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Barriers and Bridges to Success: Factors for Retention of Nontraditional Mexican American Students in Teacher Education

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Abstract

This paper discusses the findings of a qualitative, microethnographic case study of 15 nontraditional, Mexican American students as they completed their coursework in a 2+2 teacher education program in the Midwest. The theoretical frameworks that serve as the basis of this study are Tinto's Model of Student Integration (Tinto, 1975, 1993), Bean's attrition model (1980), and von Destinon's empowerment model (1988). This integrated framework is an inclusive adaptation as it addresses the complex interaction among first-generation, Mexican American students' backgrounds, geographical locations, and the institutions that serve them. The researchers identify characteristics of those students who persisted on to graduation, and they suggest critical capacities and actions among implementers that serve as factors of support in nontraditional student retention and graduation.

Educational institutions across the United States are struggling to address the significant lack of “highly qualified” educators—those licensed in the content

area(s) and the grade level they are currently teaching—in our nation’s schools. Especially in very rural, isolated schools and in large urban schools there are extreme shortages of teachers qualified to teach in subject areas such as science, math, and English for speakers of other languages (ESOL). As part of the No Child Left Behind legislation, states are required to measure the extent to which students have highly qualified teachers—particularly minority and disadvantaged students—and to adopt goals and plans to ensure all teachers are highly qualified (USDOE, 2004). In order to address these measures at the systemic level, leaders and change agents within institutions of higher education (IHEs) and local educational agencies (LEAs) are rethinking how they prepare preservice and in-service teachers.

The shortage of “highly qualified” educators, along with the ongoing increase in the number of retirees and new teachers leaving the field, has prompted IHEs and LEAs to form partnerships to consider new ways of working to effectively deal with this dilemma (Darling-Hammond, 1997; Gay, Dingus, & Jackson, 2003; Hussar, 1999). It is projected that “over 2.5 million teachers needed in the next ten years will be first-time teachers” (Gutierrez, 2006, p. 17) and the majority of the new students they will be serving will be culturally and linguistically diverse (CLD). For this reason, it is critical that IHEs and LEAs help to diversify the nation’s teaching force and provide quality teacher education programs to equip future educators with the skills they need to successfully teach all students (Flores, 1992; Gutierrez, 2006; Hussar, 1999; Valenciana, Weisman, & Flores, 2006).

Surprisingly, the rural Midwest is experiencing the greatest increase in their CLD student population in some of the most remote areas of the region, in districts where it is often difficult to lure and retain teachers (Darling-Hammond, 1997). In the three Midwest communities where the current study was conducted, geographic location and access to resources served as the major hindrances for teacher recruitment and retention (Gutierrez, 2006; USDE, 1998). These communities are located in rural regions of the state without access to a four-year university. The university in this study (which we will call Midwestern State for the purposes of this paper) is located 230 miles from the nearest partner community and 312 miles from the furthest partner community involved in this study.

The mismatch between the diverse K–12 populations served, the lack of diversity in the teaching workforce, and the traditional design of teacher education programs amplifies disparities in the quality of education received in these regions. What worked in the past—methods of delivery, assessment, support, and retention for a primarily monocultural and monolingual population—is no longer sufficient. Traditional models for teacher education fail to support and nurture CLD candidates by design, and as a result they fail the CLD children in our schools. For this reason it is critical that educators work to diversify the teaching force to more adequately reflect the population we are now educating (Baker, 1996; Nieto & Bode, 2008; Quiocho & Rios, 2000; Shroyer, 2004; Valenciana, Morin, & Morales, 2005).

High school graduation rates of CLD students are at an all-time low, making the opportunity for a postsecondary education extremely difficult to attain. Community colleges tend to know their local populations well and are now more than ever serving a vital role in providing quality educational opportunities to those who otherwise would not have access (Gutierrez, 2006; SERVE Policy Brief, 2000; Valenciana, Morin, & Morales, 2005). By joining forces, two- and four-year colleges, along with their local school districts, are able to recruit, retain, and graduate CLD teacher candidates to effectively serve the needs of our increasingly diverse populations. This paper documents the efforts and results of one such program, in which a four-year university, three community colleges, and three school districts collaboratively designed and implemented a 2+2, distance-delivered teacher education program to recruit and retain Latino/as into teaching.

In this paper the researchers: 1) briefly outline the overall structure of the distance-delivered degree program for Project Synergy, 2) provide a rich context for the successes and challenges of the program through the voices of the participating students, 3) discuss student retention in relation to the theoretical framework, and 4) highlight the critical findings of the study that have strong implications for the effective retention and graduation of CLD teacher education students.

Literature Review

The current literature depicts a bleak picture of postsecondary retention of CLD students and serves as a grim reminder of the daunting task ahead of us. In 2004, “only 25% of college-age Latino/as (18–24 years old) were enrolled in college, compared to about 42% of whites, 32% of blacks, and about 60% of Asian/Pacific Islanders” (Excelencia in Education [EIE] Fact Sheet, 2007). Of those enrolled, only 7% will graduate with a bachelor’s degree (USDOE, 2006). This comes as no surprise when 66% of Latina/o college students enroll in two-year community colleges or vocational-technical schools and 50% of Latino/as attend college only part time (EIE, 2007; Fry, 2003). For these reasons, only 4% of all Latino/as attending college complete their four-year degree through the “traditional path (enroll within one year of high school graduation, and attain a postsecondary credential within the ‘scheduled’ time frame)” (EIE, 2007). While the students’ personal characteristics (e.g., language, culture, socioeconomic status, age, preparedness) and educational choices are often implicated as the primary reason(s) for poor graduation rates, it can be argued that institutional factors such as the inflexible structure of the traditional university, the limited representation of Latino/a faculty members on campuses, and programs and curricula that ignore or devalue multicultural perspectives also play a major role in the marginalization and eventual attrition of CLD students (Gay, Dingus, & Jackson, 2003; Nieto & Bode, 2008; Valencia & Solórzano, 1998). With the addition of student-service factors such as inadequate financial aid support, ineffective advising and counseling, poor articulation of two-year college coursework, small numbers of Latino/as in the student body, and rising tuition costs, one can see why CLD-student college attrition is a high probability (Gutierrez, 2006; Jalomo, 1995; Rendon, 1992).

Student Retention

The seminal works of researchers such as Tinto (1975, 1993) and Astin (1975) have served as the foundation for seemingly countless studies on the integration and attrition of various populations in higher education. Tinto theorized that student attrition from college was based on a complex interaction between the individual student and his or her college environment. He predicted students are more likely to remain in college if there is a fit between the individual’s motivation and academic ability and the school’s academic and social characteristics. The student’s motivation can be defined as the student’s

commitment to completing college (goal commitment) and his or her commitment to the institution (institutional commitment). Individual characteristics such as family background, skills, and prior school experiences coupled with the student's goal commitment and institutional commitment influence how the student will perform in college as well as how he or she will become integrated into the social and academic systems of the institution. The institution's academic system includes the student's academic performance and interactions between faculty and staff. The characteristics of the academic system influence the student's academic integration. The institution's social system includes extracurricular activities and the student's interaction with peers. The characteristics of the social system influence the student's social integration. The student's academic integration, social integration, and institutional and goal commitments all influence the student's intention to remain in college and ultimately his or her departure decision.

