TEACHER RECRUITMENT AND RETENTION AND THE MINORITY TEACHER SHORTAGE AMONG LATINX TEACHERS IN THE UNITED STATES AND MEXICO

A Dissertation

by

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ABSTRACT

"Teacher Recruitment and Retention and the Minority Teacher Shortage among Latinx Teachers in the United States and Mexico" uses both quantitative and qualitative analysis to examine Latinx teacher retention in Mexico and the United States. The central question addressed throughout the dissertation is which factors influence retention and attrition among Latinx teacher. The dissertation follows a three article format.

The first article "Teacher Attrition and Job Dissatisfaction in Mexico: Why Do Mexican Teachers Leave the Profession?" analyzes data on teacher recruitment and retention from OCED'S TALIS to compare school climate factors that influence job satisfaction and teacher retention in Mexico. The results showed effects by gender, years of experience, age, and discipline problems, relationships between students and teachers, and perceptions of collaboration in both job satisfaction and work regret.

The second article "Job satisfaction and teacher attrition among Latinx teachers in the United States: a quantitative analysis" compares the recruitment and retention of Black, White, and Latinx school teachers and attempts to empirically ground the debate over minority teacher shortages. A large gap persists between the increasing percentage of Latinx students in U. S. schools and the percentage of Latinx teachers in the U. S. school system. The data in this article showed that classroom autonomy, influence in site-based decision-making and having an effective supportive principal were very strong factors influencing job satisfaction and teacher retention among Latinx teachers.

The third article "Stories of living and stories of leaving: a Latinx autobiographical narrative inquiry" used narrative inquiry to flesh out the relationship between school

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organizational factors and Latinx teacher retention and job satisfaction as experienced in my own career. In this article I focused on my "stories of living" and "stories of leaving" (Craig, 2014) as a bilingual teacher and later a principal in a large urban school district in the mid-Southern United States. I also account for the "stories of living" and "stories of leaving" of other teachers. I corroborate the stories of teacher attrition in this article with quantitative analyses of minority teacher retention data along with written accounts of teacher retention in the district I worked in.

CONTRIBUTORS AND FUNDING SOURCES

Contributors

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CHAPTER I

INTRODUCTION AND

LITERATURE REVIEW

Research on teacher recruitment and retention is a feast or famine proposition depending on the region and the population being studied. First, while much attention has been paid to teacher retention and attrition in the United States and Europe, little research has been done in other areas of the world, including in Mexico and in other parts of Latin America. Second, while a great deal of research has focused on teacher retention and attrition in the United States, little research has been done on different ethnicities in the United States and the organizational conditions that influence teacher retention and attrition among these ethnicities.

Research on teacher retention among the Latinx population is sorely needed because of the rapidly growing Latinx student population in the United States and the large gap that currently exists between Latinx student and teacher populations. Latinxs have accounted for half of the overall population growth in the country since 2000. Although recent administration policy changes have slightly slowed the growth of Latinx immigration to the United States, the Latinx population reached a record 59.9 million in 2018, up 1.2 million from 2017 and up from 47.8 million in 2008 (Flores, Lopez & Krogstad, 2019) . Latinxs have accounted for about half of all U.S. population growth between 2008 and 2018 (U.S. Census Bureau, 2020). The overall U.S. school population rose from 47.2 million to 50.4 million and the number of Hispanic students rose from 16% to 26% (U.S. Department of Education, 2019). Nearly one in every 4 children currently attending schools is Latinx and Latinxs are already a plurality in 22 states (Fry & Gonzales, 2008). Statistical models suggest that by 2050, the Latinx school-aged population will

more than double at which point Latinx students will constitute the largest group of students in U.S. schools (Fry & Gonzales, 2008). The growth in Latinx students in the U.S. has far outpaced the growth in the number of Latinx teachers. While European Americans account for 83% of all teachers, Latinxs account for about 7% (National Center for Education Statistics, 2008).

Growth in the Latinx population in U.S. schools has not precipitated a similar growth in academic achievement for Latinx students. Nearly 24% of all Latinx adults in the U.S. have less than a ninth-grade education and almost one in four Latinxs under 21 is either not enrolled in high school or lacks a high school diploma (National Center for Education Statistics, 2008). Fewer than 13% of Latinxs are college graduates (Lopez, 2009).

