expected to be associated with various changes in student behaviors and outcomes including retention, persistence, and success rates. To these ends, there is evidence to suggest that the program was effectively implemented at each college. Puente students completed a college level course (English 1300) at over twice the rate as compared to their non-Puente peers (see Figures 7-9). As a cohort, an average of 72 percent of students at all three Texas colleges successfully completed developmental and transfer level English within one year, compared to 32 percent of non-Puente students at the same institutions. In addition, based on survey data collected by CTN-Puente, roughly 80 percent of entering Puente students planned to transfer to a four-year university, yet the majority of these students did not know what they needed to do to reach this goal. By the second semester, only a handful of students still felt this way.

El Cajon College- Percent developmental education students who successfully completed a college-level course in one year

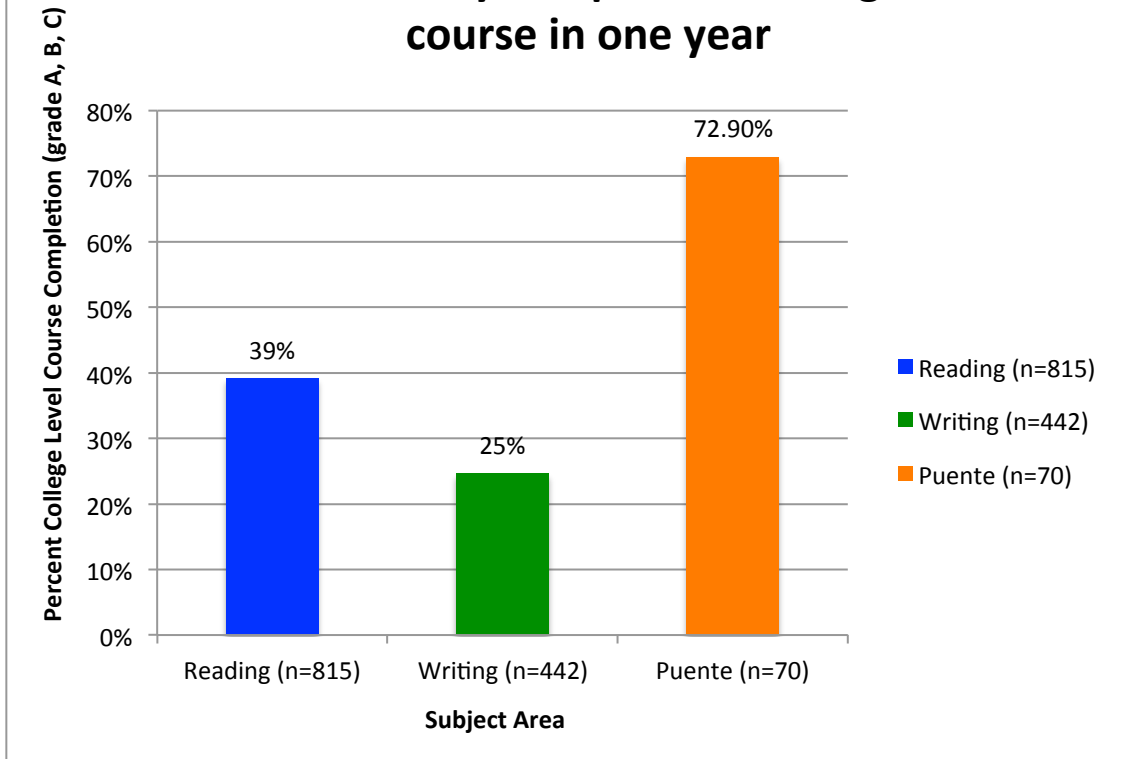


Figure 7. Student Success Rates, ECC, 2012-2013.

**Casco Nuevo College
Percent developmental education students
who successfully completed a college-level
course in one year**

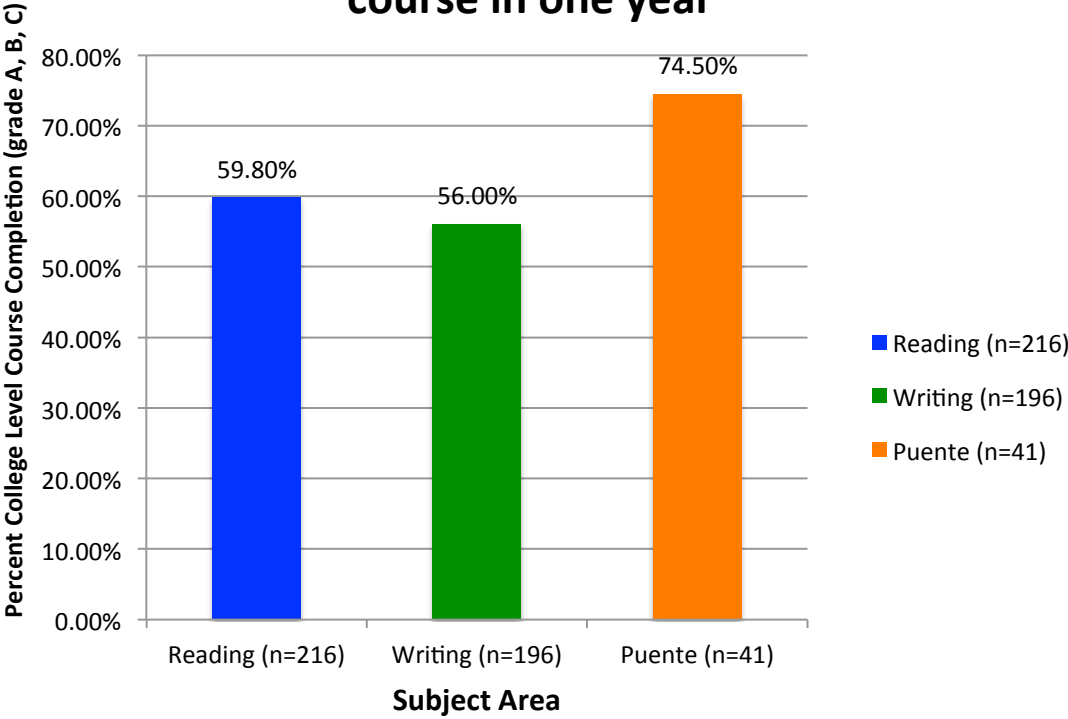


Figure 8. Student Success Rates, CNC, 2012-2013.

Southwestern College- Percent developmental education students who successfully completed a college-level course in one year

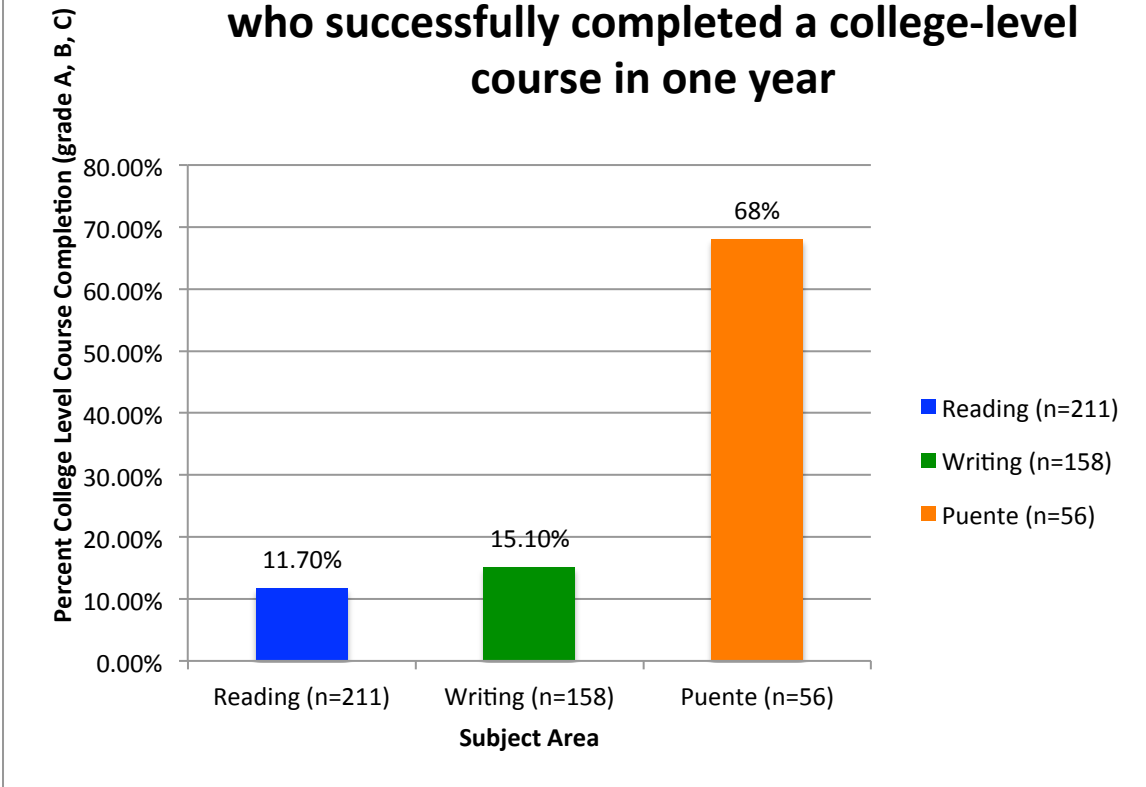


Figure 9. Student Success Rates, SC, 2012-2013.

Scale-Up Strategies

This section addresses the second underlying question that guided this study: What strategies supported the scale-up of a Latino focused transfer program from one state and campus setting to another? To answer this question, this section brings together evidence from a variety of sources. Data from case studies, content analysis, interviews, surveys and existing college documents are brought together to examine the supports to scale-up at the state, college, and practitioner levels. The results from three interview questions contribute insights to the identification of the key influences around the adoption of the Puente program and the context for implementing the adopted strategies.

Alliance Building

In the literature, “*alliances*” is a term used to describe working relationships that serve as political and technical resources for initiatives. An institutional view of power in organizations emphasizes that scarce resources and incompatible preferences cause needs to collide (Bolman & Deal, 1991). From this view, the adoption and early implementation of the Puente program emerged from bargaining and negotiation among competing stakeholders with various interests. In this process, alliance building outside and inside the organization was key at both the state and the local levels. Internal alliances crossed departments and divisions while external partners spanned organizational boundaries. Some alliances were complex and demanded participation from many different divisions within the college including areas that might not have worked together previously while other alliances were as simple as a long-standing relationship between two decision-makers.

As noted in Chapter 3, throughout data collection, I charted the stakeholders and the distribution of activities related to scale-up that occurred in the field. Table 9 presents an overview of the individuals and the activities that I documented.

Table 9
Scale-up of the CTN Puente Program

Stakeholders	Activities
Policy: THECB	Allocate funding Set official performance goals Establish rules to direct the use of resources
Professional: Puente Project, CTN, Researchers	Establish and maintain external alliances Design professional development practices Design program improvement strategies Provide in-service and pre-service training Evaluate program implementation (external)
College: Administrators, Support personnel	Allocate resources toward instructional and support services Evaluate program (internal) Maintain organizational infrastructure for coordination, continuing education, and technical assistance Recruit instructors and counselors Establish and maintain internal alliances
Practice: Teachers, Counselors, Advisers, Mentors	Recruit students and mentors Participate in professional development Develop and execute site-specific plan for counseling, instructional, and mentoring components Mentor and train incoming Puente fellow Establish and maintain internal alliances

The activities listed on Table 9 have implications for the scale-up of the program in Texas colleges; namely, an assumption of distributed expertise and mutual dependence. Stakeholders at all levels of the system were critical to making functional decisions about the program and establishing programmatic infrastructure. Many different groups had power in the formation and execution of the Puente program, because several groups were central to the program’s key processes and outputs. Hence, the organizational foundations of the scale-up of

the Puente program centered on the formation of new alliances, including internal constituents, the initiating CTN-Puente coalition, and various other actors.

As opposed to a top-down approach, Walden and Campos established early support for the program from the “bottom up”. The first alliances that Walden and Campos built tapped into Campos’ existing networks within Texas community colleges—an eager group of administrators who were from the area and wanted to “give back” to their communities. While these leaders were committed to talking about change at their local institutions, they found that motivational readiness for action was lacking. Without the support of a sufficient number of stakeholders at the state level, the colleges might have delayed their entry into the Puente program indefinitely.

To move forward, the scale-up of the Puente program required alliance building with partners outside the college communities. At the state level, Walden and Campos found support for their efforts by framing the CTN-Puente initiative as an evidence based program that would produce gains in developmental education and degree attainment. The CTN-Puente program was in a unique position to facilitate the attainment of goals set by the Closing the Gaps Initiative. Moreover, the CTN-Puente team pledged to align their practices with state policies and goals. Ultimately, based on these capacities and commitments, the state awarded a large sum of money toward the adoption and implementation of the Puente program and, equally crucial, officially endorsed the CTN-Puente.

In addition to external alliances, the implementation of the Puente program required that alliances be built with partners inside the college communities. One of the most significant challenges to the implementation of the Puente program at each college was that it met resistance from non-Puente faculty and staff. Puente teams at each college encountered individuals who, for one reason or another, simply did not support the program. One counselor attributed the

negativity toward the CTN-Puente program at his college to a lack of institutional readiness for the pace of change. He reflected:

We wanted to move quickly; we were passionate. It was a new toy. In our passion, we lost sight of bringing people on board who weren't as passionate. The wheels of academia don't spin that quickly. They wanted a more cautious approach.

Dr. Maravilla, the Dean of Counseling at CNC, attributed the nature of internal challenges at her campus to incompatibilities between the Puente's approach and more "traditional" approaches to counseling and instruction. She also noted that the "exclusiveness" of the program led to resentment among non-Puente faculty and staff. Dr. Maravilla explained:

Some people were living in another era; they wanted to be rouge out on their own in the name of academic freedom. They were anti-Puente; they thought it was too much work, but that's what we get paid for. It was just a couple, but that's it takes. If I could go back in time, I would have told the president to bring those people on board right away.

...The ones that weren't in Puente were envious and hurt that they weren't involved. Faculty members were offended that we were teaching classes in their department. When we told them about it, they were against it. They were beyond negative; they were malicious. We would tell them that, 'This is the college that supported this', but the college that waited too long. They felt like they weren't included. It was just a couple of them, but they really hurt our spirit. Our motivation went way down.