Pascarella and Terenzini (1980) have helped to operationally define some of Tinto's constructs such as academic integration, social integration, and institutional and goal commitment through the development of instruments designed to measure them. Some researchers believe Tinto's model omits external environmental factors such as financial issues and family support (Cabrera, Castaneda, Nora, & Hengstler, 1992). They have suggested combining Tinto's work with Bean's student attrition model (Bean, 1980; Bean & Metzner, 1985) since this model places a stronger focus on environmental factors. Other researchers believe that Tinto's model implies external factors are a component of social integration (von Destinon, 1988, 1990). In either case, it seems prudent to assume personal, organizational, and environmental variables all influence student attrition. It is important to note that Tinto's original study focused on populations at a residential university and was not specific to students of a particular age or ethnicity (Nordquist, 1993).

In his research, von Destinon (1988, 1990) has considered the literature related to Chicano (i.e., Mexican American) student dropout and persistence and aligned this literature with Tinto's integration model. In his work, he speculates that Chicano student characteristics related to persistence correspond closely to the variables Tinto hypothesized would influence attrition. Von Destinon's research highlights the unique role that culture and language plays as an overarching factor with Chicano/as, while providing additional evidence that

Tinto's theory may be useful for understanding the retention of CLD students in teacher education. Consideration of the unique factors for increasing the number of CLD graduates in the field of education is especially provocative in this era of growing teacher shortages.

Nontraditional Students and the Role of College Retention Programs

Due to the increase of CLD students attending community colleges, these IHEs have a great opportunity to inform the field about the educational experiences of CLD students by gaining an understanding of this growing sector of their student population, the realities they face in their pursuit of an education, and what strategies colleges can employ to ensure their success (Ceja, 2001; Genzok, Lavadenz, & Krashen, 1994). Most often, those CLD students who attend community colleges tend to be older, work at least part time, and be of lower socioeconomic status than those who attend four-year institutions (McVay, 2004).

Among this nontraditional student population, one study identified three critical aspects of retention, which involved cohort and collaborative groups, availability of courses, and family activities (Chopra et al., 2004). Specifically, activities such as opportunities to work with other students in similar life stages, to collaborate in an environment that fosters open communication, to take coursework in the evenings via distance education, and to include family members in all activities are key to successful retention. Additionally, Chopra et al. (2004) refer to academic and financial support as critical factors in the process, but in their findings they point out that social support from the family, program advisor(s), and other students was the most important factor. Considering that most campuses provide little structured social support specific to this population, it would seem necessary for IHEs to employ new and alternative strategies to effectively support these students in navigating the current social and educational terrain (Gay, Dingus, & Jackson, 2003; Genzok & Baca, 1998; Genzok, Lavadenz, & Krashen, 1994; Herrera & Morales, 2005). In order to be effective, these strategies must place CLD students at the focus of collective efforts to break the static paradigm of a one-size-fits-all student support system.

Providing access and ongoing transitional support to CLD students is a complex and highly political topic in the wake of changing affirmative action legislation.

Many researchers have addressed these issues in their work from a variety of perspectives (Ceja, 2001; Ginorio & Huston, 2001; Laden, 1992; Simoniello, 1981; Wolf-Wendel et al., 2004). While these studies and others address the barriers, tendencies, and plausible factors for the academic success of CLD populations, there is limited existing literature that identifies alternative program models that support quality recruitment and retention strategies specifically for nontraditional, CLD paraprofessionals (Chopra et al., 2004; Brandick, 2004; Flores, 1992; Genzuk, Lavadenz, & Krashen, 1994; Valenciana, Morin, & Morales, 2005; Villegas & Clewell, 1998).

Regional Context

It is important to consider how the issues of CLD student retention and the national teacher shortage play out within a specific region of the Midwestern United States where the CLD population is growing dramatically. The most recent census conducted for the state where the current study is situated shows a 241% increase in the number of CLD students attending public schools over the past decade (Kansas Department of Education Statistics Planning & Research Data, 2006). This rapid increase in CLD population, coupled with the accountability movement and the shortage of ESOL-endorsed educators, has left this state reeling. This reality is now the norm—not the exception—for many states in the Midwest (McNeil, 2000; Montemayor & Mendoza, 2004). As a result, federal and state agencies are searching for effective ways to support and promote the academic success of CLD populations at all levels in education (Ginorio & Huston, 2001; Herrera & Morales, 2005; Montemayor & Mendoza, 2004; USDOE, 1998).

In schools, from principals to counselors to teachers, traditional roles are being renegotiated as educators scramble to change with the times. The role of the paraprofessional is no exception to this dynamic. Once considered a luxury in select schools to provide supplemental support to a few students, paraprofessionals now serve a vital purpose in schools all across the nation (Black, 2002; Genzuk & Baca, 1998). Career Ladder and Grow Your Own Teacher programs appear to be two existing strategies for creating and retaining quality educators in difficult-to-staff school districts in the Midwest (e.g. fairly remote, rural areas). These programs may be particularly effective for moving paraprofessionals and other nonlicensed school professionals into teaching (Black, 2002; Brandick, 2004; Genzuk, 1997; Genzuk & Baca, 1998; Genzuk,

Lavadenz, & Krashen, 1994; Jalamo, 1995; Villegas & Clewell, 1998). These programs draw local educational agencies into the teacher recruitment and preparation process.

For those individuals who are place bound, lack of access to a four-year university has compounded the issue, as those who desire to earn a bachelors degree are left with few options (Genzok & Baca, 1998). Community colleges and universities in the state have attempted to address this issue in the past, but due to a long history of unsuccessful partnerships, the community colleges are skeptical of university programs that promise to provide the upper-level courses required for a baccalaureate degree in their communities. In the past, for a variety of reasons (e.g. distance, weather in the Midwest, lack of resources), these types of alternative degree programs were difficult for universities to implement successfully. In addition, school districts historically have not played a major role in teacher recruitment or preparation in the state.

Context of the Study

This paper discusses just one part of a larger, comprehensive case study that considered how one university, three community colleges, and three school districts collaborated in developing a program to address the CLD teacher shortage in the state and the experiences of CLD, primarily nontraditional students in a unique, 2+2, distance-delivered program. At the onset of the study, Midwestern State University (a medium-sized, land grant institution in the northeast part of the state) was in the second year of a multi-institutional collaborative partnership funded by the Department of Education as a Teacher Quality Enhancement (TQE) grant. This overarching grant, called the Equity & Access Partnership, facilitated and financed a collaboration for K–16 school improvement across seven institutions. The institutions included were Midwestern State (both the College of Education and the College of Arts & Sciences), three community colleges (all Hispanic Serving Institutions) located in the southwest part of the state, and three rural school districts within the service area of the three community colleges (with total student populations ranging from 1,600 to 7,000). The grant also significantly funded programmatic costs such as on-site university supervision, the creation and delivery of upper-level courses, and tutoring and academic support for CLD students in a distance-delivered elementary education program.

These students were originally participants in a federal Title III scholarship grant project called Project Synergy, which provided funding for the students' tuition, fees, and books as well as salaries for coordinating staff members. The main goal of this specific scholarship project was to graduate 35 students from Midwestern State with a bachelor's degree in elementary education with an ESL/bilingual endorsement. Project Synergy primarily served paraprofessionals from the three partner school districts, other school related professionals, or those reentering college after functioning in a career or home life (nontraditional students). Secondly, it served recent high school graduates or community college students transitioning to Midwestern State University (transitioning students). These categories could be autonomous or overlapping, depending on the individual student.