The disheartening academic outcomes for many Latinxs may be connected in part to the lack of Latinx teachers who are uniquely equipped to meet the needs of the students (Monzó & Rueda, 2001; Ochoa, 2007; Villegas & Clewell, 1998). White European Americans comprise 83% of all teachers while Latinxs account for only about 7% of teachers (National Center for Education Statistics, 2009). This tremendous disparity denies Latinx students the benefits that accrue when minority students are taught by a diverse teaching staff. Research shows that academic, psychological, and social benefits accrue to students of color taught by teachers of color (Gay, Dingus, & Jackson, 2003; Villegas & Lucas, 2004). Teachers of color tend to hold higher expectations for minority students (Romo & Falbo, 1994; Yeo, 1997), are more likely to value the knowledge and cultural frames of reference students ''bring to school'' (Irvine, 1989; Monsó & Rueda, 2001), and typically enter the profession with a heightened awareness of the sociopolitical contexts in which students of color are educated (Beaubeouf-LaFontant, 1999; Quiocho & Rios, 2000). They are also more likely to work in "hard to staff," high-minority,

high-poverty schools (Ingersoll & May, 2011) and have greater retention rates in those settings (Villegas, 2007, 2009).

Many research studies relate the dominant narrative of White teachers who have left the profession. A school's demographic characteristics (e.g. minority student population and low-SES population) appear to strongly influence White teacher attrition. However, these factors do not appear to play a major role in minority teacher attrition. Ingersoll and May (2011) found that minority teachers are much more likely to leave teaching because of lack of classroom autonomy and lack of voice in school-based decision-making. However, research on organizational conditions influencing minority teacher retention has tended to lump all minorities together. In one of the few studies specifically focused on Latinx teachers, Irizarry and Donaldson (2012) found that the dominant motivator among Hispanic youth to enter teaching was to overcome "antagonistic and unfriendly" conditions that they experienced as students. The students were motivated to enter teaching because of their desire to create better learning environments for Latinxs than they themselves had experienced. Because of the lack of research specifically focused on teacher recruitment and retention among the Latinx community, my dissertation will use empirical data to determine which organizational conditions most strongly influence Latinx teacher retention and attrition and in what ways.

Like the lack of research in Latinx teacher recruitment and retention in the United States, there is a dearth of research on teacher recruitment and retention in Mexico and Latin America. The research on teacher attrition and retention in Latin America and Mexico is not nearly as extensive as it is in the United States and Europe. School principals note low to medium levels of teacher stability in Brazil, Argentina, Peru, Paraguay and Chile (UNESCO, 2008). In Chile, Paredes et al. (2013) found that salary limitations, inadequate school environment, and lack of

administrative support may prompt new teachers to search for another school. Avalos and Valenzuela (2016) found that from 2000-2009 in Chile, about 39% of teachers with three years or less of experience left the profession. The same study found that the reasons for leaving the profession clustered around lack of job satisfaction related to school characteristics, such as school culture and working conditions. Research on teacher job dissatisfaction in Latin America found that third and sixth grade teachers from 15 Latin American countries indicated satisfaction with their profession, but not with their salaries (Weinstein, 2016; Ramirez & Viteri, 2016).

Madero (2019) used data from the Teaching and Learning International Survey (TALIS) to perform a comparative analysis of factors influencing teacher satisfaction and job attrition in three countries: Mexico, Brazil and Chile. He found that teachers in Mexico were overall less likely to report job dissatisfaction than those in Brazil or Chile. Additionally, he found that the concept of a professional learning community plays a significant influence on job satisfaction in all three countries. Madero also found that a culture of collaboration and influence in decision-making both played important roles in job satisfaction.

Due to the sparse research on teacher retention and attrition in Mexico, the purpose of this study will be to examine factors that led to teacher attrition in Mexico using quantitative data from TALIS (Teaching and Learning International Study) from 2013.

While quantitative data analysis can establish a relationship between school culture conditions, job satisfaction and teacher attrition among Latinx teachers it is not able to explain why these relationships exist. Qualitative analysis is needed to flesh out the reasons behind the data relationships by looking into stories of the whole person. Narrative inquiry is the appropriate tool to use since it allows one to both burrow into individual teacher stories and to broaden ones view to include the place, temporality and sociality of the educational milieu.