In this reflection, Dr. Maravilla underscored the role that presidential support for the Puente program played in building internal allies for the program; it functioned to encourage faculty and staff at all levels to be informed about and to support the Puente program. Survey responses confirmed that the Puente team members at each campus believed that the support of the president was one of the most important factors in facilitating the implementation of the Puente program at their campus. While presidential leadership may not have created active supporters for the program, it served to eliminate overt opposition to the program among faculty, counselors, and staff.

Fortunately, the presidents at each college were supporters of the Puente program and they made efforts to talk positively and frequently about the program to a wide variety of

audiences. For example, Dr. Chacon, the president of CNC highlighted CTN-Puente at the college's annual convocation ceremony. Additionally, Dr. Charon went with Walden and Campos to speak about the CTN-Puente program at the annual American Association of Community Colleges Conference. At ECC, Dr. Anthony Canales, a former VP at SC under President White, arrived mid-year to serve as the new president. Based on his positive experiences with CTN-Puente at SC and ECC, Dr. Canales agreed to serve on the CTN Board of Directors and he was regularly involved in board meetings on issues of budget, data, use and scale-up strategies. Meanwhile, at SC, Dr. White and her administrative team sought to engender support for CTN-Puente by institutionalizing the program on campus; granting transfer credits for the learning frameworks course and stipends for various Puente related activities. Perhaps because the first year of funding for the program came from the state, at each community college, the strategic use of financial resources was a less noted form of administrative support than political support and advocacy.

Mid-level administrators also played a key role in internal alliance building. These mid-level administrators provided support both indirectly by allowing the program to operate and directly in the form of assistance in applications for funding and in hiring more faculty and staff. In addition, an instructor noted the importance of being able to go to appeal to "higher levels" when they hit roadblocks. At SC, an Paloma Garza noted, "The president, the VP, and President of Academic Success, they asked how they could help. They were the right people because they could have impact." She further explained:

About 90% of folks here are supportive. The reading instructors were already teaching some of this literature. We have great faculty; they are intelligent. Our Dean was even a mentor. Our President was receptive, because it came with the data, which was hard to deny. There is openness to try anything. When our [college] mentors stepped up, they learned how celebrating culture can lead to student empowerment.

As Ms. Garza suggested, the program garnered support among mid-level administrators was by engaging mid level administrators in Puente planning meetings, professional development trainings, and student mentoring.

Finally, in the process of developing and maintaining internal alliances, Puente practitioners were indispensable. In all of the Texas colleges, faculty leaders—with experience and the trust of their colleagues—were perceived as having been crucial in persuading others to accept or support the CTN-Puente program. For example, John Miller, an instructor of developmental education at SC, helped navigate the unsteady terrain between the department of developmental education and the Puente program. Because John had been involved for several years in instructional design and redesign efforts in developmental education, he advocated for the use of some of the mainstream tools that had been developed by the department of developmental education, when possible. As the same time, he sought to expand the influence of Puente practices outside of the Puente program, in a non-coercive way. John explained,

Colleges in TX have to teach INRW. So, the reason why people are interested now, is because it is a INRW class. They want to know how it aligns. I've gone to two training sessions already. What we were taught both times is that INRW is a new course that we're designing it with developmental writing and developmental reading instructors. I'm on this committee. I'm going to bring Puente materials along, but this is meant to be everyone feeling like they have a say. I will be a salesperson for the good things I've seen, but we need to make sure we have buy in. The developmental writing instructors that I interact with often, they're interested, especially interested are the Hispanic instructors. They can see the affective benefits, but they haven't asked for my syllabus yet.

While John role was largely imposed on him by his affiliation with both the developmental education and the CTN-Puente program at SC, several other Puente team members recognized the importance of alliance building and they actively sought opportunities to serve as a link between the Puente program and the broader college community. For example,

in 2013, Carlos Lira, a Puente English instructor at ECC, arranged to serve on the college's INRW committee. He noted:

This year, I'm on the INRW committee, which will be imposed on us by 2015. People are teaching it on the fly, and I plan to use materials from Puente. So, I got my wish. I'm communicating well with Puente folks, the developmental education coordinator here, and folks district wide.

His interest in filling this new role was partially driven by developments that occurred during the first year of implementation. For example, Carlos described how he and his coworker had adapted the delivery of the INRW exit exam to meet the requirements of the Puente program. This required negotiations with the department of developmental education. Carlos explained,

The INRW course had an exit exam and students had 50 minutes to take it. If they didn't pass, then they wouldn't exit. But, we *Puentified* our test, and our test preparation. We wrote the questions and evaluated them. We got allies for the program. Thankfully, the students were mostly successful and they wrote great essays.

While most Puente team members recognized the need to build internal and external allies for the Puente program to facilitate program implementation, some were unhappy with how these relationships were built. Specifically, a few team members expressed concern about a lack transparency between stakeholders across various levels of the system; they worried that their contributions and interests were being misrepresented in higher-level discussions and negotiations that took place within the college and at the state level. Essentially, these team members longed for a more participatory governance arrangement, which would allow them to actively advocate at the college, state, and district levels for their own interests as Puente instructors and counselors. These practices, however, would have been unorthodox within the Texas community college system where state and college level decision-making tends to be hierarchical and there is no support for faculty unions or collective bargaining.

A Flexible Design

The communication of a flexible design, though less directly acknowledged by the Puente team members, was another essential ingredient in the adoption and implementation of the Puente program in Texas colleges. A flexible design was essential for enlisting support among those who might not otherwise see the benefits of the program. Particularly, flexibility was required in negotiations with state level officials and a variety of faculty and staff since certain aspects of the Puente program were perceived as incompatible with their goals and values.

In response to concerns over the compatibility of the program with state and local goals, Dr. Campos continually stressed the flexible nature of the Puente-CTN initiative. In a meeting with Texas administrators, she maintained, “CTN-Puente is a Texas initiative and we are here to address your interests.” Campos assured each community college President that the Puente program would actively promote the attainment of certificates and associate’s degrees, while orienting students to academic opportunities beyond the certificate. Noting that this was a departure from the California Puente model, Dr. Campos explained that the partnership between Puente and CTN was elastic. At the same time, Dr. Campos cautioned that some aspects of the Puente model were less flexible, namely, professional development. She reminded others that only instructors and counselors who were formally trained by the CTN-Puente staff could be officially included in the calculation of the Puente cohorts. She did, however, note that CTN was working diligently on developing online tools for professional development, which implied that there would eventually be some flexibility in how faculty and staff would be trained. She noted:

We give you a toolkit, but you have to adapt to what your student population a need...that’s the strength of the model.

Unsurprisingly, adaptations to the Puente program occurred at each college. For example, the Puente cohorts were implemented at about twice their usual size (50 students) on two Texas colleges and about four times their usual size (100 students) at ECC. Given this enlargement, faculty and counselors were forced to make additional adaptations to program at each college. The most significant changes occurred in the mentoring component. Generally, faculty and counselors found Puente's model of one-to-one mentoring to be the most time-consuming aspect of the program; they spent a great deal of time recruiting, educating, and matching mentors and educating students on how to communicate and engage with their mentors. Ultimately, despite their best efforts team members at two of the three colleges believed that they had only achieved modest degrees of success in their mentoring-related endeavors.

In response to this challenge, by the end of the first academic year, two of the CTN-Puente teams were looking for options for adapting their mentoring programs. For example, SC planned to pilot a beacon model where a group of professionals work with different classrooms as opposed to individual students. They expected that this arrangement would decrease the time that faculty and counselors would spend on recruiting mentors and managing mentor/mentee relationships, while preserving the positive contribution that mentors make to students and to the program as a whole.

While some of the changes that occurred were reactive, others were more proactive. For example, in anticipation of the resource limitations with regard to sending Texas and counselors to California each year, CTN was developing a "train the trainer" sequence that sought to build the local base for leadership and a "scholar-mentor" program that sought to recruit professional within and outside academic to serve as resources for the Texas Puente program. The train the trainer program recruited instructors and counselors who had made significant contributions to

the implementation of the program in the three founding colleges to train the new Puente teams in colleges across Texas. While the impact of these particular “enhancements” is not yet known, Puente faculty and counselors commented positively on these practices in interviews.

Comprehensive Professional Development

The modifications that were made to the Puente program could have defused the positive effects of the central components of the Puente program. This, however, does not appear to have occurred. One explanation for the program’s success is that Puente’s ongoing professional development helped team members develop a deep understanding and commitment to of the theory of action behind the Puente program. Because the Puente program is an unconventional approach to instruction and counseling, doing it well requires that instructors and counselors master both the details of the theories and activities that make up Puente’s approach.

Puente’s ongoing professional development was the key mechanism for developing a deep understanding and commitment to Puente’s core theories of cultural validation, academic acceleration, and collaboration among a critical mass of faculty, counselors, and staff. CTN-Puente team members were coached through an immersive five-day training institute and ongoing development activities that adhered to an established model of professional development that is based on an understanding of the California Puente program—a program that is largely stable. At the same time, there was flexibility in the sequences and activities that make up the Puente curriculum.

Unsurprisingly, on the survey, all survey respondents indicated that the professional development had positively contributed to their success in the first year. I had an opportunity to ask the Puente team members about their experiences with Puente’s professional development in formal interviews at the end of the 2013 academic year. In these interviews, it became clear that

professional development provided team members with new skills and other social and psychological benefits which facilitated program implementation.

First, professional development provided team members with a deeper understanding of the “nuts and bolts” of the program. For those who were less familiar with the pedagogical and philosophical underpinnings of the Puente program, it was important that the training offered a clear theoretical overview of the program and a tangible set of tools to bring back to their colleges and classrooms. The PSI training was foundational in this regard. It was the key mechanism for developing understanding and commitment to the central theories of cultural validation, academic acceleration, and collaboration. For example, when asked how the training supported his work, John Miller replied, “The training gave me the binder”. Dr. Villanueva, an administrator from ECC commented:

The training gave me the foundation for how Puente approaches what they do. The whole idea...well everything. How the student success course was run, how the literature is used, how mentoring works. The foundation. In retrospect we were missing a lot of details but it gave us attitude and philosophy.

Priscilla Santos, the mentor coordinator at CNC agreed that a key benefit of the training was that it afforded a better understanding of the “big picture”. She noted:

The training was great because we got to see the whole picture, to see how the components impact the students.

Even those with more experience in Puente pedagogical practices believed that professional development had contributed positively to their practices and their understanding of student success. For example Mr. Gomez, an English instructor at CNC reflected:

Before the training, I did most of this already. I liked the essays and I liked the literature. I used some new books and assignments that were helpful and the students enjoyed it.

Similarly, for Paloma Garza a writing instructor at SC the training was significant because it gave her new perspectives related to success practices within the English classroom.

She explained:

When I went to the trainings, it solidified my feelings of how to reach students on the margins, who aren't usually considered academic. I already did some of it before, but the model improved my teaching by leaps and bounds. As you hit the challenges, you find a way to reach out. Puente demands a lot more of you. I've always been a dedicated teacher, but this model, I think, is also about all of this other stuff that isn't directly related to what happens in the classroom.

In addition to the pedagogical benefits of the training, the Puente team members indicated that they valued the opportunity to interact professionally and socially with their colleagues. In fact, the bonds established at the 5-day PSI training enabled collaboration and interaction between team members throughout the academic year. Susie Marcos, the counselor at ECC reflected:

Overall it was a great training. I got to work more closely with English faculty, and counselors at SC and I was very impressed with the work that went into it.

Prior to the training, most of the Puente team members had little to no contact with each other at their home campuses. Hence, another clear benefit experienced by all of the Puente team members was that the PSI training offered the participants an opportunity for sustained engagement with their Puente colleagues. John Miller noted:

The training established relationships with people I never met before or interacted with very little. Dr. Saegen, she's my boss's boss, but now I interact with her as a colleague.

These relationships enabled enduring collaboration on the content and pedagogy of courses and associated activities throughout the academic year. Each participant commented positively on this aspect of the training. One instructor explained:

We would really sit down as a *familia*. You need people who can work well together. If you don't have that, that's the main ingredient.

Beyond the functional aspects of collaboration, the Puente *familias* provided team members with affective support as well. These relationships served to renew their sense of purpose and helped them cope with their professional and personal stress. An instructor commented:

I really enjoyed the collaboration with the Puente team. We met every week. The collegiality that brought us closer I looked forward to. It was a bright point.

Finally, another benefit of professional development was that it facilitated a sense of empowerment. In the literature, *empowerment* is defined as “a subjective state of mind where an employee perceives that he or she is exercising efficacious control over meaningful work” (Potterfield, 1991, p.51 as cited in Bess & Dee, 2008, p.572). The concept of empowerment is defined psychologically to underscore the importance of each stakeholder’s perceptions in determining motivation. Many of the instructors experienced Puente’s professional development as an affirmation of their pedagogical philosophies. For Mr. Lira, an English instructor at ECC, the main benefit of the training was that it validated his use of Chicano and Chicana literature in the English classroom. He disclosed:

I was excited to see that my field, Chicano and Chicana studies and English Poetry, was included. I was excited to find a program building the scholars that we need. It’s a no brainer... I felt empowered. This is a successful program...it was enriching to be a part of.

Professional development empowered others by providing rich opportunities for professional growth. On monthly phone conferences and newsletters, and biannual training institutes, prominent Puente instructors and counselors were asked to serve as moderators on monthly calls and to present at training sessions. In addition, instructors and counselors were called upon to speak on behalf of the Puente program at state meetings. Based on her exemplary work with CTN-Puente over the course of the first year, Paloma Garza was asked to address the

coordinating board at a CTN-Puente planning meeting and to serve as the secretary on the CTN board. Ms. Garza commented:

Puente was a great opportunity for me to grow professionally. Also, for the students, I was able to address huge deficits. I got the tools to address the needs of students. I've been recognized for my work. If you're a driven person, you can take as much as you want.

Despite general approval for the programs professional development practices, interviews and observational data also revealed some shortcomings. Namely, as the program adapted to the context of Texas colleges, some of the attendees found that technical aspects of the California Puente training model were less applicable to their campus setting. The counselors, in particular, struggled to reconcile how they would perform their role in the program from outside of the Puente classroom. One counselor considered:

You know what, it was a very good training. However, I went and I received a lot of training for the counselor in the class, not the one outside of class. I wish we could have that training. It was for instructors, but I am not an instructor.