The beginning years of Project Synergy were difficult ones for not only the students but also for the project coordinators. Poor leadership, challenges of distance and weather in the Midwest, and a lack of funding for targeted retention strategies led to the loss of roughly 1/2 of the original cohort from the scholarship program and 1/3 from college altogether in just the first two and a half years. The researchers discussed the initial study done for this group, which identified and documented these issues, in a paper presented at the American Educational Research Association in 2007 (Authors, 2007).

In order to address the identified issues for retention, once funded, the Equity & Access Partnership grant partnered with Project Synergy to provide the targeted financial and academic support necessary to prevent further student attrition. For the remaining two and half years of the scholarship grant, the two entities worked in tandem to support the remaining cohort of 18 students in the distance-delivered program. Unfortunately, due to extenuating circumstances (a miscarriage, death of a father, and a divorce) three of the remaining 18 students dropped out of the program in the first semester of this new partnership. Therefore, the researchers focused solely on the experiences of the 15 students effectively retained in the distance-delivered program to gain insights into the unique academic, institutional, and environmental factors affecting student success and resilience as they completed their final internship semester. For the purposes of this paper, the authors will use the term Synergy program when identifying the collective efforts of both grant projects and the institutions associated with them.

The 15 students in this study were Mexican American and primarily place-bound, nontraditional, English language learner (ELL), first-generation college students. They were all recruited from the surrounding rural communities where the three partner community colleges were located and intended to remain in their respective communities to teach the growing population of CLD students in the region upon graduation. All but three students were paraprofessionals or other school related professionals, such as substitute teachers and adult educators. One student was reentering college after functioning in a noneducational career for many years, and two students were community college students transitioning to the university who did not want to leave their families or communities.

Being primarily nontraditional, a majority of the students had spouses and school-aged children. In addition to working full time, these individuals were required to be full-time students in order to qualify for federal Synergy scholarship funding. At times this proved quite problematic, and, not surprisingly, this factor played a major role in their educational experience in the program. One might consider this an overwhelming amount of responsibility for any student to handle, let alone someone who is an ELL and a first-generation college student.

While Midwestern State had successfully implemented and sustained a CLD undergraduate education program on their campus with a 90% retention rate (Herrera & Morales, 2005), the Synergy program served as the first opportunity for the university to modify the existing model to create a distance-based, collaborative, teacher education program involving four different campuses and three school districts. This program also was designed for a more nontraditional audience with a considerable amount of education-related professional experiences. As part of this modification, all courses and project activities were accessible on site at one of the three participating community colleges or school districts. Program staff tried to be as flexible as possible to accommodate the varying family and work needs of the students. Families were frequently included in program events, and the students' native language and culture were incorporated into activities and discussion whenever possible. A program coordinator and a program manager located at Midwestern State, along with on-site program managers (one at each community college) served as support and advising staff for the students. The CLD students took their first two years

of coursework for community college credit. In the subsequent years, faculty members from Midwestern State collaborated with community college faculty and school district personnel to offer the upper-level courses required for the degree through a variety of distance delivery and on-site modalities for university credit. In addition, one on-site university faculty and three on-site clinical instructors (a teacher or administrator from each district) served as university supervisors for all school-based field experiences and the final internship (student teaching) during the last two years of the program.

Participants

Of the 15 students in the study, 14 were female and one was male. The students ranged in age from 22 to 57 years old with an average age of 39. All 15 of these students were bilingual. Nine of the 15 (60%) were born in the United States while six (40%) were born in Mexico. Of the nine students born in the U.S., four (44%) were first-generation, four (44%) were second-generation, and one (12%) was third-generation American born. Those who immigrated to the U.S. had been here between 8 and 45 years, with a group average of 25 years. Twelve of the 15 students (80%) had children. Twelve of the students were paraprofessionals or other school-related professionals such as substitute teachers or adult educators. Before they began their student teaching experience, these 12 paraprofessionals had been working in the schools from 2 to 21 years, with an average of nine years of K–12 school experience.

Purpose of the Study

Given this complex context, the researchers focused specifically on the retained students' preparation for, transition into, and completion of the internship (student teaching) semester of this program and the various experiences encountered in the process. The research question guiding the study was: What did students perceive as the academic, social, and institutional barriers and bridges to success that impacted their persistence in teacher education? Using a modification of Tinto's conceptual model for students' college persistence/withdrawal as a basis for inquiry, the researchers sought to understand the various complex factors involved in determining CLD student success at the individual and the institutional level (Tinto, 1993; von Destinon, 1988).

Theoretical Framework

Tinto's Student Integration Model

While Tinto's longitudinal model for student attrition (Tinto, 1975, 1993) served as the primary basis of this case study, the researchers applied this framework in light of various critiques and modifications provided in the literature by Fox (1986), Liu (2002), Pascarella & Terenzini (1980), and others. It should be noted that Tinto's original study focused on populations at a residential university and was not specific to students of a particular age or ethnicity (Nordquist, 1993). Halpin (1990) provided one of the few studies that applies Tinto's framework to the community college student population and found that it was effective overall in evaluating and interpreting general community college student attrition and integration. Von Destinon (1988) utilized theories of student attrition from Tinto and Astin with Chicano populations at a four-year university. Rovai (2003) considered the persistence theories of Tinto, Metzner, and Bean with distance education students, who tend to be primarily of nontraditional age, yet there is no research on the attrition, integration, and persistence of Latino/a nontraditional students in a distance-delivered educational program. Therefore, it is important to evaluate the usefulness of such an application for a very distinct but growing population in our colleges whose experiences and biographies are quite different from those of the majority population. Subsequently, our framework is a more inclusive adaptation of Tinto's model that incorporates the considerations of Bean, von Destinon, and others in order to capture the complex interaction among students' backgrounds, languages, geographical locations, and the educational institutions that serve them. This expanded framework guides the discovery of those elements that may hinder and support CLD students' access to and success in a distance-delivered 2+2 teacher education program in the Midwest.

Methods

Design and Data Collection

The mode of inquiry for this study is drawn from the work of Merriam (1998). Merriam's concept of case study is defined as an examination of a specific phenomenon—participants' perspectives in this study—and seeks a holistic description and explanation of this phenomenon (Merriam, 1998). In addition to three years of close interactions and observations, data for this study included

focus groups, a survey, and an interview. Additionally, program documents and academic records helped to contextualize student progress during their time in the program and aided in the interpretation of student responses. These academic records include—but are not limited to—cumulative GPA scores, ACT scores, and Pre-Professional Skills Test [PPST] scores.

During the semester just prior to their final internship semester, students participated in one of two informal focus groups. Their comments were used to develop a survey that was sent to each of them during the first month of their student teaching internship. Twelve of the 15 students completed the surveys. After graduation, individual follow-up interviews were conducted for clarification using questions similar to those asked on the survey. Fourteen of the 15 Synergy students participated in a personal interview. One student was unable to participate in a personal interview due to family and work conflicts, but she did respond to the questions in writing. All interviews and focus groups were audiotaped and transcribed (Spradley, 1979).