1.1 Positionality

The articles in my study are intimately linked by my positionality as both an immigrant and as an educator. I was born in the center of Mexico City. Mexico's history with educators is both paradoxical and perplexing. Traditionally, in Mexican culture, the teacher has enjoyed a place as both a revered figure of authority and a wise sage. Mexican teachers who immigrate to the United States fondly recall the days when a teacher could have a class of 35 of 40 students and yet experience very few discipline problems. However, Mexico has a history of violence involving students and teachers like few other countries. In 1968, at Tlatelolco Plaza in Mexico City several hundred students were fired on and killed while protesting an increase in student fees in the country's most prestigious university, UNAM (Universidad Nacional Autonoma de *Mexico*, National Independent University of Mexico). The government initially claimed that the students initiated fire on city police, but government documents released in 2000 show that gunfire was initiated by law enforcement. (Poniatowska, 1975, p. 41). In another incident on September 26, 2014, while traveling to the annual peaceful memorial of the student massacre in Mexico City, 43 student teachers were kidnapped in Iguala, Guerrero. Neither the 43 students nor their bodies have been encountered. It is believed that they were all killed on the night of September 24, 2016 (Hernandez, 2016).

I immigrated to the United States in first grade and although I would return to Mexico many times over the years, it was not my destiny to grow up in Mexico City. I have lived, studied, and worked as an educator in the United States for many years now. My relationship with teacher attrition began as a bilingual first-grade teacher in one of the largest school districts in the mid-southern United States. In 1997 I started a twenty-year career in various high-

minority, low-SES schools. In 2012, I was named principal of an elementary school comprised entirely of low-SES Latinx students, 60% of whom were recent immigrants and two thirds of whom were English Language Learners (ELL). The state education agency had placed the campus on academic probation the year before I was placed there due to poor performance on the state-wide standardized achievement exam.

I was employed as a principal by a superintendent who was well-known for having a firefirst, ask-questions-later mentality. The turnover when I was hired into the district was so great that nearly 1/3 of the almost 300 schools in the district were staffed by brand-new first-year principles like myself. And the superintendent believed that the key to school reform was "exiting" teachers. He was well-known for calling out specific principals by name at the district principals' meeting for not having enough staff turnover! The day I was hired by the superintendent, as a new principal with no prior experience, I was told that I had one academic year to turn around the school. If I did not, I would be without a job. It was made clear that his lived theory of action (Argyris & Schon, 1978) to turnaround efforts was "exiting" teachers.

Research shows that hard-to-staff schools with high turnover rates often end up with a relatively high proportion of inexperienced teachers with sub-standard or alternative credentials, which can undermine student achievement as a function of both teacher inexperience and overall instability (Kini & Podolsky, 2016). Accountability pressure related to test preparation and sanctions for teachers whose students perform poorly are the most frequently cited areas of job dissatisfaction among former teachers, listed by 25% of those who left the profession (NCES, 2013; Carver-Thomas & Darling-Hammond, 2019).

After my first year, the school came off academic probation and received distinction designations from the state because of high academic progress. However, teacher morale had

plummeted. The teacher evaluation system used in the district relied heavily on students' standardized test performance. Officially, I recommended four teachers for termination to the school board, but over the summer I had to hire 18 new teachers because 50% of the teaching staff had become dissatisfied and had left the school. In part due to the great deal of attrition experienced in my school district, the demand for qualified teacher candidates greatly outweighed the supply. Most of the teachers I hired were brand-new or relatively inexperienced teachers and many of them had not graduated from a college or university teacher preparation program. Research shows that novice teachers with mediocre test scores and with substandard credentials produce lower student outcomes than their contrasting counterparts (Clotfelter, Ladd, & Vigdor, 2007a, 2007b).

In subsequent years I realized the value of investing in teacher retention efforts. Teachers improve more rapidly in supportive and collegial working environments (Kraft & Papay, 2014, Sutcher, Darling-Hammond & Carver-Thomas, 2019). Stability combined with shared planning and collaboration helps teachers improve their effectiveness (Jackson & Bruegmann, 2009). When my school partook of efforts to improve in these areas, teachers were able to flourish, and the school was set up for success for several years.