Another counselor, who implemented the Learning Frameworks course, expressed mild frustration with the limited amount of time that the Puente teams had to construct their own models with the guidance of the California Puente teams. He explained:

Berkeley, it was a whole week, but then we had 40 minutes to explain what we would do at our colleges.

In general, however, individuals were positive about how professional learning activities influenced their subsequent teaching and counseling activities.

A Flexible but Focused Approach

The theoretical starting point of this study took a behavioral approach to the subject of program scale-up and argued that organizational settings affect how programs are scaled-up. Levine's institutionalization-termination framework set out a structure for thinking about the

legitimacy and profitability of equity oriented student success programs such as Puente in diverse contexts. The findings of this study suggest that success in the scale-up of a Latino focused student success program in a diverse state and college system depended on a flexible but focused approach. On the one hand, the scale-up of the CTN-Puente program had to be flexible enough to take advantage of local networks while also accommodating certain local constraints. On the other hand, the CTN-Puente program had to maintain fidelity to Puente's core principles, or theory of action.

For the program to be viewed as legitimate, profitable, and scalable, this study found that three interrelated factors had to be satisfied. First was a consideration of the particularities of the interests of the stakeholders in the actual contexts into which the program was to be scaled. Second was a flexible notion of what it meant to implement the program in diverse contexts. And third was a clear idea of what the program was trying to enact and why this was a worthwhile thing to do—that is, a clear idea of the theory of action. These results imply that the scale-up of programs must make sense in practical as well as theoretical ways, which means that scale-up plans cannot be detached from the context of delivery. Achieving coherence in scale-up required leadership that appreciated both the complexity of the context and the theoretical basis of the Puente program. Adaptation and “development” were central, and should be included in models of scale-up. At the same time, programs must find ways to maintain adherence to their central principles—or the theoretical underpinnings.

CHAPTER 6

SUMMARY AND CONCLUSION

In this last chapter, I summarize the findings of this study, reflect on the general subjects of scale-up and change in organizations, and discuss the implications of this study for research and practice. I illustrate the findings of this research and offer some suggestions to community colleges and programs concerned with the scale-up of equity-oriented student success programs.

The results of this study are largely indicative of the effectiveness of the efforts to scale-up the Puente program to three Texas community colleges in the first year of program implementation. While it is too early to judge the long-term outcomes related to the sustainability of the Puente program in Texas colleges, some early lessons about adoption and early implementation have emerged. These lessons are preliminary rather than definitive. Since there is little information in the literature to demonstrate the strategies that facilitate scale-up in diverse community college settings, this study provided some comparative data on scale-up that are unique. While no claims are made about the generalizability of the results to other types of institutions or institutions in other settings, these results indicate a direction for further inquiry, especially with regard to the positive findings about the role of professional development in program implementation and scale-up.

Summary of Findings

Levine's institutionalization-termination framework provided an effective lens to study the scale-up of the Puente program in Texas colleges. The terminology and viewpoints of this perspective proved to be valuable for understanding innovation and change in the diverse cultural and institutional contexts of Texas community colleges. The central hypothesis of this study, derived from Levine's institutionalization-termination theory, speculated that the adoption

and implementation of the Puente program in Texas would depend on the extent to which the program established and maintained profitability and legitimacy among divergent stakeholders in the context of each Texas college. The data examined supported this hypothesis and confirmed expectations derived from the literature. State officials, local administrators and college faculty and staff adopted and implemented the Puente strategies that were compatible with their goals and their *beliefs* about effectiveness and cost-effectiveness, although most colleges and individuals did not have any data on how these strategies would actually perform at their college. The program's search for legitimacy and the effects that resulted were the means for institutional survival.

While this study was not a formal evaluation of the Texas CTN-Puente initiative, the preliminary results presented in these case studies suggest that efforts to implement Puente program in Texas community colleges were largely successful in the first year; the adoption and implementation of the Puente program appeared to contribute positively to the success rates of students who participated in the Puente program. In each of these case studies, it was clear that scale-up could not have been handled prescriptively—it required a high degree of skill and judgment on the part of the implementing teams. At the same time, it is doubtful that scale-up would have been successful unless specifications matched Puente's theory of action and supported instructors and counselors' development of expertise in these key areas. The resulting analyses indicated that the legitimacy and profitability of the Puente program was established and maintained through alliance building, a flexible design, and comprehensive professional development.

For analytic purposes, the following section discusses each of the three factors individually. In reality, these factors worked dynamically to explain scale-up progress. Effective

implementation required the training of a skilled and committed group of core staff members. Yet, scaling-up also depended on the ability to enlist those outside of the program to the cause and share knowledge and resources essential for effective change. This required the support and engagement of highly placed officials and those charged with enacting new roles and routines called for by the intervention being scaled-up. Additionally, since acceptance by relatively large numbers of faculty was crucial for the program, scale-up required flexibility with the Puente model.

Reflections on Scale-Up and Organizational Change

In this section, I reflect on each of the central findings of this study and the general subject of scaling-up equity-oriented programs in diverse community college settings.

Soliciting and Sustaining Alliances

The first finding of this study suggests that effective alliance building facilitated scale-up. As opposed to the working arrangements that facilitate program implementation through the refinement of practice—alliances foster implementation by bringing together parties with distinct interests and responsibilities together for a new common purpose. Alliances at all levels encouraged faculty, staff, administrators, and state level officials to be informed about and to support Puente strategies. This support, in turn, facilitated scale-up.

Boundary spanners were key to establishing effective alliances. In the literature, “*boundary spanners*” is a term to describe individuals within a system who have, or adopt, the role of linking the organization's internal and external networks (Bess & Dee, 2008). Boundary spanners have been found to have a direct link to the absorptive capacity, or the organization’s “ability to recognize the value of new information, assimilate it, and apply it to advantageous ends” (Bess & Dee, 2008, p.95). When realized, organizations have the capacity to develop new

routines and facilitate the combining of existing knowledge and newly acquired knowledge. In order to embrace this kind of transformational change, however, significant numbers of people first need to believe either that their current practices are not effective or that alternatives to those practices will have more favorable effects on the learning experiences of students or, potentially, their own experiences. Moreover, individuals had to develop shared commitments to collectively agreed upon strategies of action.

As mentioned, in community colleges, this type of agreement is not readily obtainable. Not only do organizational member have multiple commitments within the organization, but they also have other loyalties outside the organization. For example, state officials expressed interest in the program's ability to address "a developmental education problem" but not necessarily a racially/ethnically based "transfer gap". In contrast, when asked why they chose to participate in the Puente initiative, the majority of Puente team members attributed their involvement to the program's alignment with their values for social justice and their commitment to enhancing educational opportunities for underserved Latino community college students. In this inconsistent context, the role of the boundary spanners was key in inspiring and enabling organizational change.

One important consideration in alliance building was finding the right individuals to serve as boundary spanners. In this study, Walden and Dr. Campos were easily recognized as the key boundary spanners. The CTN-Puente initiative benefitted from their preexisting collegial relationships with influential administrators, researchers, and policymakers. While Walden had limited networks in the field of education, he touted Dr. Campos' "familiarity with key players" and "extraordinary networking abilities." Appropriately, Dr. Campos was highly successful in

establishing internal and alliances between the CTN, the California Puente program, and Texas community colleges.

Other alliances required new bridges to be built at the college levels. Internally, administrators and Puente team members were key in bringing new ideas into the sub-systems at each Texas college. Community college leaders made important staffing decisions and provided leadership that established the legitimacy of the program on the broader campus community. At the same time, practitioners played a key role in building internal alliances with their non-Puente peers. Hence, on top of structured opportunities for facilitating new learning—the scale-up required the ability to facilitate alliances that delivered high value to the participants at all levels of the system.

The Communication of Flexibility

In Chapter 6, the argument was made that a robust design was essential in creating buy-in among external and internal stakeholder groups. By communicating a flexible design, Walden and Campos allowed each stakeholder to develop a picture of the future and flexibility in the means to get there; they did not foreclose possible opportunities. As a result of this flexible approach, several proactive and reactive adaptations were made to the Puente model. First, state pressures to create widespread change in the delivery of developmental education pressed the Puente program to expand to twice its usual size on two campuses and four times its usual size on another. Additionally, state pressures required CTN to shift the official focus of the Puente program away from transfer to certificate and 2-year degree attainment.

Changes to the Puente model also occurred throughout the process of program implementation. For example, two of the three colleges reduced the use of one to one mentoring because they found that it was simply too challenging to implement this component with fifty or

more students. Additionally, in response to feelings of exclusion expressed by non-Puente faculty, administrators at CNC included non-Puente faculty to Puente-CTN training events and piloted an initiative called “Puente Pathways” which enrolled phase two and three Puente students (second semester and beyond) in “*Puentified*” courses. Finally, because of counseling shortages, student success courses were staffed by instructional coaches.

It should be noted, however, that while the communication of a flexible design was essential in the scale-up of the program to Texas colleges, the adaptations that actually occurred should not be overstated. Despite a focus on the obtainment of AA degrees, CTN-Puente faculty continued to promote the transfer degree alongside the AA. Furthermore, the increases in cohort size that were made to Puente ECC in the first year of implementation were eliminated by second year. Over time, then, the CTN-Puente program actually came to look more and more like the California model. According to Sofia Obregon, when Juan Chacon, the Executive Director of Puente, visited Texas colleges, the similarity of the look and feel of Texas Puente program to the California Puente program surprised him. Ms. Obregon, in contrast, was not surprised. She explained, “the Puente program faces the same challenges in Texas as it does in California; its just the nature of Puente.”

This study contends that the scale-up of the Puente program would have failed if it had been too rigid—if it had required such a tight specification of conditions that scaling was impossible beyond idealized settings. Given this flexible view of program scale-up, what, if any, aspects of the program were non-negotiable? The results of this study suggest that implementation had to be tight about the delivery of the professional learning portion of the Puente program—the process by which Puente team members learned about, practice, reflected upon their work, and adjusted their practice. The following section describes this factor in more

detail. With regards to the practice of Puente itself, it is not yet clear what, precisely, colleges had to be focused about.

Since there is little clarity around the delivery of the programs components, this study suggests that scale-up models must be concerned with securing ecological legitimacy and profitability. Some have argued that the instgoititutional processes that occur during scale-up contribute to technical efficiencies; that program adaptation may, in fact, be a vehicle by which programs and colleges become more efficient (Meyer & Rowan, 2006). While this study was not able to determine the relative effectiveness of the adaptations that occurred to the Puente program in relation to the California Puente model, the study clearly indicated that adaptations to the Puente model were a prerequisite for program adoption and implementation. Consequently, in the design of the program scale-up, models must include guidance, support, and tools that aid in the evaluation of the program in the local setting in order to increase the likelihood that the program is successful.

A Comprehensive Model of Professional Development

Finally, the results of this study suggest that professional development was the key to CTN's success in establishing support for the Puente program among Texas faculty, counselors, and administrators. In the literature, **professional development** is defined as efforts that offer opportunities for individuals to learn certain skills or knowledge related to issues associated with the change effort (Jackson, et al., 2013). In contrast to traditional professional development models that assume that economic incentives and prescriptive programs are effective tools in promoting development, Puente's model of professional development empowers individuals by tapping into their social and moral drives to improve their practice. The results of this study suggest that the significance of professional development was that it met faculty and counselors'

social and psychological needs to be a part of collegial, effective, and culturally validating professional learning community.

As noted previously, Puente is fundamentally a professional development program. The theory of action with regards to scale-up reflects a three-step model common to all programs built on teacher professional development: (a) practitioners learn about a better way to teach and provide services through professional development, (b) practitioners adopt and implement more appropriate approaches to teaching and counseling, (c) student success outcomes are improved because of these improvements (Thompson & William, 2007, p.21). In the case of Puente, this process required that teachers and counselors learn extensively about Puente via an initial 5-day training and through sustained engagement in campus-based learning communities (*familias*) and workshops.

There were two important underlying aspects to Puente's professional development. First, throughout professional development, instructors and counselors were provided the time and structures to be learners. Scholars have noted that under pressure to replicate the components of a complex program, there is a risk of reducing the role of the implementation team solely to the function of program delivery (Thompson & William, 2007, p.22). In this view, Thompson and William note that an instructor's understanding of that curriculum (or, a counselors understanding of how to support students) is presumed to be handled by the delivery of the intervention itself. In contrast, through professional development, Puente establishes the expectation that teachers are learners who must participate actively in ongoing learning. Moreover, the Puente development team provides explicit guidance for the tone of professional development and ongoing support to campus based learning communities.

A second key issue in professional development was that the transmission of Puente's knowledge base was complete. While the Puente program may hinge on three key strategies, the program draws on research and theory from multiple fields, and, when implemented, it is brought to bear on many different kinds of classrooms using many different techniques. Consequently, the knowledge base for Puente is large and complex, and it has taken many years for developers to internalize and organize the details of their thinking and experience along the lines of professional development. In the literature, it has been established that professional development led by researchers and university officials outside of the instructional setting does not effectively produce change in the classroom setting. In contrast to a static knowledge base, Puente California field experts and developers led the team members in Texas through an inquiry-based professional development that developed an understanding of the field setting, the theoretical foundations of the program, and the interplay between the two.

In each case study, it became clear that Puente's professional development supported the work of each Puente team member in several ways. First, as documented in the case studies, professional development encouraged instructors and counselors to learn about, practice, reflect upon, and adjust their practice so that they eventually become expert in the delivery of Puente at their college campuses.

The social benefits of participation in Puente professional development model also held a deep meaning for participants. The "*familia*" model socialized individuals into workplace associations that developed into caring relationships and fostered a common sense of purpose. There is broad agreement in the literature about the important role that such cohesion plays to the success of change initiatives. **Cohesion** refers to the pressures that individuals experience to work on behalf of a group and to remain committed to it (Bess & Dee, 2007). Cohesion also

reflects an emotional sticking together—a sense of caring about the well being of all members. As discussed, this type of cohesion is not always obvious in community colleges.

Finally, Puente’s model of professional development empowered faculty by validating the use of culturally relevant content and promoting professional growth. In the literature, empowerment has been found to engender a sense of connectedness to the organization and affect employees’ decision to stay or depart organizations (Conger and Kanungo, 1988). The results of this study suggest that professional development facilitated empowerment, by putting openness, trust, and diversity at the center of the knowledge generation process. As opposed to a rigid curriculum, individuals were invited to talk about students on their own terms. Past studies of Puente have described the way in which these activities help Puente teachers develop a capacity for and a commitment to the common enterprise of supporting students’ success (Pradl, 2002). From this perspective, professional development was essential because it facilitated positive working relationships and it ensured that individuals had opportunities to have a meaningful role in progress toward critical outcomes. Ultimately, Puente teams established their capacity for and a commitment to the enterprise of supporting underserved students’ post-secondary pathways.