Data Analysis

The research team utilized a thematic approach for analysis given the breadth and variety of the qualitative data collected (Miles & Huberman, 1984). Using the theoretical framework (an expanded version of Tinto's model) to guide the analysis via the constant comparative method, the researchers read and considered the range of data, making initial notes on the various texts (Guba & Lincoln, 1981). The researchers then reread the focus group and interview transcriptions, surveys, and artifacts to identify commonalities among the data collected (Miles & Huberman, 1994). The initial etic coding (outsider view of the observer), came to suggest emic codes (insider view of the participant) that reflected participants' experiences and outcomes as CLD students within the program (Creswell, 2007). These codes were classified into themes and subthemes within Tinto's Student Integration Model, which captured the collective essence of the students' experience (Taylor & Bogdan, 1984). Credibility of the data was assessed through member checking, peer debriefing, and triangulation (Guba & Lincoln, 1981). Multiple pieces of data were collected from students and at least two researchers analyzed each piece of data.

As stated earlier, Tinto identified academic integration, social integration, and institutional and goal commitment as the main indicators for persistence. Due to the frequent reference to environmental factors in the student discourse within this study, the original category of social integration was divided into two subcategories: institutional factors and environmental factors. Some researchers have described environmental factors as a missing component of Tinto's model (Cabrera, Castaneda, Nora, & Hengstler, 1992) while others believe these environmental factors are implied under social integration (von Destinon, 1988). For the purposes of this study, the researchers specified a subcategory for these responses to allow for alignment within Tinto's model while still honoring the participants' emphasis on such factors. Table 1 displays each of the categories and subcategories used for analysis as well as the coding indicators that emerged from the data.

TABLE 1 | Framework Coding Categories and Indicators

Coding Category	Coding Indicators
Academic Integration	<ul style="list-style-type: none"> • Grades, test scores, academic performance • Perceptions of ability and preparation • Self-esteem • Faculty/student and student/student interactions within an academic context • Support services provided by the program • Age and life experiences of the student • Impact of language and culture academically and professionally
Social Integration (Institutional Factors)	<ul style="list-style-type: none"> • Social interactions with peers outside of the academic context • Social interactions with faculty/staff outside the academic context • Extracurricular activities
Social Integration (Environmental Factors)	<ul style="list-style-type: none"> • Family responsibilities • Geographical location • Finances • Family attitudes toward and support for attending college • Work-related factors
Institutional and Goal Commitment	<ul style="list-style-type: none"> • Commitment to institutions and the Synergy program • Commitment to earning a degree • Commitment to becoming a teacher • Perseverance to reach a goal

Findings

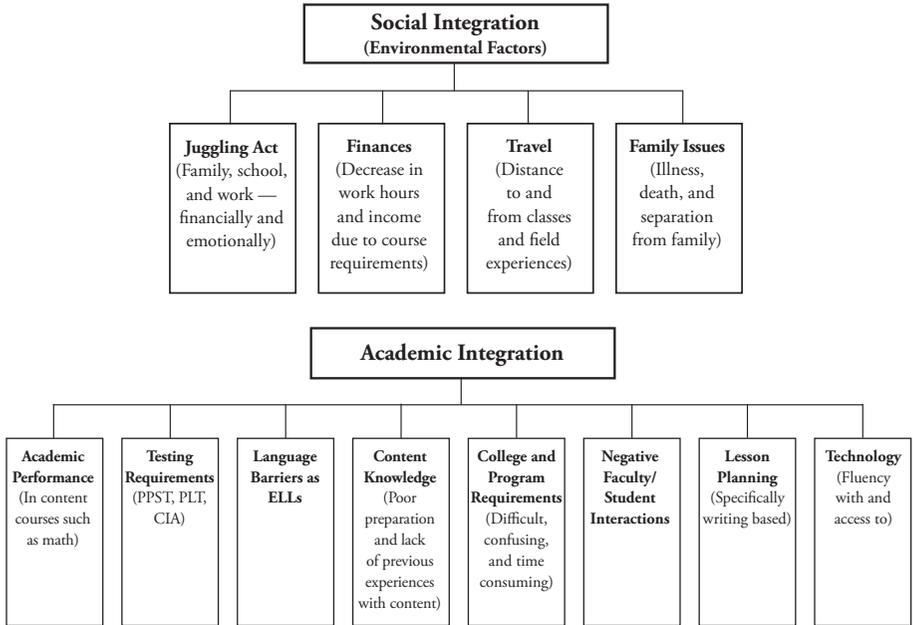
As previously mentioned, our findings are based on data from two informal focus groups (all 15 Synergy students participated), a survey (completed by 12 students), and individual interviews using questions similar to the survey (involving 14 students). The only student who was not interviewed in person responded to the questions in writing.

Based on this data, the adaptation of Tinto's model that incorporated contributions from Bean and von Destinon, particularly the inclusion of environmental factors, served as a very useful model for understanding the barriers and bridges to success for first-generation, Mexican American, nontraditional students in teacher education. Of the four coding categories used, social integration: environmental factors proved most salient, with academic integration surfacing as second most important and goal commitment as third. Due to the unique nature and structure of this distance-delivered program, factors that Tinto would have coded as social integration: institutional factors were not identified as significant to the students of this study. These types of factors (e.g., extracurricular activities and out-of-school social interactions with faculty and peers) were limited for these nontraditional working students. Instead, peer cohort and programmatic support (coded as academic integration because they were planned, structural features of the program) served as key support features.

Barriers to Success

As shown in Table 2, 12 primary factors were identified in the data as barriers to success; four were coded as social integration: environmental factors and eight were coded as academic integration.

TABLE 2 | Barriers to Success



When the students were asked, “What were your greatest challenges in college?” all 15 responded with statements that were coded as social integration: environmental factors. These factors included juggling responsibilities, family issues, and finances related to travel. Twelve students focused on the demands of juggling work, family, and school responsibilities, as represented by the following excerpt:

My greatest challenge was I have a family. . . . It was really hard to juggle my family life and work. I worked 40 hours a week, full time and went to school full time. It wasn't so much the academics; it was just juggling all three situations all the time.

Eight of the 15 students commented on the financial and travel challenges of attending college as it related to social integration: environmental factors. Finances were an issue especially during their field placements, when they had to reduce their work hours, and during student teaching, when they were not

permitted to work at all. One student shared her struggle in this way: “My challenges were mileage. . . . I had to come 25 miles every day and of course [with] no pay because I wasn’t working.”

In addition to challenges related to family, finances, and work, 12 students also talked secondarily about challenges that were coded as academic integration. These factors included academic performance, testing, language, and program requirements. Five students described challenges resulting from their academic performance, testing requirements, and language barriers as ELLs. One student shared her personal struggle with learning the English language as an adult.

[My greatest challenge was] writing in English. I am an ESL student. And I have not been here for very long time . . . seven years I have been learning the English language while I was going through college. That was the hardest.

Another student specified formal exams as one of her greatest academic challenges.

I really struggled with my math, because I have test anxiety. So, when I take tests I just blank out. And I know the content; but yet when I have to sit down and do a test my mind would just go blank.

Like this student, the majority of students in the program were first-generation college students and had been out of school for a significant period of time, making their academic integration more difficult.

Seven students mentioned challenges that were coded as academic integration. These statements related to difficult, confusing, and time-consuming program and college requirements, as well as negative student–faculty interactions within the classroom. When asked to clarify what she meant by the challenges of program requirements, one student stated:

We had to meet weekly and . . . talk to each other about anything [the program staff] wanted to talk about. So you would have to spend that time right after work with them [the cohort], you would have to spend all week with them, at least 3–4 nights a week with them [in class], and then you would have to spend another hour [in cohort meetings] talking to them about what they are working on this week. We’ve already been doing that except our advisor wasn’t there and I think that took a lot of time away from our family and we already had groups to study with.