The school I inherited as a first-year principal was a microcosm of many urban teaching environments in the United States. Nationally, in 2012-2013, close to 16% of teachers left the school at which they taught the prior year, a figure which includes both those who left the teaching profession and those who moved to a different school (Sutcher, Darling-Hammond & Carver-Thomas, 2019). These figures are often multiplied at high-minority, low-SES schools. These schools experience difficulty hiring and annually have high turnover. This happens in part due to inequitable funding which leaves many low wealth urban districts with inadequate

resources. Thus, they pay lower salaries and often have poor working conditions (Darling-Hammond, 2010; Adamson & Darling-Hammond, 2012).

The schools I worked in during my career in K-12 education were all overwhelmingly minority. With the exception of one African-American school, the schools I taught at and worked as a principal at were all nearly 100% Latinx. A major issue currently facing U.S. education is the disparity between minority teachers and minority students in the U.S. educational system. This is particularly true for Latinx students.

Efforts to increase the number of Latinx teachers in the U. S. have typically focused on recruitment. However, research suggests that, while U. S. efforts to recruit minority teachers have been largely successful, the corresponding efforts to retain them in the teaching profession have not been nearly as successful (Ingersoll, May, & Collins, 2019). A school's demographic characteristics (e.g., percentage of low-SES students, percentage of minority students, etc.) play a major role in influencing White retention and attrition. However, organizational conditions such as classroom autonomy and influence in site-based decision-making play a much stronger role in minority teacher retention (Ingersoll, May, & Collins, 2019). Research on the conditions that influence minority teacher recruitment and retention has tended to group all minorities together. Thus, it's imperative that empirical data be used to ground the argument over what conditions influence Latinx teacher retention and attrition.

1.2 Goals

The scope of this dissertation looks at teacher retention and attrition in different ways. The first article attempts to capture quantitatively which factors most influence job satisfaction and teacher attrition among teachers in Mexico. The research found several interacting variables

that influence job satisfaction in teacher attrition. The second article examines the Mexican teachers' Latinx counterparts in the United States. The quantitative analysis in the second article attempts to determine which factors most influence teacher satisfaction and retention among Latinx teachers in the United States. The results showed that classroom autonomy, increased influence in site-based decision-making and having a supportive, effective, principal all played major roles in teacher retention among Latinx teachers in the United states. The third article uses narrative inquiry to take a deeper look at why certain factors influence job dissatisfaction and teacher attrition in Mexico.

Research questions that will be answered in this dissertation include the following:

- How do Latinx teachers differ from others on measures of job satisfaction and teacher retention?
- Is there a need to disaggregate data for Latinx and other minorities when discussing school culture, teacher retention and job satisfaction
- 3) What factors play a role in job satisfaction and teacher retention among Latinx teachers in Mexico?
- 4) What demographic characteristics correlate with specific factors influencing teacher attrition among teachers in Mexico?
- 5) How do the factors that influence job attrition and retention play out at one highminority, high-needs school in the Southwestern United States through the lens of autobiographical narrative inquiry?

1.3 Summary of Articles

My first dissertation article "Teacher Attrition and Job Dissatisfaction in Mexico: Why Do Mexican Teachers Leave the Profession?" analyzes data on teacher recruitment, preparation and retention from OCED'S Teaching and Learning International Survey. The article focuses on comparing school climate factors that influence job satisfaction in teacher retention in Mexico. The study joins the limited body of research on teacher attrition in Latin America and Mexico (see Avalos & Valenzuela, 2016; Marcelo & Vaillant, 2017; Madero, 2019). While researchers have studied many factors related to teacher dropout in the United States and Western Europe, research on teacher dropout in Latin America and especially in Mexico is much more limited. This article uses data from the 2013 Teaching and Learning International Survey and produced a variety of results that could inform future education policies and interactions between and among teachers, school leaders and policymakers. The results showed effects by gender, years of experience, age, and discipline problems, relationships between students and teachers, and perceptions of collaboration in both job satisfaction and work regret. More research is needed to examine the influence of other factors, as well as to explain the teacher's variables that influence these factors.

"Job satisfaction and teacher attrition among Latinx teachers in the United States: a quantitative analysis" examines and compares the recruitment and retention of Latinx and White school teachers and attempts to empirically ground the debate over minority teacher shortages. A large gap persists between the increasing percentage of Latinx students in U. S. schools and the percentage of Latinx teachers in the U. S. school system. Nearly one in every four children currently attending U. S. schools is Latinx and demographic projections suggest that by 2050, the Latinx school-aged population will more than double. Despite consistent, successful efforts to recruit minority teachers, Latinx teachers make up only about 7% of teachers (Fry & Gonzales,

2008). While efforts to recruit minority teachers have been largely successful, turnover rates among minority teachers have been significantly higher than among White teachers. Research suggests organizational conditions like classroom autonomy and influence in site-based decisionmaking appear to have the strongest influence on minority teachers' decisions to stay in teaching or to leave the profession (Ingersoll, May & Collins, 2019).