Recommendations for Programs and Practice

As practitioners, policymakers, and researchers search for innovations and strategies to improve community colleges, particularly for Latino students and other groups at the greatest risk of failure, the focus must be on transformational change. Research suggests comprehensive programs such as Puente have the ability to effectively address the conditions that contribute to student failure. This research suggested that the scale-up of transformational programs in community colleges can potentially be established and sustained through a flexible but focused

approach. Exploring the dimensions of the scaling-up process illuminated three interconnected strategies for facilitating the adoption and implementation of transformational change. In this section, I distill the findings and conclusions of this study into recommendations that can support the growth of successful transfer programs for the ever-growing numbers of underrepresented Latino community college students.

Lessons for CTN-Puente

Continue to collaborate in the delivery of professional development. While this study found that there is a great deal of flexibility in the delivery of the Puente program, it also found that developers must be focused about the essential elements of the professional development portion of the programs. This theory of action has to do with the process by which teachers and counselors learn, interact, and mobilize action. That is why the Puente program builds in the explicit expectation that teachers participate in inquiry based learning communities, or *familias*. In addition, it is also why Puente developers provided sustained guidance for the content and tone of professional development, and ongoing support for campus based learning communities. Ultimately, the expansion of the Puente program will require additional infrastructure for delivering high quality professional development in Texas. CTN-Puente has started the process of developing this infrastructure for scaling-up professional development by training instructors in various academic disciplines to take on leadership positions in the delivery of professional development.

With their 30-year history, the California Puente program has refined, not only their program, but also their approach to delivering in-service and pre-service training to support transformational change. For Texas practitioners, professional development activities, which were led by Puente California, were *the* most legitimizing aspect of the program. As the Catch

the Next team and the Texas Puente fellows take on larger roles with regards to professional development in Texas colleges, the Puente and the Catch the Next teams should continue to find ways to work together. A lack of collaboration between the two organizations would, in all likelihood, reduce the legitimacy of the CTN-Puente program in Texas colleges, leaving the program vulnerable in the competitive landscape of Texas community colleges.

Support the expansion of the Puente program to colleges in the most critical regions of the state. Given the abundance of Hispanic Serving Institutions, many Texas and California community colleges may look for ways to improve programs and services for targeted student populations. Moreover, in Texas, as the state promotes the integrated reading and writing, it is anticipated that many more colleges could adopt Puente in the near future.

Recognize and calculate the trade-offs between the breadth and depth of services. While there is much to be learned of the scale-up of the program in Texas colleges, the program is unlikely to be transformational unless it can be expanded to serve more students. Yet, the effectiveness of the Puente program may be reduced if cohorts grow too large or resources are stretched too thin. This appears to have been the case with regard to the mentoring component. Given the scarcity of mentors in some areas and the large numbers of students, it would have been nearly impossible to abide by the one-to-one mentoring model. As the program expands, going to scale with one-to-one mentoring may be less effective than targeting such resources to students who are especially at risk.

Likewise, due to a shortage of counselors in Texas, non-counseling staff at two Texas colleges taught the Learning Frameworks course. There is some evidence to suggest that this practice may have been an effective approach to supplementing the work of counselors by providing additional guidance and advising in the classroom setting. According to a randomized

experiment study conducted by researchers at Stanford University, students who were randomly assigned to a “coach”, or a guide who was not formally trained as a counselor, were more likely to persist during the treatment period, and were more likely to be attending college one year after the coaching had ended (Bettinger & Baker, 2011). Hence, as the program continues to develop in Texas, there may be opportunities to explore and test different approaches for increasing the reach of the program to more students through fitting adaptation.

Consider ways to differentiate Puente strategies for students in lower and higher levels of education. Rather than a one-size-fits-all approach, some Puente colleges in Texas may need to consider differentiation. The Puente strategies affected developmental students in the highest levels of developmental education. Yet, lower-level students are the ones with the longest and most strenuous paths toward graduation. And large numbers of Texas and California community colleges entrants test into the lowest categories. By the end of the first year, leadership at CTN was considering developing a “Pre-Puente” to serve students in lower levels of developmental education and a “Puente Pathways” model to serve Puente students who are beyond the second Phase (semester) of the program. If funders and policymakers hope to expand the reach of the Puente program, they might consider supporting efforts to develop Puente-inspired interventions tailored specifically for these student populations.

Lessons for the California Puente Program

As discussed in Chapter One, in California, the Puente program has maintained an isolated position on most college campuses and has reached only a small fraction of the students who stand to benefit from it. Consequently, the Puente program has been under pressure to serve more students on each campus. While this study was primarily concerned with the scale-up of the program from California to Texas, each one of the recommendations for CTN-Puente listed

above can offer guidance for the expansion of the Puente program in California. In addition, this section includes one final California-specific recommendation.

Build capacity for scaling-out professional development. As effective as the California Puente program has been in developing effective individual instructors and counselors, the program remains isolated from broader campus community. Consequently, most instructors and counselors continue to follow traditional approaches to instruction and counseling. In contrast, in Texas, the larger cohort sizes encouraged leadership to incorporate more instructors, counselors, and staff into CTN-Puente’s professional development activities. Notably, most instructors and counselors believed that they, and their students, benefitted from this training.

In California, like Texas, professional development is the heart of the Puente program. Yet, in California, an extremely small subset of instructors receives training to implement the program. Consequently, the Puente organization has developed limited infrastructure to support its training. In fact, state budget cuts over the past few years forced the program to reduce their already-limited training-dedicated staff. The results of this study, however, suggest that colleges could benefit from incorporating more counselors and instructors into the Puente program. This would require the development of appropriate infrastructure to support the delivery of the training. The “train the trainer” sequence that is currently being developed in Texas colleges may be one promising avenue for the California Puente program to explore. Such an approach does not require the addition of staff to the organization, but develops the capacity of current Puente team members to take on new leadership positions within the organization.

Lessons for Colleges

Communicate early and ongoing support for Puente. In the implementation of the CTN-Puente program in Texas, the president’s spoken support sent a clear message about the

importance of the Puente program and it encouraged campus community members to support, or at least to cooperate, with the initiative. In the crowded landscape of Texas colleges, it was important that each president made the program out to be an institutional priority. This support helped to concentrate energy on implementation and to eliminate implementation obstacles.

Anticipate complexities in where Puente-related activities fit into the academic calendar and consider providing extra release time for Puente team members during peak activity periods. The results of this study suggest that Puente counselors and instructors need time to interact with each other and with students. In many cases, Puente faculty and counselors were put in the stressful position of choosing between Puente related duties, other job responsibilities, and their personal lives. In many cases, Puente team members elected to make personal sacrifices to meet the new demands of their job. A more sustainable approach to change requires finding creative ways to support the work of Puente faculty and counselors, particularly during peak activity periods. One cost-effective option, currently used in California colleges, is providing Puente faculty and counselors with release time and hiring adjunct faculty and staff to “fill-in” for these gaps.

Encourage a broad base of faculty, staff, and mid-level administrators to participate in Puente via professional development and mentoring. Finally, the results of this study found that participation in Puente-related activities (mentoring) and professional development helped to strengthen the locus of innovation—the constellation of forces generating support for the innovation. In the literature, studies have found that acceptance by relatively large numbers of faculty is crucial for an innovation to become widespread. Hence, it is crucial that the program develop a within college supportive structure to help perpetuate commitment to the Puente model.

Implications for Research

The qualitative approach taken in this study has the potential for further development, both in terms of research and policy. There are three primary research implications centering on questions of program scale-up, profitability, and legitimacy. First, the findings of this study demonstrate that contextual factors should be a component of any model of program scale-up. A common research assignment at many institutions includes the evaluation of program effectiveness. It is possible, however, to find correlations between programs and student outcomes, without considering the influence of organizational environments on the programs themselves.

The results of this study suggest that researchers should increase attention on the how of program scale-up; the strategies and resource requirements are not necessarily the same for colleges and individuals in diverse institutional and cultural contexts. For example, does the motivation to participate in Latino-focused change initiatives operate in the same way for instructors and counselors in non-Hispanic Serving Institutions? And do Puente's professional learning communities work equally well for instructors in all academic departments (e.g. English, developmental education, Education) or are they more effective for some instructors than others? To the extent that we can better understand the process by which equity oriented changes take place, the results of this study allow for more comprehensive planning.

One fundamental question that this study answered is about the meaning of transformational change with regard to Latino student success. Some student success strategies make the claim to be transformative because they reach large numbers of students or because they use accelerated teaching strategies. Neither of these are entitlements to the term "transformational" with regard to Latino student success. Rather a transformational program should be based on an understanding of the nature of Latino student success. In Chapter two, the

presentation of the challenges facing Latino students and the discussion of the theoretical underpinnings of the Puente program contributed to an understanding of the elements required in transformational Latino student success programs. The study argued that effective Latino student success programs involve culturally validating approaches to accelerated instruction, comprehensive counseling strategies, and opportunities for mentoring. Future research might focus on the relative effectiveness of variations of the Puente program that alter the delivery of one or more of these areas. It would be important to understand if and how the range of techniques necessary to address Latino student attrition and failure vary by state and by institution.

Finally, in the literature, returns on investments in student retention strategies are not generally known, and thus, it is difficult to determine whether the funds in programs have been wisely invested. This paper provides a framework to make the task of cost effectiveness easier. If an understanding of the nature of change is achieved, then the programs can be designed more effectively and other programs can be more readily assessed. A traditional benefit-cost analysis enables researchers to ascertain whether a particular course of action is “worth it” by comparing the costs with the benefits. In a classical sense, this method treats all benefits and costs of a program in dollar terms, so that they may be compared. The difference between benefits and costs is calculated, if the difference is positive then the program is deemed worthwhile in the cost benefit sense. As noted previously, however, the criteria by which organizations evaluate innovations are more diffuse.

Instead, the results of this study suggest that two possibilities are relevant to the study of the costs and benefits of scale-up: 1) effects on the legitimacy of the program, 2) effects on the profitability of the program. The possibility of there being no consequences at all is also an

option to be considered. Given the adaptations to the Puente model that occurred in this study during the scale-up process and the positive impact on student outcomes, the results of this study suggest that more research is needed to determine the cost-effectiveness of adapted models of the program. This study provided a typology that might be used to learn about both the monetary and non-monetary consequences of scale-up. In an era of increasing accountability, colleges will need such frameworks to address questions related to the adoption and implementation of services for Latino and other underserved groups.

Conclusion

This study sought to support the improvement of educational opportunities for underserved community college students by examining the organizational change process and its effects on the scale-up of an externally developed Latino-focused transfer program. Community colleges have often been accused of mission drift: fluctuating with the tides of political mandates and economic demands without an anchor to a theory of action (Beatty-Guenter, 1994). Mission drift may be seen as the responsiveness to the market; to the extent that community colleges are policy driven, then they must respond to the types of charges leveled by state and public authorities (Beatty-Guenter, 1994, p. 210). As described in Chapter One, this has resulted in the tendency to lose a focus on the transfer function. Yet, the responsiveness of the students and faculty in this study suggest that there is a demand for a reinvigorated focus on transfer and transfer-oriented programs in some settings. Without further research into the market demand for transfer programs and services in Texas community colleges, transfer seems at least as significant a mission as any other.

The results of this study demonstrated that many of the colleges in Texas need to take action to address Latino student success and transfer, and a guide for such action can be created

from the case studies that have been presented here. The discussion in the paper about flexibility and focus in scale-up will provide colleges with valuable information as they try to make good decisions about the implementation of Latino student success programs. For example, colleges that, despite having many initiatives, have persistently low rates of student success in developmental education might look to the Puente program as an extensive college-wide reform strategy for improvement in both technical and transfer programs. In contrast, colleges with higher rates of student success in developmental education might look to the Puente program as a smaller transfer-focused change strategy. Regardless of the approach, a flexible but focused formulation requires a loyalty to central design principles with accommodations to the needs, resources, restraints, and idiosyncrasies that occur in any college.

This study began with a number of questions about the role of merit in the American higher education system. In this discussion, I argued that transfer was one central indicator of social mobility and equality in our stratified system of higher education. After completing this study, I still believe that transfer is crucial, but I conclude that the scaling-up equity oriented community college programs must be robust and adaptive. It is possible for equity-oriented transfer programs to advance other, more incremental, goals while maintaining a long-term commitment to transfer. Ultimately, the results of the study suggest that flexibility, in addition to focus, played an important role in scale-up.

For the past four years, I looked critically at the rates of success among academically underprepared Latino students and I observed one program that is cultivating change in Texas colleges. This process inspired and humbled me. In this study, I portrayed some of the challenges in the enactment of an externally created Latino-focused transfer program in three Texas community colleges. Yet, I also demonstrated in this study some of the strategies that made it

possible for the Puente program to scale-up to a new state and college context without compromising their commitment to improving academic outcomes for underserved Latino students.

CHAPTER 7

POSTSCRIPT

The Future

The case studies profiled in this study were promising; by the end of the first year, the three Texas colleges had made real progress in advancing the CTN-Puente strategy. The results of this study indicated that support for the program was established and maintained through alliance building, a flexible design, and comprehensive professional development. While the timeline of this study did not allow for judgment on the ultimate success of the initiative, it is also important to consider issues related to sustainability of the program over time.

By the end of the first year, support for the program remained strong among faculty members; all of the team members planned to continue to work with the program and many team members were interested in helping to facilitate the adoption of the program at more colleges throughout Texas. Additionally, based on the success of the program in the first year, by the second year, demand for the program was rising at the institutional level; the president and the administrative teams at each community college wanted to enroll more students to the program and the state planned to facilitate the adoption of the program at more colleges throughout Texas.

Walden observed:

Our ability to deliver changed the conversation because we demonstrated that we could get the program off the ground with a sizable number of students.