Cohort grouping as a requirement of the program was seen both as a positive and as a negative in student discourse. Positive impacts of cohort grouping are covered later in the Bridges to Success portion of the paper.

On the survey, students were asked to use a Likert scale to indicate if they strongly disagreed, disagreed, were neutral, agreed, or strongly agreed with a series of statements related to potential challenges to their success in the Synergy program. The items with the highest scores were family and financial issues and were coded as social integration: environmental factors. Eight of the students completing the survey agreed or strongly agreed that family issues were a challenge, and all but one agreed or strongly agreed that finances were a challenge. The next highest marks related to academic integration, and main factors were identified as academic performance and testing requirements. Six agreed that coursework was a challenge, five strongly agreed that the national Pre-Professional Skills Test (PPST) was a challenge, five agreed or strongly agreed that the national Principles of Learning and Teaching exam (PLT) and Curriculum, Instruction, and Assessment exam (CIA) were a challenge, and five strongly agreed that technology was a challenge. None of the students agreed that faculty or administrators at the community college or the university posed a challenge to their success.

When the students were asked on the survey and during the interview, “When did you feel the most vulnerable to failure?” the majority of responses were coded as academic integration, as they focused on academic performance and testing requirements. The only male in the group said he never felt vulnerable, while 11 students described their difficulties with the required math courses and/or their struggles passing the PPST, which is required for entry into the College of Education. These 11 academic integration responses demonstrated the negative impact of performance on self-esteem and retention. Several of these students noted that they almost dropped out at these points because they had lost faith in their ability to be a teacher. Two student responses related to health and illness of family members and were coded as social integration: environmental factors (identified as family issues).

When the students were asked, through surveys and interviews, to describe their lowest point in their journey, the majority of responses were again coded as academic integration. The male student stated there was not a low point

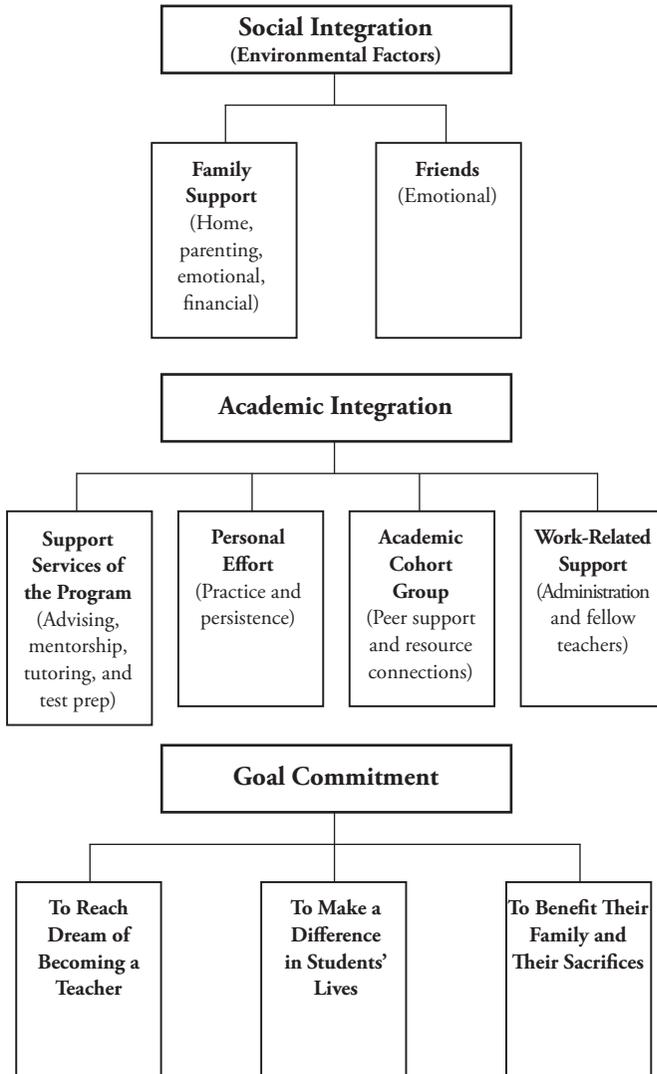
for him, while seven students provided responses that were coded as academic integration (performance, testing requirements, and faculty interactions), four students provided responses that were coded as social integration: environmental factors (family issues and travel), and one student did not respond. The academic integration responses were related to performance in content and methods courses, negative comments from faculty members, and failure to pass required national tests. The Praxis I exam, the PPST, is required by Midwestern University, while the Praxis II exams, the PLT, CIA, and the ESOL content exams, are required by the state for licensure. Students struggled with all four of these required tests.

The social integration: environmental factors responses focused on family issues related to the poor health and even death of parents and separation from family members. In addition, two students identified their low points as the time when they were told they would have to student teach out of town. Although these two responses were coded as social integration: environmental factors, they demonstrate the interaction between academic integration and social integration. It was an institutional requirement (academic integration) that placed the students in a partner school nearly one hour from their homes while it was finances and family (social integration: environment factors) that made this requirement so challenging.

Bridges to Success

As shown in Table 3, nine primary factors were found to be bridges to success; two were coded as social integration: environmental factors, four were coded as academic integration, and three were coded as goal commitment.

TABLE 3 | Bridges to Success



During the in-depth interviews conducted after graduation, students were asked, “What support helped you overcome your challenges?” The majority of student responses were coded as academic integration and social integration: environmental factors. Many students responded with more than one answer; so individual responses were coded into more than one category. Eleven responses

were coded as academic integration, nine responses were coded as social interaction: environment, and four responses were coded as goal commitment.

The 11 academic integration responses fell into four general categories—support services, personal effort, academic cohort grouping, and work-related support. The following quote exemplifies the nine responses related to support services provided by faculty, advisors, and tutors.

The Synergy group. They were very helpful. They made us feel comfortable and gave us all the help we needed—if we needed a tutor or anything for those hard classes. They were wonderful. . . . They would tell us all the upcoming events and upcoming deadlines. So we got good communication.

Another described her experience in relation to support services offered by the community college:

If I had problems with my subjects or my work I would go to the library and they would help me. They have math tutors and writing tutors, so they would help me and then I would get on the computer and do research papers, and then they would edit my paper.

In addition to program support, four of the 15 students made references to personal effort, practice, and persistence as critical factors for their academic integration. One student shared a scenario of how she personally overcame her struggle with reading for the sake of her family, which is representative of this category.

I got so far and then I was stuck at the PPST. That was scary because my kids have sacrificed all this time, my husband sacrificed all this time and all his effort to [do] laundry and shopping, ballgames, tournaments without me and I couldn't get past it [the PPST]. So then I just thought you have to go and start from scratch. So I did . . . I had to go back and start reading a lot more. You get faster by reading, so every night I just picked a book and read until I got better at it. I took a semester off of school and work just to learn to read faster to get the PPST done.

The support from the Synergy academic cohort group, the third category under academic integration, surfaced in four of the interviews. Students commonly described the group as a second “family” supporting them on their journeys toward becoming teachers. The following quote is representative of the benefits students received from being in the cohort group.

I got to know other people that were in the same program and we worked together as a group . . . we really got to know each other and depended on each other in everything. Whether we had a question on our literature, we had a question on our history, or on our math, if we were struggling with any subject we would e-mail each other or call and we'd be right there helping each other.