However, most of the research on minority teacher retention has lumped all minorities into one non-White category. Thus, this research uses empirical data to determine which organizational conditions are most strongly related to Latinx teachers' decisions to stay in teaching or to leave the profession. This paper examines data from the National Center for Education Statistics' nationally representative National Teacher and Principal Survey to determine what organizational conditions most strongly influence Latinx teachers' decisions to stay in teaching or to leave the profession. The data in this second dissertation article shows that classroom autonomy, influence in site-based decision-making and having an effective supportive principal were very strong factors influencing job satisfaction and teacher retention among Latinx teachers.

My third article, "Stories of living and stories of leaving: a Latinx autobiographical narrative inquiry" uses autobiographical narrative inquiry to further explore job satisfaction and teacher retention among Latinx and other teachers at one high-minority, high-poverty school in the mid-Southern United States. In the previous two empirical studies, several organizational factors were found to influence job satisfaction and teacher retention among Latinx teachers. For example, it was revealed that Latinx teachers place a high priority on the presence of a supportive, effective principal, participation in site-based decision-making, and classroom autonomy. Data analysis can only go so far in exploring these outcomes. Narrative inquiry

allows me to achieve a more upfront and personal understanding of these outcomes. Autobiographical narrative inquiry is used as a research tool to provide a way for me to examine my pedagogical and research practices from my own lived evocative experiences lived over time and across my career.

1.4 Methodology and Data Analysis

The data for my research on Latinx teacher attrition comes from both quantitative and qualitative sources. My first two dissertation articles are quantitative articles which use secondary analyses of very large national databases. The Teaching and Learning International Survey, used in the first dissertation article, surveyed 3,198 Latinx teachers in Mexico. The National Teacher and Principal Survey, used in the second dissertation article, collected data on 49,470 teachers in the United States. My third dissertation article, an autobiographical narrative inquiry, uses a sample of one Latinx teacher. The first two articles broaden the scope of my research and allow me to look at trends affecting Latinx teacher attrition on an international scale. The third article, allows me to "burrow" into the research by examining a case study of one. By using contrasting research methodologies, I am able to expand both the breadth and the depth of my research.

1.5 TALIS

The OECD has conducted a worldwide study on teachers since 2008: The Teaching and Learning International Survey (TALIS). I use TALIS for my research because it focuses on the working conditions of teachers and looks at the organizational conditions that affect how teachers' work is recognized, appraised, and rewarded, and the influence these factors have on job satisfaction and teacher attrition. The study provides insights into teachers' beliefs and

attitudes towards teaching, the pedagogical practices that they adopt, and the factors related to teachers' sense of self-efficacy. TALIS is designed for teachers who teach 15-year-old students in the 34 countries that comprise the OECD. In Mexico, a total of 3,138 teachers were surveyed.

Each participating country was required to provide a minimum sample size of 4000 teachers from at least 200 schools. Following TALIS guidelines, at the time the TALIS samples were selected, the two neighboring schools in the TALIS collection were designated as replacements in the event a school did not qualify. TALIS guidelines specified that 20 teachers were to be selected in each school in a random probability sample, except in the event that there were not 20 teachers in the school, in which case all teachers were selected. TALIS established a response-rate target of at least 75% of schools and at least 75% of teachers within the schools to participate in the sample. In order for an education systems data to be included in the TALIS sample a minimum of 50% of schools before replacement and 75% of schools after replacements had to be included.