At the same time, while administrators and state levels officials advertised the Puente program as a successful change strategy, by the end of the 2012-2013 academic year, state endorsement existed mainly in principle. The state elected to fund new colleges that wished to adopt the Puente program, but not to financially support colleges that had already gotten the program off the ground. The state did, however, agree to fund a “Train the Trainer” sequence,

which paid for some of the costs of professional development for a subset of team members at the three founding colleges. For the most part, however, the founding colleges were left to their own recourses in the second year. The CTN and Puente leadership teams hoped that in time ideological support would once again be manifested as financial support. While Campos and Walden worked tirelessly to search for externally funding opportunities, Walden remained optimistic:

The funding is precarious...but the colleges are putting in resources because they are seeing student success. That is not the ideal situation, but our early success counts for a lot. They could have said, the grant ran out, we're not doing it anymore. All of these partnerships help us be a player, so that people consider us when they are thinking of who to fund. Ideally, I want the state to fund us... I have provided the bridge funding when we haven't had the funds.... success comes from staying the course and showing that you are effective.

Thankfully, administrators at all three Texas colleges found ways to keep the program running in the second year on each community college campus. The level of funding and support they planned to provide, however, was no match for their ambitions. For example, the administrative team at CNC hoped to enroll 1000 students in the Puente program in the 2013-2014 academic year. When asked, however, most of the Puente team members sincerely doubted their ability to support this level of growth. An instructor at ECC criticized the situation his college stating, "they want to wave their magic wand, but it's not that easy." He reflected:

Paco and I threw ourselves into this. We spent an enormous amount of time developing the course. Pushing the students. We've never spent this much time on a course. It was a concerted effort. I don't think we could do it again at that same level.

... We realized that burnout is real. We love the concept and we can see the benefits, but we want our own experience to matter and count. To those who have the money, we need the release and the resources. We cannot do it alone. It's at least two times the amount of time, at least in the first semester.

Ultimately, when the release time and the resources did not come, the Puente teams at ECC cut their Puente cohorts by half in the second year. This development suggests that, for those that worked with larger cohorts, the costs of participation in the program outweighed the

benefits. While the benefits of participation in the Puente program are almost entirely non-monetary, instructors and counselors were unable to sustain their commitment to “scaled-up” (larger) versions of the program without financial or technical support for their work. As discussed, while many factors that impacted scale-up are likely context specific (e.g. available resources, political support, the availability of professional development), certain principles, such as time-intensiveness, are likely universal. As one instructor put it, “the hardest thing about these programs is that it add more work”. Hence, ambitions to increase the size of the program, in Texas or elsewhere, are unlikely to be successful unless there is infrastructure to support this kind of growth.

Although the Puente teams at ECC reduced their teaching loads in the second year, college administrators sought to maintain the program’s size by sending two new instructors to the Puente PSI training in the 2013-2014 academic year. Walden viewed this as a potentially important development in the scale-up of the program in Texas colleges. He suggested:

This kind of training builds advocates. Every cohort that goes through the training, there are more people that champion the program.

Hence, one promising aspect of the scale-up of the Puente program to Texas colleges was that it pushed colleges to “scale-out” the training to more faculty members from various academic fields. Ultimately, this approach distributed the responsibilities for change more broadly and expanded the grassroots support for the program on each college campuses.

In the spring of 2015, however, CTN-Puente suffered a devastating blow: Mike Walden, the founder of CTN, passed away suddenly. Walden’s passing presented many challenges for the CTN organization, which operated much like a close-knit family. Individuals had to immediately step in to fill Walden’s shoes; Dr. Campos became the executive director and Dr. Lucia

Camacho became the Director of Programs. In my own work, I continued on in my role as the Director of Research and Evaluation.

A month after Walden's passing, at the annual spring training institute, Puente-CTN team members, scholar mentors, and state levels officials gathered to celebrate the life and work of Mike Walden and to renew their commitments to promoting transformational change in Texas colleges. The event marked both an end of an era and a new beginning; it offered a reflective look back on the life work of Mike Walden and a look toward the future of CTN-Puente. Despite the contextual uncertainties, most attendees expressed their commitments towards continuing to facilitate the scale-up and implementation of the CTN-Puente program in Texas colleges. The future of the program was promising in this regard.

According to Taylor and Adelman (1997), enduring transformational change depends on the ability to "mobilize high levels of positive energy over extended periods of time" (p.221). The scale-up of the CTN-Puente program in Texas colleges ensured that individuals had access to positive working relationships, support in working toward desired outcomes, and the ability to make meaningful contributions to their colleges and communities. The continued development of Puente's professional development strategies offer the possibility of extraordinary improvements in Latino student achievement; CTN-Puente offers an effective mechanism for supporting instructors, counselors, and administrators in making the necessary changes in their practice. It will remain essential, however, for researchers and practitioners to continue to monitor and develop a formulation that optimizes the chances for taking these practices to scale in diverse settings, while ensuring that the changes that are made do not compromise the most essential elements of the program.

APPENDIX A

CTN-PUENTE PRACTITIONER INTERVIEW QUESTIONS

Section I. Depth of Adoption and Adaptation

1. What were the most significant changes to your work as a result of your involvement with CTN-Puente?
2. How, if at all, did these changes affect your approach to your work change?
3. Did you adapt or try to adapt the Puente program to fit your needs or the needs of your students, classroom, or campus? If so, how?
4. Results from the survey suggest that there is a certain pride associated with the participation in the Puente program. Can you please to talk about what this pride has meant to you and how, if at all, it impacted your work.
5. How, if at all, does the Puente program align with your personal values?

Section III. Support for Puente

6. Were any groups or individuals particularly supportive and enthusiastic about the initial adoption of the Puente program at your campus?
7. Were any groups or individuals opposed to the adoption?
8. How would you characterize the position of these groups or individuals now?
9. Survey results indicate there were several challenges to the implementation of the Puente program on each campus. What did these challenges look like at your campus and how, if at all, did they impact your work?
10. How, if at all, did financial considerations impact the implementation of the Puente program on your campus?
11. Do you think that inadequate funding will limit the program in the upcoming academic year?
12. Survey responses suggest that professional development, including the initial PSI training in Berkeley, was a source of support for most Puente participants. How, if at all, did the training support your work?
13. In your opinion, what additional training or support might have benefitted your work or the work of your colleagues?

14. If you are involved in the “train the trainer” sequence, do you feel that you will be that you will be prepared to help lead the PSI and ongoing training?

Section III. Quality of Program Implementation and Scale

15. Data suggest that the Puente program at each campus was successful in their delivery of the integrated reading and writing courses. Why do you think that this was the case at your college?
16. The results from the survey suggest that mentoring and transfer advising were a challenge to implement across all three colleges. Was this the case at your college? If so, why?
17. In your opinion, what changes might be made to strengthen these or any other aspects of the Puente program?

Section IV. The Future

18. Has your college made any significant changes to the Puente program in the 2013-2014 academic year?
 - a. Are there any new Puente instructors and courses at your college?
19. How, if at all, do you think that these changes will impact the implementation of the program?
20. The survey responses suggest that Puente participants greatly benefited from collaboration other Puente/CTN faculty, counselors, or administrators at their colleges. Do you think that this cohesiveness will continue if the program continues to grow?

APPENDIX B

PUENTE/CTN IMPLEMENTATION SURVEY

Puente/CTN Implementation Survey

[Exit this survey](#)

Puente/CTN Implementation Survey-Overview

10%

In a continued effort to study the implementation of the Puente/Catch the Next (CTN*) program in Texas, I am seeking feedback from Puente faculty and counselors regarding the implementation of the Puente/CTN program at their college during the 2012-2013 academic year. The purpose of this questionnaire is to better understand the factors which contributed to a strong implementation of the program across the various campus contexts. Please answer the questions honestly and thoroughly. Your response will be kept confidential. Thank you for your help.

[Next](#)

Puente/CTN Implementation Survey

[Exit this survey](#)

Section I. Background

20%

1. In which of the following ways, if at all, were you involved in the implementation of the the Puente/CTN program? (Please mark as many as apply.)

- Planning/designing
- Coordinating/supervising
- Teaching/facilitating
- Advising/referring students to the program
- Training faculty/instructors
- Evaluating/assessing the program
- Mentoring students
- Training program mentors
- I am not involved

Other (please specify)

2. What was the total number of hours per week that you were OFFICIALLY ASSIGNED to work with the Puente/CTN program?

- None
- 0 to 5
- 6 to 10
- 11 to 15
- 16 to 20
- 21 to 25
- 26 to 30
- 31 to 35
- 36 to 40
- 41 or more

Other (please specify)

3. What was the total number of hours per week that you ACTUALLY worked with the Puente/CTN program?

- None
- 0 to 5
- 6 to 10
- 11 to 15
- 16 to 20
- 21 to 25
- 26 to 30
- 31 to 35
- 36 to 40
- 41 or more

Other (please specify)

[Prev](#) [Next](#)

Puente/CTN Implementation Survey

[Exit this survey](#)

Section II. Entrance into Puente/CTN



4. Who or what was your initial source of information regarding the Puente program? (Please mark as many as apply.)

- Puente coordinator
- CTN coordinator
- College administrator
- District or state personnel
- Students or community member
- Faculty or counselor at this college
- Faculty or counselor at another college
- Awareness presentation
- Journal article or book
- Not sure
- Conference

Other (please specify)

5. Who or what was the most influential in causing you to participate in the Puente program?

- California Puente coordinator
- CTN coordinator
- College administrator
- Administrative mandate
- Visit to California Puente college
- District or state personnel
- Students or community member
- Faculty or counselor at this college
- Faculty or counselor at another college
- Awareness presentation
- Journal article or book
- Not sure
- Conference

Other (please specify)

6. How would you characterize the position of each of the following groups with regards to the adoption of the Puente/CTN program INITIALLY?

	Supportive and enthusiastic	Supportive	Neutral	Unsupportive	Against adoption	Don't know
Texas Higher Education Coordinating Board (THECB)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
District personnel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College president	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counselors/Advisers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Department heads (English, Counseling, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Members of the larger campus community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. How would you characterize the position of each of the following groups with regards to the adoption of the Puente/CTN program CURRENTLY?

	Supportive and enthusiastic	Supportive	Neutral	Unsupportive	Against adoption	Don't know
Texas Higher Education Coordinating Board (THECB)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
District personnel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College president	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counselors/Advisers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Department heads (English, Counseling, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Members of the larger campus community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Section III. Quality of Program Implementation



8. On a scale of one to five, how would you rate the overall quality of implementation of the Puente/CTN program during the 2012-2013 academic year at your school?

- 1--Program is hardly evident, poorly implemented, or not implemented
- 2--Program is being implemented, but there are some serious problems, or missing elements
- 3--Program is mostly well-implemented, with some areas poorly or incompletely implemented
- 4--Complete solid routine implementation-Implemented routinely, but some elements are missing
- 5--Thoughtful, creative, enthusiastic implementation

9. Evaluate the level of implementation of each of the following strategies/components of the Puente/CTN program as used at your college in the 2012-2013 academic year.

	Not implemented	Partially or poorly implemented	Adequately implemented	Outstandingly implemented	Don't know
Integrated reading and writing curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of Mexican American and/or Latina literature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transfer counseling/advising	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mentoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. What factors were necessary in implementing Puente/CTN successfully at your college? (Please mark as many as apply.)

- Faculty support
- Support from counselors/advisers
- Support from CTN facilitators
- Support of the president
- Support from mentors
- District level support
- State level support
- Community level support
- Networking with other Puente colleges
- Staff commitment to the program
- Effective teaching materials (availability and quality)
- Training prior to implementation
- Continued training
- Familia support structure of the program itself
- Cooperative learning components (English/College Success)
- Early success rates
- Had ample available funding
- Strong support of school site facilitators
- Consistent implementation
- Consistent Puente/CTN staff meetings
- Monitoring/evaluation of program
- Staff fidelity to the Puente/CTN model

Other (please specify)

11. What factors were impediments to your efforts in implementing Puente/CTN at your college? (Please mark as many as apply.)

- Insufficient number of personnel
- Inadequate funding
- Lack of district or state support
- Having to manage and get approval for course syllabus and materials
- Getting faculty to adhere to program structure
- Getting counselors to adhere to program structure
- Getting mentors to adhere to program structure
- Lack of student engagement
- Insufficient number of Puente classes
- Insufficient and/or inconsistent training
- Having to train new staff
- Poor Puente facilitator
- Poor CTN facilitator
- Insufficient time for staff development
- Overall scheduling problems
- Student turnover
- Too much paper work
- Not having a full-time Puente/CTN facilitator
- Large class size
- Inconsistent updating of materials
- Lack of commitment by faculty
- Lack of commitment by counselors
- Insufficient number of mentors
- Lack of fidelity to the model
- Resistant teachers
- Lack of leadership
- Space limitations
- Lack of preparation time
- Lack of culturally-relevant materials

Other (please specify)

12. Has there been any change in leadership since the adoption of the program?

- Yes
- No

13. If yes, did this change cause problems in the implementation of the program? Please describe.

14. Have you had to apply for any special waivers/permission to implement the Puente/CTN program?

- Yes
- No

15. If yes, what type of waiver/permission? (Please check as many as apply.)

- Grading/Assessment waiver
- Course placement waiver
- ESL waiver
- Attendance policy waiver
- Waiver/approval of developmental English curriculum
- Waiver/approval of transfer English curriculum
- Waiver/approval of college success curriculum

Other (please specify)

16. How, if at all, have state, district, or local policies required you to adapt your implementation of the Puente/CTN program?