Finally, in relation to the fourth category in academic integration, identified as work-related support, three students interviewed in the study shared related comments. As previously mentioned, all but three of the students were paraprofessionals or had some related educational experiences. Overall, the students shared a general sense of support from and collegiality with personnel in the schools. In addition to direct support from colleagues and supervisors, the schools as work environments also served as powerful supports to overcoming challenges. The following excerpt is indicative of participant experience.

I've been a para for many years and being around the children and adults, the teachers and the parents also has helped me be more outgoing and open. Then just the children—I am always telling them I'm going to take them home; the ones that kind of feel like they're lost. I have children of my own, but I've always been one that I get too attached to them. I feel like just being in a classroom, being a para, has helped me.

Additional comments related to social integration: environmental factors (family support) included the role that actual family members played in helping students overcome their challenges. The following excerpt illustrates the seven responses given by students that related to family.

I think support from our family . . . I think that was one of the things that helped overcome the challenges. Having support when you were having to stay late to do homework, or having to travel from here to town C. We had a class in town C and there was the support we had from our husbands and in-laws and mom that helped [me] take good care of my son.

In addition to childcare and encouragement, one student shared that his father offered him academic support as well.

I also went to my father. He helped me out in the academic stuff and he was able to guide me. He helped give me more insight. If I was reading something I didn't know, I went to him and he explained what they were talking about.

On the survey, students were asked to use a Likert scale to indicate if social support systems, such as family and friends, and specific support strategies provided by the Synergy program, such as advising and tutoring, were “not at all beneficial,” “somewhat beneficial,” or “extremely beneficial.” A detailed breakdown of responses is found in Table 4.

TABLE 4 | Factors in Supporting Nontraditional ELL Students

Type of Support	Not at All	Somewhat	Extremely
<i>Internal Factors</i>			
Family		2	10
Self			12
Friends		7	5
<i>External Factors</i>			
Synergy Program Staff		2	10
Faculty		2	10
<i>Program Support Factors</i>			
Paid tuition/fees			12
Book/monthly stipends			12
Program-approved course enrollment/Personal advising			12
Faculty mentors		1	11
Personal meetings/conversations with Synergy program personnel		2	10
Peer support		2	10
Help with completing financial aid forms	1	3	8
Peer tutors/study groups		5	7
Tutors for PLT/CIA study groups		3	7
Campus-provided tutors	2	1	6
Reporting semester grades to Synergy personnel	1	5	6
Requesting midterm reports from professors	1	5	6
Tutors for PPST study groups or individual tutoring	2	3	5
Orientation each semester		7	5
PPST seminars/workshops	4	3	4
BESO (Bilingual Education Student Organization)	2	6	4
Regular seminars		8	3
Self-reports on course status	2	6	3

All support factors listed were at least “somewhat beneficial” to almost all students who completed the survey. Factors coded as social integration included friends and family (coded as social integration: environmental factors). Ten students rated their families as extremely beneficial while two students felt they were somewhat beneficial. Six students identified friends as extremely beneficial while seven said they were somewhat beneficial. In terms of the support services provided by the program (coded as academic integration), ten students said the Synergy program staff was extremely beneficial, one said they were somewhat beneficial, and one did not respond. Nineteen different support strategies offered as part of the Synergy program were included on the survey. Eleven of these items were rated as somewhat or extremely beneficial by all students.

In the interview students were asked to 1) identify their successes in the Synergy program and also to 2) describe their highest point in their journey to becoming a teacher. Thirteen students shared successes that were coded as academic integration, while one student described the improvement of her mother’s health (social integration: environmental factors) as her most successful experience. It is important to note that all of the students described personal high points that were coded as academic integration. Across both of these questions the students described their performance in a class, field experience, student teaching, or on a required national exam. Some indicated their entry into and/or completion of the teacher education program or being offered their first teaching job. One student’s response was coded as academic integration and social integration: environmental factors. She described the realization that she had a strong support system through the Synergy program and her family.

All the students described situations that represented their growing knowledge and skills as teachers. These successful, positive experiences were often seen as turning points that gave students the belief in themselves and motivation to continue forward. One student called this a “confidence evolving process.” Several identified experiences that were also coded as goal commitment. One described the time she decided to continue forward with her education and knew she would finish, while the other described the time she knew she was going to reach her dream of being a teacher. They were emotional moments—one student said, “I cried.” Students also mentioned the importance of the Synergy program support system in achieving their success: “I knew the Synergy [program] staff was always there for me making sure I achieved my goal.”

Students also were asked in their interviews to complete open-ended statements to provide a deeper understanding of their bridges to success. One statement began, “*I am here today . . .*” Responses to this statement were once again coded as academic integration, social integration: environmental factors, and goal commitment. The students’ statements were overwhelmingly positive and indicated their appreciation for the Synergy program, their families, and their friends. Furthermore, their statements demonstrated the students’ deep religious convictions and belief in themselves. As one student affirmed, “God has guided me—provided resources, family, friends, and faculty.” They described their success as due to their “past experiences, present learning, and view to the future.” These responses were full of hope for the future and positive self-esteem. Students said they were “prepared to start a new journey,” “prepared for the challenge,” and “striving to learn more as I go through life” because they “now believe in myself” and “know the support continues.”

Another open-ended statement began “*I will continue tomorrow . . .*” Responses to this statement (which were naturally coded as goal commitment) focused on the future now possible for these students. Statements included a quest for lifelong growth and learning for the benefit of children; to “continue lifelong learning—helping children succeed” and “to inspire and touch the lives of children.” These statements also demonstrated the students’ growing confidence in themselves and what they have to offer, “showing their talent to the world.” As one student said, “Tomorrow I will work hard and give it my best to mold our future, to learn new strategies and overcome challenges.” Another said “Tomorrow I will grow professionally to meet the needs of students and myself—to continue to make it better every day.”

Discussion, Conclusions, and Implications

Tinto’s Student Integration Model (1975) was a very useful lens to examine retention issues related to nontraditional CLD students. It is critical to point out, however, that this model was modified by creating the subheading of environmental factors under the category of social integration. These environmental factors played such a critical role in understanding the experiences of these nontraditional CLD students that the researchers contend that it would be more useful to consider environmental factors as a separate retention category similar to Bean’s attrition model (1980). They also found that

a focus on student strengths and bridges to success, as a component of student empowerment (von Destinon 1988, 1990), provided a more positive and meaningful way to identify effective strategies, mitigate barriers, and enhance future success as compared to a deficit model which only focuses on students' weaknesses.

Student retention factors are very complex and interrelated. An examination of academic integration, social integration, and goal commitment in relation to the success of the Synergy students has demonstrated the importance of all three sets of factors. Academic integration and the environmental factors identified under social integration are critical to both the barriers and the bridges to success for nontraditional CLD students. Although students, except in terms of their commitment to the Synergy program, did not mention institutional commitment as an important element, goal commitment served as a powerful motivator for student success—often mitigating the negative influence of academic and environmental challenges.

More specifically, when students were asked to identify challenges, in the interview or the survey, they more frequently discussed factors identified as social integration: environmental factors. In particular, students discussed the environmental challenges of family, work, and finances. But these environmental challenges were quickly followed by examples of challenges related to academic integration such as performance on courses, field experiences, and required tests. When students were asked to identify situations that made them feel vulnerable to failure or experiences that were low points in their college experience, they were more likely to identify factors that were classified as academic integration.