Puente/CTN Implementation Survey

Section IV. Context for Implementation



17. Indicate how important you believe each priority listed below is at your college:

	Highest priority	High priority	Medium priority	Low priority
To strengthen links with four-year college and universities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To promote the institution's transfer mission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To strengthen links with the for-profit, corporate sector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To promote the institution's vocational mission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To strengthen links between faculty and student affairs staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To strengthen links with feeder high schools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To enhance the delivery of developmental/basic skills/college prep education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To facilitate student involvement in community service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To promote the institution's community service mission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To increase or maintain institutional prestige	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To create a diverse culturally representative campus environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To develop a sense of belonging among first-generation minority students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. Indicate how well each of the following describes the state of developmental education (only) at your college:

	Very descriptive	Somewhat descriptive	Not descriptive	Don't know
It is easy for students to see instructors outside of class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instructors are respected by non-developmental instructors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy for students to progress into college-level courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instructors are rewarded primarily for their ability to help students pass standardized assessments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instructors are rewarded for their efforts to make courses culturally-relevant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administrators consider instructors' concerns when making policy related to developmental education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instructors encourage students in developmental courses to transfer to four-year universities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instructors work with counselors/advisers to promote students success	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Indicate how well each of the following describes the state of co-curricular programming at your college:

	Very descriptive	Somewhat descriptive	Not descriptive	Don't know
College orientation offers students information about transfer to four-year colleges and universities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student success courses offer students information about transfer to four-year colleges and universities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Required placement tests (ACCUPLACER, ASSET, COMPASS, etc.) accurately reflect students' incoming academic skills in reading, writing, and/or math	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Required placement tests accurately place students' into developmental/basic skills/college prep course sequences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents and other family members are actively recruited to attend informational events at this college (orientation, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students are offered brush-up/refreshers experiences to prepare for placement tests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counselors/advisers encourage students in developmental courses to transfer to four-year universities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Section V. Training Issues



20. How many Puente/CTN training and follow-up days did you have during the 2012-2013 academic year?

Number of days

21. How satisfied were you with the initial training you received from the Puente/CTN facilitators?

- Very satisfied
- Moderately satisfied
- Unsatisfied

22. How satisfied were you with the follow-up training you received from your Puente/CTN facilitators?

- Very satisfied
- Moderately satisfied
- Unsatisfied

23. How often did you speak to your Puente/CTN facilitators by phone?

- At least once a week
- 1-4 times a month
- Less than once a month

24. How often did you communicate with your Puente/CTN facilitators by email?

- At least once a week
- 1-4 times a month
- Less than once a month

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Section VI. Networking



25. How often did you interact with your Puente team at this college?

- More than once a week
- 1-4 times a month
- Less than once a month
- Never

26. What type of interaction did you have with your Puente team at this college? (Please check as many as apply.)

- Phone calls
- Meetings
- Social get-togethers
- In-class visits
- Sharing resources, materials, or supplies
- E-mail
- Presentations on Puente program at your college
- Presentations on Puente outside of your college
- Cultural events

27. How often did you interact with the Puente teams at other colleges?

- More than once a week
- 1-4 times a month
- Less than once a month
- Never

28. What type of interaction did you have with your Puente team at other colleges? (Please check as many as apply.)

- Phone calls
- Meetings
- Social get-togethers
- In-class visits
- Sharing resources, materials, or supplies
- E-mail
- Presentations on Puente
- Cultural events
- Statewide Puente trainings
- Puente/CTN facilitator communications

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Section VII. Budget Issues



29. How would you describe the 2012-2013 level of funding for Puente?

- Fully adequate
- Adequate
- Moderately adequate
- Moderately inadequate
- Inadequate

30. Do you anticipate any major funding changes in the next few academic years?

- Yes
- No

31. Please mark any of these situations which apply to your college.

- Grants allocated for Puente/CTN will decrease
- We have received additional grants for the implementation of Puente/CTN
- College operating budget will decrease
- College operating budget will increase
- State/local funds will decrease
- State/local funds will increase
- College budget will be reorganized

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Section VIII. Professional Experiences



32. What community college do you currently work at?

- South Texas College
- El Paso Community College
- Palo Alto College

33. How many years of experience do you have working at any community college?

- 40 years or more
- 30 to 39 years
- 20 to 29 years
- 10 to 19 years
- 5 to 9 years
- 1 to 4 years
- First-year

34. Prior to your participation in the Puente/CTN program, had you engaged in any of the following professional development opportunities at your institution?

	Yes	No	Not eligible	Not available
Paid workshops outside the institution focused on underrepresented minority students success	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Paid workshops outside the institution focused on developmental education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Travel funds paid by the institution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal grants for research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training for leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Received incentives to develop new courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional mentoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

35. For each of the following items please mark either Yes or No.

	Yes	No
Are you a member of a faculty union?	<input type="radio"/>	<input type="radio"/>
Have you ever received an award for doing outstanding work at this college?	<input type="radio"/>	<input type="radio"/>

36. Based on your work with the Puente/CTN program, please indicate the extent to which each of the following was a source of stress for you during the 2012-2013 academic year:

	Extensive	Somewhat	Not at all	Not applicable
Puente/CTN meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institutional procedures and "red tape" involved in program implementation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased teaching/counseling load	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student recruitment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Keeping up with Puente/CTN e-mails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working with underprepared students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program budget cuts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of support from non-Puente/CTN faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of support from non-Puente/CTN student affairs staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of support from campus administration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of opportunities for professional development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of appropriate resources for class activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-imposed high expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of autonomy in program design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Change in work responsibilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

37. Based on your work with the Puente/CTN program, please indicate the extent to which each of the following was a source of strength for you during the 2012-2013 academic year:

	Extensive	Somewhat	Not at all	Not applicable
Increased opportunities for direct communication with students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collaboration with Puente/CTN faculty, counselors, or administrators at this college	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Partnerships with Puente/CTN faculty, counselors, or administrators at other colleges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Close alignment between your work with Puente/CTN and your personal values	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Healthy balance between your personal life and your professional life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Familia support structure of the program itself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pride associated with participation in the program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The expression of diversity in Puente/CTN curricular and co-curricular activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional mentoring opportunities with Puente/CTN scholar-mentors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal satisfaction with early success rates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Autonomy in program design and delivery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training for your role in the Puente/CTN program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leadership opportunities in the Puente/CTN program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

38. Are you still working with with the Puente/CTN program in the 2013-2014 academic year?

- Yes
 No

39. Do you anticipate any changes in the implementation of the program in the 2013-2014 academic year?

- Yes
 No

40. If yes, please describe.

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Section IX. Program Effectiveness



41. Please indicate the degree to which you agree or disagree with the following statements regarding your overall Puente/CTN program.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Don't know
Puente/CTN had a positive impact on my college.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Puente/CTN had a positive impact on students' interest in transfer at my college.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Puente/CTN had a positive impact on students' interest in career opportunities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Puente/CTN had a positive impact on students' achievement in English.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Puente/CTN had a positive impact on students' scores on standardized placement tests.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Puente/CTN decreased the time students spend in developmental education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Puente/CTN increased attendance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Puente/CTN counselors and instructors received adequate materials and resources to implement the program effectively.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt prepared to be a Puente/CTN counselor or instructor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Puente/CTN increased professional collaboration at my college.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank you for your time and assistance.

REFERENCES

- Adelman, H. S., & Taylor, L. (1997). Toward a implementation model for replicating new approaches to schooling. *Journal of Educational and Psychological Consultation, 8*(2), 197–230.
- Alexander, B. C., Garcia, V., L., Grimes, G., & O'Brien, D. (2007). Barriers in the transfer process for Hispanic and Hispanic immigrant students. *Journal of Hispanic Higher Education, 6*(2), 174–184.
- Alfonso, M. (2006). The impact of community college attendance on baccalaureate attainment. *Research in Higher Education, 47*(8), 873–903.
- Astin, A. (1970). The methodology of research on college impact (II). *Sociology of Education, 43*, 223–254.
- Astin, A. W. (1975). *Preventing students from dropping out*. San Francisco, CA: Jossey-Bass.
- Astin, A. W. (1977). *Four critical years*. San Francisco, CA: Jossey-Bass.
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel, 25*(3), 297–308.
- Astin, A. W. (1993). *What matters in college?: Four critical years revisited* (Vol. 1). San Francisco, CA: Jossey-Bass.
- Bailey, T. (2009). Challenge and opportunity: Rethinking the role and function of developmental education in community college. *New directions for community colleges, 2009*(145), 11–30.
- Bailey, T., Calcagno, J. C., Jenkins, D., Kienzl, G., & Leinbach, T. (2005). *Community college student success: What institutional characteristics make a difference?* New York, NY: Columbia University, Teachers College, Community College Research Center.
- Bailey, T., Calcagno, J. C., Jenkins, D., Leinbach, T., & Kienzl, G. (2006). Is student right to know all you should know? An analysis of community college graduation rates. *Research in Higher Education, 47*(5), 491–519.
- Bailey, T., Jenkins, D., & Leinbach, D. (2007). The effect of student goals on community college performance measures (CCRC Brief No. 33). New York, NY: Community College Research Center, Teachers College, Columbia University.
- Barnett, E. A. (2010). Validation experiences and persistence among community college students. *The Review of Higher Education, 34*(2), 193–230.
- Bean, J. P. (1983). The application model of turnover in work organizations to the student attrition process. *Review of Higher Education, 6*(2), 129–148.

- Beatty-Guenter, P. (1992). *Efficiency or Legitimacy? Diffusion of the Puente Project*. University of California Berkeley.
- Beatty-Guenter, P. (1994). *Retention strategies at community colleges: Diffusion, legitimacy, and effectiveness* (Unpublished doctoral dissertation). University of California Berkeley, Berkeley, CA.
- Bergquist, W. H. (1992). *The four cultures of the academy*. San Francisco, CA: Jossey-Bass.
- Berman, P., & McLaughlin, M. W. (1976). Implementation of educational innovation. *The Educational Forum*, 40(3), 345–370.
- Bess, J. L., & Dee, J. R. (2008a). *Understanding college and university organization: Theories for effective policy and practice* (Vol. 1). Sterling, VA: Stylus.
- Bess, J. L., & Dee, J. R. (2008b). *Understanding College and University Organization: Dynamics of the system* (Vol. 2): Stylus Pub Llc.
- Bettinger, E., & Baker, R. (2011). *The effects of student coaching in college: An evaluation of a randomized experiment in student mentoring* (NBER Working Paper No. 16881). Retrieved from National Bureau of Economic Research website: <http://www.nber.org/papers/w16881>
- Bloom, P. N., & Chatterji, A. K. (2009). Scaling social entrepreneurial impact. *California management review*, 51(3), 114–133.
- Bogdan, R. C., & Biklen, S. K. (1998). *Qualitative research for education: An introduction to theory and methods*. Needham Heights, MA: Allyn & Bacon.
- Bolman, L. G., & Deal, T. E. (1991). *Reframing organizations*. San Francisco, CA: Jossey-Bass.
- Bowen, W. G., & Bok, D. (1998). *The shape of the river: Long-term consequences of considering race in college and university admissions*. Ewing, NJ: Princeton University Press.
- Bragg, D. D. (2001). Opportunities and challenges for the new vocationalism in American community colleges. *New Directions for Community Colleges*, 2001(115), 5–15.
- Cabrera, A. F., & Nora, A. (1994). College students' perceptions of prejudice and discrimination and their feelings of alienation: A construct validation approach 1. *The Review of Education/Pedagogy/Cultural Studies*, 16(3–4), 387–409.
- California Department of Education. (2015). *Fingertip facts on education in California: CalEdFacts*. Retrieved from California Department of Education website: <http://www.cde.ca.gov/ds/sd/cb/ceffingertipfacts.asp>

- California Postsecondary Education Commission. (2010). Higher education enrollment. Retrieved from California Postsecondary Education Commission website: <http://www.cpec.ca.gov/OnLineData/SelectFirstOptions.ASP?ReportType=Enroll>
- Callahan M. (2005). Tracking and high school English learners: Limiting opportunity to learn. *American Educational Research Journal*, 42(2), 305–328.
- Carnevale, A. P., & Strohl, J. (2010). How increasing college access is increasing inequality, and what to do about it. In R. D. Kahlenberg (Ed.), *Rewarding strivers: Helping low-income students succeed in college* (pp. 71–207). Retrieved from The Century Foundation website: <http://www.tcf.org/work/education/detail/how-increasing-college-access-is-increasing-inequality-and-what-to-do-about/>
- Carnevale, A. P., Nicole Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Retrieved from Georgetown University Center on Education and the Workforce website: <https://cew.georgetown.edu/report/help-wanted/>
- Carnevale, A. P., Strohl, J., & Smith, N. (2009). Help wanted: Postsecondary education and training required. *New Directions for Community Colleges*, 2009(146), 21–31.
- Castellanos, J., & Gloria, A. M. (2007). Research considerations and theoretical application for best practices in higher education: Latina/os achieving success. *Journal of Hispanic Higher Education*, 6(4), 378–396.
- Cazden, C. (1996, April). *The “mentor paper” writing assignment in one community college Puente class: Preliminary report from a participant observer*. Paper presented at the Annual Meeting of the American Educational Research Association, New York, NY.
- Center for Public Policy and Higher Education. (2008). *Measuring up: State facts comparison results*. Retrieved from ERIC website: <http://files.eric.ed.gov/fulltext/ED503610.pdf>
- Chaffee, E. E., & Tierney, W. G. (1988). *Collegiate culture and leadership strategies*. New York, NY: Macmillan Company.
- Clark, B. R. (1983). The contradictions of change in academic systems. *Higher Education*, 12(1), 101–116.
- Coburn, C E. (2003). Rethinking implementation: Moving beyond numbers to deep and lasting change. *Educational Researcher*, 32(6), 3–12.
- Cohen, A. M., & Brawer, F. B. (1987). *The collegiate function of community colleges: Fostering higher learning through curriculum and student transfer*. San Francisco, CA: Jossey-Bass.
- Cohen, A. M., & Brawer, F. B. (2009). *The American community college*. San Francisco, CA: Jossey-Bass.

- Collins, M. L. (2010). Bridging the evidence gap in developmental education. *Journal of Developmental Education*, 34(1), 2–4.
- Community College Research Center. (2015). Community college FAQs. Retrieved from <http://ccrc.tc.columbia.edu/Community-College-FAQs.html>
- Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of management review*, 13(3), 471–482.
- Contreras, F. (2011). *Achieving equity for Latino students: Expanding the pathway to higher education through public policy*. New York, NY: Teachers College Press.
- Cooper, C. R., Jackson, J., Azmitia, M., Lopez, E., & Dunbar, N. (1995). Bridging students' multiple worlds: African American and Latino youth in academic outreach programs. In R. F. Macias & R. G. García-Ramos (Eds.), *Changing schools for changing students: An anthology of research on language minorities* (pp. 211–234). Santa Barbara: University of California Linguistic Minority Research Institute.
- Cooper, R., & Center, E. R. I. (1998). *Socio-cultural and within-school factors that affect the quality of implementation of school-wide programs*. Baltimore, MD: Center for Research on the Education of Students Placed at Risk.
- Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative*. Upper Saddle River, NJ: Prentice Hall.
- Crisp, G., & Delgado, K. (2011). *The impact of developmental education on community college student success*. Paper presented at the Annual Meeting of the Association of the Study of Higher Education.
- Crisp, G., & Nuñez, A. M. (2014). Understanding the racial transfer gap: Modeling underrepresented minority and nonminority students' pathways from two-to four-year institutions. *The Review of Higher Education*, 37(3), 291–320.
- Cuban, L. (1988). Constancy and change in schools (1880s to the present). In P. Jackson (Ed.), *Contributing to educational change* (pp.85–105). Berkeley, CA: McCutchan.
- Cuban, L. (1993). *How teachers taught: Constancy and change in American classrooms, 1890–1990*. New York, NY: Teachers College Press.
- Curry, B. K. (1992). *Instituting enduring innovations. achieving continuity of change in higher education* (ASHE-ERIC Higher Education Report No. 7). Washington, DC: ASHE-ERIC Higher Education Reports, The George Washington University.

- Dadgar, M., & Trimble, M. J. (2014). Labor market returns to sub-baccalaureate credentials how much does a community college degree or certificate pay? *Educational Evaluation and Policy Analysis*. Retrieved from American Educational Research Association website: <http://www.aera.net/Newsroom/RecentAERAResearch/LaborMarketReturnstoSub-BaccalaureateCredentialsHowMuchDoesaCommunityCollegeDegreeorCertificatePay/tabid/15704/Default.aspx>
- Damanpour, F., & Evan, W. M. (1984). Organizational innovation and performance: The problem of "organizational lag." *Administrative Science Quarterly*, 29(3), 392–409.
- Datnow, A., Hubbard, L., & Mehan, H. (2002). *Extending educational reform*. Hoboken, NJ: Taylor & Francis.
- Datnow, A. (2000). Working together for reliable school reform. *Journal of Education for Students Placed at Risk*, 5(1–2), 183–204.
- De Los Santos, A. G., & De Los Santos, G. E. (2003). Hispanic-serving institutions in the 21st century: Overview, challenges, and opportunities. *Journal of Hispanic Higher Education*, 2(4), 377–391.
- Desimone, L. M. (2009). Improving impact studies of teacher's professional development: Toward better conceptualizations and measures. *Educational Researcher*, 38(3), 181–199.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
- Dougherty, K. J. (1992). Community colleges and baccalaureate attainment. *The Journal of Higher Education*, 63(2), 188–214.
- Dougherty, K. J. (1994). *The contradictory college: The conflicting origins, impacts, and futures of the community college*. Albany: SUNY Press.
- Dougherty, K. J., & Kienzl, G. S. (2006). It's not enough to get through the open door: Inequalities by social background in transfer from community colleges to four-year colleges. *Teachers College Record*, 108(3), 452–487.
- Du Bois, W. (1903). *The souls of black folk*. Chicago, IL: AG Mc-Clurg.
- Duffy, H. M. (2002). *Reconceptualizing teaching and learning: an exploration of professional development and its classroom application in the high school Puente Project*. Berkeley: University of California, Berkeley.
- Easton, D. (1985). Political science in the United States: Past and present. *International Political Science Review/Revue internationale de science politique*, 6(1), 133–152.

- Eaton, J. S. (1988). *Colleges of choice: The enabling impact of the community college*. New York, NY: MacMillan.
- Eckel, P. D., & Kezar, A. J. (2003). *Taking the reins: Institutional transformation in higher education*. Westport, CT: Praeger.
- Eckel, P., Hill, B., & Green, M. F. (1998). *En route to transformation*. Washington, DC: American Council on Education.
- El-Khawas, E. (1995). External review: Alternative models based on US experience. *Higher Education Management*, 7(1), 39–48.
- El-Khawas, E., & Walker, A. A. (2001). External forces and institutional response to change. In *Transforming Institutions: Context and Process* (pp. 4–16). Los Angeles, CA: Higher Education Research Institute.
- Elmore, R F. (2004). *School reform from the inside out: Policy, practice, and performance*. Cambridge, MA: Harvard Education Press.
- Feldman, M. J. (1993). Factors associated with one-year retention in a community college. *Research in Higher Education*, 34(4), 503–512.
- Ferguson, R. F. (2002). *What doesn't meet the eye: Understanding and addressing racial disparities in high-achieving suburban schools*. Oak Brook, IL: North Central Regional Educational Lab.
- Fry, R. (2002). *Latinos in higher education: Many enroll, too few graduate* (Vol. 5). Washington, DC: Pew Hispanic Center.
- Fry, R. (2011). *Hispanic college enrollment spikes, narrowing gaps with other groups*. Washington, DC: Pew Hispanic Center.
- Gándara, P. (2002). A study of High School Puente: What we have learned about preparing Latino youth for postsecondary education. *Educational Policy*, 16(4), 474–495.
- Gándara, P. C., & Contreras, F. (2009). *The Latino education crisis: The consequences of failed social policies*. Cambridge, MA: Harvard University Press.
- Gandara, P. C., & Hopkins, M. (2010). *Forbidden language: English learners and restrictive language policies*. New York, NY: Teachers College Press.
- Gándara, P., & Moreno, J. F. (2002). Introduction: The Puente Project: Issues and perspectives on preparing Latino youth for higher education. *Educational Policy*, 16(4), 463–473.
- Gándara, P., Alvarado, E., Driscoll, A., & Orfield, G. (2012). *Building pathways to transfer: Community colleges that break the chain of failure for students of color*. Los Angeles, CA: Civil Rights Project/El Proyecto Derechos Civiles.

- Goldrick-Rab, S. (2007). What higher education has to say about the transition to college. *The Teachers College Record*, 109(10), 2444–2481.
- González, N., Moll, L. C., & Amanti, C. (Eds.). (2013). *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. New York, NY: Routledge.
- Grubb, N. W. (1991). The decline of community college transfer rates: Evidence from national longitudinal surveys. *The Journal of Higher Education*, 62(2), 194–222.
- Grubb, W. N. (1996). *Working in the middle: Strengthening education and training for the mid-skilled labor force*. San Francisco, CA: Jossey-Bass.
- Grubb, W. N. (2011). Understanding the “crisis” in basic skills: Framing the issues in community colleges. Retrieved from Policy Analysis for California Education website: <http://www.edpolicyinca.org/publications/understanding-%E2%80%9Ccrisis%E2%80%9D-basic-skills-framing-issues-community-colleges>
- Grubb, W. N., Boner, E., Frankel, K., Parker, L., Patterson, D., Gabriner, R., . . . Wilson, S. (2011). Innovation in developmental education: The landscape and the locus of change. *Basic Skills Instruction in California Community Colleges* (Working Paper No. 3). Retrieved from Policy Analysis for California Education website: <http://www.edpolicyinca.org/publications/innovation-developmental-education-landscape-and-locus-change>
- Grubb, W. N., Bawdy, N., Bell, D., Bragg, D., & Russian, M. (1997). *Workforce, economic and community development: The changing landscape of the entrepreneurial community college* (MDS–1094). Berkeley, CA: National Center for Research in Vocational Education.
- Gumport, P. (1993). Contested terrain of academic program reduction. *Journal of Higher Education*, 64(3), 283–311.
- Hagedorn, L., Cypers, S., & Lester, J. (2008). Looking in the rear view mirror: Factors affecting transfer for urban community college students, *Journal of Research and Practice*, 32, 643–664.
- Hall, A. D., & Fagen, R. E. (2008). Definition of System. In Bess, J. L., & Dee, J. R. *Understanding college and university organization: Dynamics of the system* (Vol. 2). Sterling, VA: Stylus.
- Hammersly, M., & Atkinson, P. (1995). *Ethnography: Principles in practice* (2nd ed.). London, England: Routledge.
- Handel, S. (2006). Academic cultures of community colleges and selective four-year institutions: The “transfer-going” context in California. New York, NY: The College Board.
- Hatch, M. J., & Cunliffe, A. L. (2006). *Organization theory: Modern, symbolic, and postmodern perspectives*. Oxford, England: Oxford University Press.

- Hearn, J. C. (1996). Transforming U.S. Higher Education: An organizational perspective. *Innovative Higher Education*, 21, 141–151.
- Horn, L., & Lew, S. (2007). California community college transfer rates: Who is counted makes a difference (MPR Research Brief). Washington, DC: MPR Associates.
- Hoyt, J. E. (1999). Remedial education and student attrition. *Community college review*, 27(2), 51–72.
- Hubbard, L., & Mehan, H. (1999). Scaling up an untracking program: A co-constructed process. *Journal of Education for Students Placed at Risk*, 4(10), 83–100.
- Hurtado, S., Cuellar, M., & Guillermo-Wann, C. (2011). Quantitative measures of students' sense of validation: Advancing the study of diverse learning environments. *Enrollment Management Journal*, 53–71.
- Iannaccone, L. (1967). *Politics in education*. Norwich, England: Centre for Applied Research in Education.
- Jackson, D. L., Stebleton, M. J., & Laanan, F. S. (2013). The experience of community college faculty involved in a learning community program. *Community College Review*, 41(1), 3–19.
- Janesick, V. J. (1994). The dance of qualitative research design: Metaphor, methodolatry, and meaning. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (pp. 35–55). Thousand Oaks, CA: Sage.
- Johnson, H. B. (2014). *The American dream and the power of wealth: Choosing schools and inheriting inequality in the land of opportunity*. New York, NY: Routledge.
- Kane, T. J., & Rouse, C. E. (1995). Labor-market returns to two-and four-year college. *The American Economic Review*, 85(3), 600–614.
- Kane, T. J., & Rouse, C. E. (1999). The community college: Educating students at the margin between college and work. *Journal of Economic Perspectives*, 13(1), 63–84.
- Karen, D., & Dougherty, K. J. (2005). Necessary but not sufficient: Higher education as a strategy of social mobility. In G. Orfield, P. Marin, & C. L. Horn (Eds.), *Higher education and the color line: College access, racial equality, and social change* (pp. 33–57). Cambridge, MA: Harvard Education Press.
- Karp, M. J. M., O'Gara, L., & Hughes, K. L. (2008). *Do support services at community colleges encourage success or reproduce disadvantage?* Retrieved from Community College Research Center website: <http://ccrc.tc.columbia.edu/publications/do-support-services-encourage-success.html>
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations*. New York, NY: Wiley.

- Keller, G. (1983). *Academic strategy: The management revolution in American higher education*. Baltimore, MD: Johns Hopkins University Press.
- Kezar, A., & Eckel, P. (2002). Examining the institutional transformation process: The importance of sensemaking, interrelated strategies, and balance. *Research in Higher Education, 43*(3), 295–328.
- Kezar, A., & Eckel, P. D. (2002). The effect of institutional culture on change strategies in higher education: Universal principles or culturally responsive concepts? *Journal of Higher Education, 73*, 435–460.
- Kirst, M. W., & Mosher, E. K. (1969). Politics of education. *Review of Educational Research, 39*(5), 623–640.
- Kurlaender, M., & Flores, S. M. (2005). The racial transformation of higher education. In G. Orfield, P. Marin, & C. Horn (Eds.), *Higher education and the color line: College access, racial equity, and social change* (pp. 11–32). Cambridge, MA: Harvard Education Press.
- Laden, B. (1999). Socializing and mentoring college students of color: The Puente Project as an exemplary celebratory socialization model. *Peabody Journal of Education, 74*(2), 55–74.
- Laden, B. V. (2000). The Puente Project: Socializing and mentoring Latino community college students. *Academic Quarterly Exchange, 4*(2), 90–99.
- Ladson-Billings, G. (2009). *The dreamkeepers: Successful teachers of African American children*. New York, NY: Wiley.
- Lasswell, H. (1965). *Politics: Who gets, what, when, how?* New York, NY: Peter Smith.
- Lee, V. E., & Frank, K. A. (1990). Students characteristics that facilitate the transfer from 2-year to 4-year colleges. *Sociology of Education, 63*(3), 178–193.
- Leigh, D. E., & Gill, A. M. (2003). Do community colleges really divert students from earning bachelor's degrees? *Economics of Education Review, 22*(1), 23–30.
- Leigh, D. E., & Gill, A. M. (2004). The effect of community colleges on changing students' educational aspirations. *Economics of Education Review, 23*(1), 95–102.
- Levine, A. (1980). *Why innovation fails*. New York: SUNY Press.
- Long, B. T., & Kurlaender, M. (2009). Do community colleges provide a viable pathway to a baccalaureate degree? *Educational Evaluation and Policy Analysis, 31*(1), 30–53.
- Lundberg, C. A., & Schreiner, L. A. (2004). Quality and frequency of faculty-student interaction as predictors of learning: An analysis by student race/ethnicity. *Journal of College Student Development, 45*(5), 549–565.

- Mann, H. (1848). *Twelfth annual report of Horace Mann as secretary of Massachusetts State Board of Education*. Retrieved from Educational Takeout website:
<http://www.intellectuالتakeout.org/library/primary-sources/twelfth-annual-report-secretary-massachusetts-state-board-education>
- McClenney, K. M. (2007). Research update: The community college survey of student engagement. *Community College Review*, 35(2), 137–146.
- McGrath, P., & Galaviz, F. (1996). The PUENTE Project. *On common ground: Strengthening teaching through school-university partnership*. New Haven, CT: New Haven Teachers Institute, Yale University.
- McIntosh M., & Rouse C. (2009). *The other college: Retention and completion rates among two-year college students*. Washington, DC: Center for American Progress.
- McJunkin, K. S. (2005). Remedial education in community colleges: Understanding the problem and proposing solutions. *Community College Journal of Research and Practice*, 29(6), 495–500.
- McLaughlin, M. W. (2001). Theory-based change and change-based theory: Going deeper, going broader. *Journal of Educational Change*, 2(4), 301–323.
- McMillan, J. H., & Schumacher, S. (1997). *Research in education: A conceptual approach*. New York, NY: Long.
- Medsker, L. L. (1960). *The junior college: Progress and prospect*. New York, NY: McGraw-Hill.
- Melguizo, T., Bos, J., & Prather, G. (2011). Is developmental education helping community college students persist? A critical review of the literature. *American Behavioral Scientist*, 55(2), 173–184.
- Merriam, S. B. (1988). *Case study research in education: A qualitative approach*. San Francisco, CA: Jossey-Bass.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass
- Meyer, H. D., & Rowan, B. (2006). Institutional analysis and the study of education. In H. D. Meyer & B. Rowan (Eds.), *The new institutionalism in education* (pp. 1–13). Albany: SUNY Press.
- Meyer, J W. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340–363.
- Meznek, J., McGrath P., & García, F. (1989). *The Puente Project* (ED Publication No. 307209). Millbrae, CA: U.S. Government Printing Office.