When students were asked to identify successes and high points in their journeys, they identified experiences primarily coded as academic integration and goal commitment. These positive experiences indicated students' desire to succeed, to continue learning and growing, and to make a difference in the lives of children. These successful experiences enhanced students' belief in themselves and motivated them to continue in teacher education. Students frequently mentioned that their successes would not have been possible without the intense support services provided through the Synergy program.

The students' incredible desire to become teachers, their ability to keep their focus on the future, and their drive to pursue lifelong learning helped them to persist under even the most difficult conditions.

An important implication of these findings is that if K–12 schools and IHEs are serious about retaining nontraditional CLD students in teacher education and diversifying the teaching force, they must invest in systems of support that address environmental issues related to family, work, and finances *in addition* to providing academic support such as

individual academic advising, tutorial assistance, faculty mentoring, cohort group support, and study group preparation for required national exams (see Table 4). While the investment in these support systems for effectively “growing your own” teachers is significant, supporting local, nontraditional students and CLD paraprofessionals reaps significant dividends in that these teachers tend to remain in their home communities and in the teaching profession much longer than U.S.-born traditional students (Genzuk, Lavadenz, & Krashen, 1994).

To create mechanisms to enhance social integration and reduce environmental challenges, it is important, as seen in this study, to support the unique sociocultural dimensions of nontraditional CLD students. Programs can accomplish this by including family in social and program events, by being flexible and accommodating the varying work and family needs of the students, and by incorporating the students' native language and culture into course assignments and program activities. Some committed institutions have even begun providing flexible, on-campus childcare and English tutoring programs for their students' parents and families, which has proven effective in increasing, retaining, and graduating CLD populations on their campuses (Ludden, 2002). These are just a few strategies to address issues related to social integration.

When designing support systems to address CLD students' academic integration, there are several key issues to consider. It is important to examine the students' experiences with mathematics and our nation's continued use of mathematics as a gatekeeper to academic success. It is not a surprise that this was the content area most frequently identified by students in this study as challenging. Teacher education programs also need to critically examine enrollment procedures, entrance exams, and standardized tests for biases, to provide support services to help prepare for these tests, and ultimately to develop

alternative assessment strategies for CLD students (Bennett, McWhorter, & Kuykendall, 2006; Luykx et al., 2007). The Synergy students perceived these exams as culturally and linguistically biased and persistently identified these assessments as some of their greatest challenges. Several students indicated that failure to pass math courses and required exams damaged their belief in their ability to be a teacher and caused them to seriously consider dropping out of the program. As a result of this study, Midwestern State University is currently looking at how other forward-thinking institutions have addressed standardized assessment policies for CLD students and is considering reevaluation of its own policies. Findings also strongly suggest that in addition to supporting the academic integration of nontraditional CLD students, schools need to provide effective linguistic support systems designed for ELLs at the institutional level, given that language barriers were identified by all participants as a major challenge to their success. Examples of such support systems include providing guided financial aid and enrollment sessions for the students and sheltered instruction training (e.g., SIOP) for campus faculty.

Finally, the powerful influence of goal attainment must not be overlooked in any effort to support the success of nontraditional CLD students. The students' incredible desire to become teachers, their ability to keep their focus on the future, and their drive to pursue lifelong learning for the ultimate benefit of their future students helped them to persist under even the most difficult of academic and social conditions.

While the grant funding for the Synergy program has ended, the program personnel keep in regular contact with the graduates. Now teaching full time in their home communities, the graduates have been recognized on several occasions for their accomplishments, and it is notable that they have also served as role models for others. As a result of their success, a second cohort of students (also made up of primarily nontraditional CLD paraprofessionals who learned about the program by word-of-mouth) has been established. Though this second cohort of students is not receiving the same level of grant-based scholarship support, the Equity & Access Partnership grant has been able to provide the needed academic resources and personnel to offer the distance-based program again for a second time. Utilizing the lessons learned from the first offering, the second cohort in the program has been quite successful and is currently two semesters from graduating.

In summary, given that in 2001–2002, CLD students represented 40% of all public school students, CLD teachers have much to offer public education in terms of their ability to build rapport and relate to diverse students and their families (National Education Association, 2004a). As teacher educators, we have the opportunity and obligation to design and maintain college environments and support systems to help retain our CLD teachers in education. This is especially imperative given that as of 2001, 90% of all public school teachers were White (National Education Association, 2004b). The reality is that comprehensive support systems like the ones described above are not only beneficial to CLD and nontraditional students, they are effective in supporting all preservice teachers as learners. By modeling a commitment to supporting the entire student, teacher education programs and districts better prepare future teachers to do the same for their students once they are in our nation's public schools.

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References

- Astin, A. W. (1975). *Preventing students from dropping out*. San Francisco: Jossey-Bass.
- Baker, R. (1996). Sociological field research with junior high school teachers: The discounting of Mexican American students. *The Journal of Educational Issues of Language Minority Students*, 18, 49–66.
- Bean, J. P. (1980). Dropouts and turnover: The synthesis and test of a causal model of college student attrition. *Research in Higher Education*, 12, 155–187.
- Bean, J. P., & Metzner, B. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Education Research*, 55, 485–650.
- Bennett, C. I., McWhorter, L. M., & Kuykendall, J. A. (2006). Will I ever teach?: Latino and African American students' perspectives on PRAXIS I. *American Educational Research Journal*, 43, 531–574.
- Black, S. (2002). Not just helping hands. *American School Board*, 189(5), 42–45.
- Brandick, S. (2004). *The Los Angeles Unified School District paraeducator career ladder program*. Los Angeles: Los Angeles Unified School District.
- Cabrera, A., Castaneda, M., Nora, A., & Hengstler, D. (1992). The convergence between two theories of college persistence. *Journal of Higher Education*, 63(2), 143–164.
- Ceja, M. (2001). *Applying, choosing, and enrolling in higher education: Understanding the college choice process of first-generation Chicana students*. Unpublished doctoral dissertation, University of California, Los Angeles.
- Chopra, R. V., Sandoval-Lucero, E., Aragon, L., Bernal, C., De Balderas, H. B., & Carol, D. (2004). The paraprofessional role of connector. *Remedial and Special Education*, 25(4), 219–231.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among the five traditions* (2nd ed.). Thousand Oaks, CA: Sage.
- Darling-Hammond, L. (1997). *Doing what matters most: Investing in quality teaching*. New York: National Commission on Teaching and America's Future.
- Excelencia in Education (EIE). (2007). *Latinos in undergraduate education*. Washington, DC: Author. Retrieved on Oct 9, 2008 from www.EdExcelencia.org/research
- Flores, J. L. (1992). *Persisting Hispanic American college students: Characteristics that lead to baccalaureate degree completion*. ERIC Digest. (ERIC Document Reproduction Service No. ED 345 609)
- Fox, R. (1986). Application of a conceptual model of college withdrawal to disadvantaged students. *American Educational Research Journal*, 23(3), 415–424.