- Mitroff, I. I. (1983). *Stakeholders of the organizational mind*. San Francisco, CA: Jossey-Bass.
- Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice, 31*(2), 132–141.
- Mullin, C. M. (2012). *Why access matters: The community college student body* (AACC Policy Brief 2012-01PBL). Washington, DC: American Association of Community Colleges.
- Nadler, D. A., & Tushman, M. L. (1989). Organizational frame bending: Principles for managing reorientation. *The Academy of Management Executive, 3*(3), 194–204.
- National Center for Public Policy and Higher Education. (2011, June). Affordability and transfer: Critical to increasing baccalaureate degree completion. Retrieved from Policy Alert website: http://www.highereducation.org/reports/pa_at/
- Nora, A. (2004). The role of habitus and cultural capital in choosing a college, transitioning from high school to higher education, and persisting in college among minority and nonminority students. *Journal of Hispanic Higher Education, 3*(2), 180–208.
- Núñez, A. M., Sparks, P. J., & Hernández, E. A. (2011). Latino access to community colleges and Hispanic-serving institutions: A national study. *Journal of Hispanic Higher Education, 10*(1), 18–40.
- Oakes, J. (1992). Can tracking research inform practice? Technical, normative, and political considerations. *Educational Researcher, 21*(4), 12–21.
- Oakes, J. (2005). *Keeping track: How schools structure inequality*: New Haven, CT: Yale University Press.
- Orfield, G., Losen, D., Wald, J., & Swanson, C. B. (2004). *Losing our future: How minority youth are being left behind by the graduation rate crisis*. Retrieved from The Civil Rights Project website: <http://civilrightsproject.ucla.edu/research/k-12-education/school-dropouts/losing-our-future-how-minority-youth-are-being-left-behind-by-the-graduation-rate-crisis>
- Orfield, G., Marin, P., & Horn, C. L. (2005). *Higher education and the color line: College access, racial equity, and social change*: Cambridge, MA: Harvard Educational.
- Oseguera, L., Locks, A. M., & Vega, I. I. (2009). Increasing Latina/o students' baccalaureate attainment. *Journal of Hispanic Higher Education, 8*(1), 23–53.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students (Vol. 2): A third decade of research*. San Francisco, CA: Jossey-Bass.
- Pascarella, E. T., Wolniak, G. C., Pierson, C. T., & Terenzini, P. T. (2003). Experiences and outcomes of first-generation students in community colleges. *Journal of College Student Development, 44*(3), 420–429.

- Passel, J. S., & Cohn, D. (2008). *U.S. population projections: 2005–2050*. Washington, DC: Pew Research Center.
- Passel, J., & Cohn, D. (2008). *Immigration to play lead role in future U.S. growth*. Washington, DC: Pew Research Center.
- Patton, M. Q. (2002). Two decades of developments in qualitative inquiry a personal, experiential perspective. *Qualitative Social Work, 1*(3), 261–283.
- Porchea, S. F., Allen, J., Robbins, S., & Phelps, R. P. (2010). Predictors of long-term enrollment and degree outcomes for community college students: Integrating academic, psychosocial, socio-demographic and situational factors. *The Journal of Higher Education, 81*(6), 750–778.
- Pradl, G. M. (2002). Linking instructional intervention and professional development: Using the ideas behind Puente high school English to inform educational policy. *Educational Policy, 16*(4), 522–546.
- Puente Project. (2012a). About Puente. Retrieved April 13, 2012, from www.puente.net/about/
- Puente Project. (2012b). Program results. In *Program Fact Sheets*. Retrieved April 13, 2012, from <http://www.puente.net/programs/factsheet.html>
- Quint, J., Byndloss, D. C., Collado, C Gardenhire, A., Magazinnik, A., Orr, G., . . . Jaggars, S. S. (2011). *Scaling up is hard to do*. Retrieved from the MDRC website: <http://www.mdrc.org/publication/scaling-hard-do>
- Radford, A. W., Berkner, L., Wheelless, S. C., & Shepard, B. (2010). *Persistence and attainment of 2003–2004 Beginning Postsecondary Students: After 6 Years*. (NCES 2011–151). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics.
- Rendon, L. E. (2002). Community College Puente: A validating model of education. *Educational Policy, 16*(4), 642–667.
- Rendon, L. I., Hope, R., & Associates. (1996). *Creating a new majority: Transforming America's educational system for diversity*. San Francisco, CA: Jossey-Bass.
- Rhoads, R. A., & Valadez, J. R. (1996). *Democracy, multiculturalism, and the community college: A critical perspective* (Vol. 5). New York, NY: Garland.
- Richards, L., & Morse, J. M. (2013). *Readme first for a user's guide to qualitative methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Rivas, M. A., Pérez, J., Álvarez, C. R., & Solórzano, D. (2007). *Latina/o transfer students: Understanding the critical role of the transfer process in California's postsecondary institutions*. Los Angeles: UCLA Chicano Studies Research Center.

- Schein, E. H. (1990). Organizational culture, *American Psychologist*, 45(2), 109–119.
- Scheunsul, S., Schensul, J., & LeCompte, M. (1999). *Essential ethnographic methods*. Lanham, MD: Altamira Press.
- Schneider, B., & McDonald, S. K. (2006). Introduction. *Scale-up in education: Ideas in principle* (Vol. 1). Rowman & Littlefield Publishers. 1–15.
- Scribner, J. D., Aleman, E., & Maxcy, B. (2003). Emergence of the politics of education field: Making sense of the messy center. *Educational administration quarterly*, 39(1), 10–40.
- Shavelson, R. J., & Towne, L. (2003). *Scientific research in education*. Washington DC. National Academy Press.
- Shaw, K. M., & London, H. B. (2001). Culture and ideology in keeping transfer commitment: Three community colleges. *The Review of Higher Education*, 25(1), 91–114.
- Simsek, H., & Louis, K. S. (1994). Organizational change as paradigm shift: Analysis of the change process in a large, public university. *The Journal of Higher Education*, 670–695.
- Spillane, J. P. (1999). External reform initiatives and teachers' efforts to reconstruct their practice: The mediating role of teachers' zones of enactment. *Journal of Curriculum Studies*, 31(2), 143–175.
- Spillane, J. P. (2000). Cognition and policy implementation: District policymakers and the reform of mathematics education. *Cognition and Instruction*, 18(2), 141–179.
- Spillane, J. P., & Jennings, N. E. (1997). Aligned instructional policy and ambitious pedagogy: Exploring instructional reform from the classroom perspective. *Teachers College Record*, 98(3), 439–481.
- Spillane, J. P., Reiser, B. J., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*, 72(3), 387–431.
- Stout, R. T., Tallerico, M., & Scribner, K. P. (1995). Values: The 'what?' of the politics of education. In J. D. Scribner & D. H. Layton (Eds.), *The study of educational politics: The 1994 commemorative yearbook of the Politics of Education Association (1969–1994)*. (pp. 5–20). New York, NY: Taylor & Francis.
- Stringfield, S., Datnow, A., & Ross, S. M. (1998). *Scaling up school restructuring in multicultural, multilingual contexts: Early observations from Sunland County* (Research Report No. 2). Retrieved from eScholarship website: <https://escholarship.org/uc/item/42f3x9h5#page-1>
- Szelenyi, K. (2002). *National transfer rates are up! Results of the 2001 transfer assembly project*. Retrieved from ERIC database. (ED482719)

- Taylor, M. (2009). *The master plan at 50: Assessing California's vision for higher education*. Retrieved from Legislative Analyst's Office website: http://www.lao.ca.gov/2009/edu/master_plan_intro/master_plan_intro_111209.aspx
- Terenzini, P. T., Rendon, L. I., Lee Upcraft, M., Millar, S. B., Allison, K. W., & Gregg, P. L. (1994). The transition to college: Diverse students, diverse stories. *Research in Higher Education, 35*(1), 57–73.
- Texas Education Agency. (2014). *Enrollment in Texas public schools 2013–2014*. Retrieved from Texas Education Agency website: http://tea.texas.gov/acctres/enroll_index.html
- Texas Higher Education Coordinating Board. (2011). *Texas public higher education almanac: A profile of state and institutional performance and characteristics*. Retrieved from Texas Higher Education Coordinating Board website: <http://www.thecb.state.tx.us/>
- Texas Higher Education Coordinating Board. (2012a). *Texas public higher education almanac: A profile of state and institutional performance and characteristics*. Retrieved from Texas Higher Education Coordinating Board website: <http://www.thecb.state.tx.us/>
- Texas Higher Education Coordinating Board. (2012b). *2012-2017 Statewide Developmental Education Plan*. Retrieved from Texas Higher Education Coordinating Board website: <http://www.thecb.state.tx.us/>
- Texas Higher Education Coordinating Board. (2013a). *Texas public higher education almanac: A profile of state and institutional performance and characteristics*. Retrieved from Texas Higher Education Coordinating Board website: <http://www.thecb.state.tx.us/>
- Texas Higher Education Coordinating Board. (2013b). *Developmental Education Best Practices*. Retrieved from Texas Higher Education Coordinating Board website: <http://www.thecb.state.tx.us/>
- Texas Higher Education Coordinating Board. (2014). *Texas public higher education almanac: A profile of state and institutional performance and characteristics*. Retrieved from Texas Higher Education Coordinating Board website: <http://www.thecb.state.tx.us/index.cfm?objectid=A44B548A-E50C-8417-E09BF83FC11EA1EF>
- Thomas, J. B., Clark, S. M., & Gioia, D. A. (1993). Strategic sensemaking and organizational performance: Linkages among scanning, interpretation, action, and outcomes. *Academy of Management Journal, 36*(2), 239–270.
- Thompson, M., & Wiliam, D. (2007). *Tight but loose: A conceptual framework for scaling up school reforms*. Princeton, NJ: Educational Testing Service.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: University of Chicago Press.
- Tinto, V. (1998). Learning communities and the reconstruction of remedial education in higher education. *Planning for Higher Education, 25*(1), 1–7.

- Tinto, V. (2000). What have we learned about the impact of learning communities on students. *Assessment Update*, 12(2), 1–2.
- Tinto, V. (2003). Learning better together: The impact of learning communities on student success. *Higher Education Monograph Series*, 1, 1–8.
- U.S. Census Bureau. (1993). *Voting and registraion in the election of November 1992*. Retrieved from the U.S. Census Bureau website: <http://www.census.gov/hhes/www/socdemo/voting/publications/p20/>
- U.S. Census Bureau. (1995). *Voting and registraion in the election of November 1994*. Retrieved from the U.S. Census Bureau website: <http://www.census.gov/hhes/www/socdemo/voting/publications/p20/>
- U.S. Census Bureau. (1997). *Voting and registraion in the election of November 1996*. Retrieved from the U.S. Census Bureau website: <http://www.census.gov/hhes/www/socdemo/voting/publications/p20/>
- U.S. Census Bureau. (1999). *Voting and registraion in the election of November 1998*. Retrieved from the U.S. Census Bureau website: <http://www.census.gov/hhes/www/socdemo/voting/publications/p20/>
- U.S. Census Bureau. (2001). *Voting and registraion in the election of November 2000*. Retrieved from the U.S. Census Bureau website: <http://www.census.gov/hhes/www/socdemo/voting/publications/p20/>
- U.S. Census Bureau. (2003). *Voting and registraion in the election of November 2002*. Retrieved from the U.S. Census Bureau website: <http://www.census.gov/hhes/www/socdemo/voting/publications/p20/>
- U.S. Census Bureau. (2005). *Voting and registraion in the election of November 2004*. Retrieved from the U.S. Census Bureau website: <http://www.census.gov/hhes/www/socdemo/voting/publications/p20/>
- U.S. Census Bureau. (2007). *Voting and registraion in the election of November 2006*. Retrieved from the U.S. Census Bureau website: <http://www.census.gov/hhes/www/socdemo/voting/publications/p20/>
- U.S. Census Bureau. (2009). *Voting and registraion in the election of November 2008*. Retrieved from the U.S. Census Bureau website: <http://www.census.gov/hhes/www/socdemo/voting/publications/p20/>
- U.S. Census Bureau. (2011). *The Hispanic population: 2010* (2010 Census Briefs). Retrieved from the U.S. Census Bureau website: <https://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf>

- U.S. Department of Education, National Center for Education Statistics. (2014). *The condition of education 2014* (NCES 2014–083). Retrieved from National Center for Education Statistics website: <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2014083>
- W. K. Kellogg Foundation. (2004). *Logic model development guide*. Retrieved from W. K. Kellogg Foundation website: <https://www.wkkf.org/resource-directory/resource/2006/02/wk-kellogg-foundation-logic-model-development-guide>
- Wassmer, R. , N. Shulock, & C. Moore (2004). The effect of racial/ethnic composition on transfer rates in community colleges: Implications for policy and practice. *Research in Higher Education*, 45(6), 651–672.
- Wellman, J. V. (2002). *State policy and community college baccalaureate transfer* (National Center Report No. 02–6). Retrieved from the National Center for Public Policy and Higher Education website: <http://www.highereducation.org/reports/transfer/transfer.shtml>
- Wenzel, M., & Marquez, R. (2012). *Unrealized promises, Unequal access: Affordability, and excellence at community colleges in Southern California*. Retrieved from the Civil Rights Project website: <http://civilrightsproject.ucla.edu/research/metro-and-regional-inequalities/lasanti-project-los-angeles-san-diego-tijuana/unrealized2029-promises-20292029-unequal-access-affordability-and-2029excellence-2029at2029-community2029-colleges-2029in2029-southern-2029california>
- Yin, R. K. (1994). Discovering the future of the case study method in evaluation research. *Evaluation Practice*, 15(3), 283–290.
- Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). Thousand Oaks, CA: Sage.
- Yosso, T. (2002). Critical race media literacy: Challenging deficit discourse about Chicanas/os. *Journal of Popular Film and Television*, 30(1), 52–62.
- Zaltman, G., & Duncan, R. (1977). *Strategies for planned change*. New York, NY: Wiley.
- Zhao, C. M., & Kuh, G. D. (2004). Adding value: Learning communities and student engagement. *Research in Higher Education*, 45(2), 115–138.
- Zucker, L. G. (1987). Institutional theories of organization. *Annual review of sociology*, 13(1), 443–464.