- Fry, R. (2003). *High school dropout rates for Latino youth*. ERIC Digest. (ERIC Document Reproduction Service No. ED 482 920)
- Gay, G., Dingus, J. E., & Jackson, C. W. (2003). *Recruiting teachers of color*. Denver: Education Commission of the States.
- Genzok, M. (1997). *Diversifying the teaching force: Preparing paraeducators as teachers*. ERIC Digest. (ERIC Document Reproduction Service No. ED 406 362)
- Genzok, M., & Baca, R. (1998). The paraeducator-to-teacher pipeline. *Education and Urban Society*, 3(1), 73–78.
- Genzok, M., Lavadenz, M., & Krashen, S. (1994). Paraeducators: A course for remedying the shortage of teachers for limited-English-proficient students. *Journal of Educational Issues for Language Minority Students*, 14, 211–222.
- GINORIO A., & HUSTON, M. (2001). *Si, se puede! Yes, we can. Latinas in school*. Washington, DC: American Association of University Women Educational Foundation. (ERIC Document Reproduction Service No. ED 452 330)
- Guba, E. G., & Lincoln, Y. S. (1981). *Effective evaluation: Improving the usefulness of evaluation results through responsive and naturalistic approaches* (1st ed.). San Francisco: Jossey-Bass.
- Gutierrez, S. (2006). *Community college role in teacher education*. Unpublished doctoral dissertation, Kansas State University, Manhattan.
- Halpin, R. L. (1990). An application of the Tinto model to the analysis of freshman persistence in a community college. *Community College Review*, 17(4), 22–32.
- Herrera S., & Morales, A. (2005, April). *From remediation to acceleration: Recruiting, retaining and graduating future CLD educators*. Paper session presented at the annual meeting of the American Education Research Association, Toronto, Ontario.
- Hussar, W. J. (1999). *Predicting the need for newly hired teachers in the United States to 2008–09*. Washington, DC: United States Department of Education, National Center for Educational Statistics.
- Jalomo, R. E. (1995). *Latino students in transition: An analysis of the first-year experience in community college*. Unpublished doctoral dissertation, Arizona State University.
- Kansas Department of Education Statistics Planning & Research Data. (2006). Retrieved on February 27, 2008 from http://www3.ksde.org/k12/state_reports.html
- Laden, B. V. (1992, October). *An exploratory examination of organizational factors leading to transfer of Hispanic students: A case study*. Paper presented at the annual meeting of the Association for the Study of Higher Education, Minneapolis, MN. (ERIC Document Reproduction Service No. ED 352 922)

- Liu, R. (2002). *A methodological critique of Tinto's student retention theory*. Paper presented at the Annual Forum for the Association for Institutional Research. Toronto, Ontario, Canada.
- Ludden, J. (Reporter). (2002, December 16). *Educating Latinos: An NPR special report* [Radio Broadcast]. New York and Washington, DC: National Public Radio.
- Luykx, A., Lee, O., Mahotiere, M., Lester, B., Hart, J., Deaktor, R. (2007). Cultural and home language influences on children's responses to science assessments. *Teachers College Record, 109*, 897–926.
- McNeil, L. M. (2000). Creating new inequalities: Contradictions of reform. *Phi Delta Kappan 81*(10), 728–734.
- McVay, R. H. (2004). *Perceived barriers and factors of support for adult Mexican American ESL students in a community college*. Unpublished doctoral dissertation, Kansas State University, Manhattan.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education: Revised and expanded from case study research in education* (2nd ed.). San Francisco: Jossey-Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Montemayor, R., & Mendoza, H. (2004). *Right before our eyes: Latinals past, present & future*. Tempe, AZ: Scholargy Publishing.
- National Education Association. (2004a). *A parent's guide to school improvement* [Brochure]. Washington, DC: Author.
- National Education Association. (2004b). *A parent's guide to supporting school success* [Brochure]. Washington, DC: Author.
- Nieto, S., & Bode, P. (2008). *Affirming diversity: The sociopolitical context of multicultural education* (5th ed.). New York: Allyn & Bacon.
- Nordquist, E. D. (1993). *Missing opportunities: Drop-outs and a failure to find a mentor*. Paper presented at the annual meeting of the Western States Communication Association, Albuquerque, NM.
- Pascarella, E. T., & Terenzini, P. T. (1980). Predicting voluntary freshman persistence and voluntary dropout decisions from a theoretical model. *The Journal of Higher Education, 51*, 60–75.
- Quiocho, A., & Rios, R. (2000). The power of their presence: Minority group teachers and schooling. *Review of Educational Research, 70*(4), 485–528.
- Rendon, L. I. (1992). Eyes on the prize: Students of color and the bachelor's degree. *The National Center for Academic Achievement and Transfer Working Papers, 3*(2).

- Rovai, A. P. (2003). In search of higher persistence rates in distance education online programs. *The Internet and Higher Education*, 6, 1–16.
- SERVE Policy Brief. (2000). *Community colleges and K–12 teacher preparation*. Chapel Hill, NC: Author.
- Shroyer, G. (2004). *Equity & access: Enhancing teacher quality through multi-institutional partnerships*. Manhattan, KS: Kansas State University.
- Authors. (2007). *Retention of culturally and linguistically diverse paraprofessionals in teacher education—the juggling act of nontraditional students*. Paper presented at the American Education Research Association Conference, Chicago, IL.
- Simoniello, K. (1981). On investigating the attitudes toward achievement and success in eight professional U.S. Mexican women. *International Journal of Chicano Studies Research*, 12(1), 121–137.
- Spradley, J. (1979). *The ethnographic interview*. New York: Holt, Rinehart and Winston.
- Taylor, S. J., & Bogdan, R. (1984). *Introduction to qualitative research methods: The search for meanings*. New York: John Wiley & Sons.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45, 89–125.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd. ed.). Chicago: University of Chicago Press.
- U.S. Department of Education. (1998). *Promising practices: New ways to improve teacher quality*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Education. (2004). *New No Child Left Behind flexibility: Highly qualified teachers*. Washington, DC: Author. Retrieved on April 30, 2009 from <http://www.ed.gov/nclb/methods/teachers/hqtflexibility.html>
- U.S. Department of Education, National Center for Education Statistics. (2006). *Institutional Postsecondary Education Data Survey (IPEDS) Enrollment Survey, 2005–06*. Washington, DC: U.S. Department of Education. Retrieved on October 9, 2008 at (<http://nces.ed.gov/ipeds/>)
- Valencia, R. R., & Solórzano, D. G. (1998). Contemporary deficit thinking. In R. Valencia (Ed.), *The evolution of deficit thinking in education thought and practice*. New York: Falmer.
- Valenciana, C., Morin, J. A., & Morales, R. (2005). Meeting the challenge: Building university-school district partnerships for a successful career ladder program for teachers of English learners. *Action in Teacher Education* 27(1), 82–91.
- Valenciana, C., Weisman, E. M., & Flores, S. Y. (2006). Voices and perspectives of Latina paraeducators: The journey toward teacher certification. *The Urban Review*, 38(2), 81–99.

- Villegas, A. M., & Clewell, B. C. (1998). Increasing teacher diversity by tapping the paraprofessional pool. *Theory into practice, 37*(2), 121–130.
- von Destinon, M. (1988). *Chicano students: Applying Tinto's and Astin's theories*. Paper presented at the Annual Joint Conference of the Western College Reading and Learning Association and the Arizona Association for Developmental Education, Phoenix, AZ.
- von Destinon, M. (1990). *Descubriendo el sueno: Programming for success*. Paper presented at the Annual Conference of the National Association of Student Personnel, New Orleans, LA.
- Wolf-Wendel, L., Twombly, S., Morpew, C., & Sopcich, J. (2004). From the barrio to the bucolic: The student transfer experience from HSIs to Smith College. *Community College Journal of Research and Practice, 28*(3), 213–23.