TALIS adjudicated the data collected by each educational system to ensure that both principal data and teacher data met TALIS international guidelines. The principal and teacher data were adjudicated separately. For school-level data adjudication depended on only school data (the principal participation) and for teacher-level data, adjudication depended on only teacher data (50 percent of teachers in the school had to participate). Thus, TALIS 2013 consists of two separate datasets – school level data set consisting of principal surveys – in the teacher level data set system of teacher surveys in instances when a teacher level percent participation reached the 54% standard before replacements

Internationally, TALIS 2018 was designed to be extremely inclusive. *In-scope* teachers,

those comprising the international target population, were all classroom teachers teaching at least one ISCED Level 2 class and their school principals, and all subject matters are included. *Out-ofscope* teachers who were not included in the dataset consisted of the following:

• Teachers in schools for special education needs students and their principals

• Substitute, emergency, or occasional teachers who fill in on a temporary basis (no longer than six consecutive weeks).

• Teachers teaching exclusively to adults, whether the adult students follow a standard or an adapted curriculum.

• Teachers on long-term leave who are absent and not expected to be back during the survey administration period.

• Teacher aides who are typically non-professional or paraprofessional staff supporting teachers in providing instruction to students.

• Pedagogical support staff who provide services to students to support the instructional program, such as guidance counselors or librarians.

• Health and social support staff such as doctors, nurses, psychiatrists,

psychologists, occupational therapists, and social workers.

The target population for TALIS 2013 consisted of schools providing ISCED Level 2 education as well as their principals and their teachers. In Mexico this corresponded to "escuela secundaria" or secondary school which is the common name for grades 6-8. TALIS countries that had participated in PISA in 2012 had the option of implementing TALIS in the same schools that implemented PISA and Mexico chose to do so. Additionally, TALIS schools that had

participated in PISA 2012 had the option of giving the TALIS survey in ISCED Level 1 (primary school) and ISCED Level 3 (senior high school) schools and Mexico elected to do so.

A total of 3198 teachers from 194 different Mexican schools were surveyed. Teachers were selected for the study based on a random stratified sample. First the country provided OCED with a list of all schools which provided education at ISCED Level 2. A stratified sampling of schools was randomly selected. Stratification in Mexico was selected based on both school size and source of funding. 200 schools were selected out of a total of 15,881 schools in Mexico that provide ISCED Level 2 education. From these 200 schools 20 teachers were selected at random from each school. Thus, the teacher sample expected size was 4000. The actual sample size of 3198 teachers was arrived at after eliminating schools who opted out of the study and teachers who were non-respondents.

The TALIS survey found the following characteristics of teachers in Mexico. 54% of teachers are women and the average age is 42. Of those surveyed, 90% completed university or other equivalent higher education while 62% completed a teacher education or training program. The average Mexican teacher has 16 years of teaching experience. Mexican teachers have an average of 33 students in class on average. Following previous research on teacher turnover (e.g. Ingersoll, May & Collins, 2019), the analysis of variance will include control variables for two key teacher characteristics: gender and age. Because age has been found to have a U -shaped relationship to turnover (Ingersoll, 2001), I transformed age into three categories – younger (less than 30), middle-aged (31-50), and older (greater than 50).

Finally, I focus on the relationship of turnover with five key aspects of organizational conditions in schools: student discipline problems, school leadership and support, school-wide decision-making influence, teacher classroom autonomy, and teacher professional development

activities. I focus on these characteristics of schools because they have long been considered important aspects of effective school organization (e.g., Goodlad, 1984; Chubb & Moe, 1990; Ingersoll & May, 2011; Ingersoll, May, & Collins, 2019). They also are amenable to policy changes and are available from the data source. This stage of the analysis will examine the likelihood that individual teachers will leave their teaching jobs as related to the abovementioned measures school organizational characteristics.

1.6 NTPS

The data for my research on U.S. teachers comes from the National Center for Education Statistics' (NCES) nationally representative National Teacher and Principal Survey (NTPS). This is the largest and most comprehensive data source available on occupational and organizational variables involved in staffing U.S. schools. My research examines the 2015-1016 NTPS. The 2015-16 NTPS sampled a total of 49,470 teachers divided between traditional public and public charter schools (private schools were not surveyed in the 2015-16 NTPS). The very large sample sizes included in these databases will increase the reliability of the data analyses I will perform. Each cycle of the NTPS includes separate questionnaires for school and district administrators and for a random sample of teachers in each school. In the NTPS's previous iteration, the Schools and Staffing Survey, the same sample of schools were contacted and all those in the original teacher sample who had departed from the school were given follow-up surveys to obtain information on their departures. The Teacher Follow-Up Survey (TFS) was composed of this latter group of teachers along with a representative sample of teachers who stayed in their teaching jobs. The TFS had the advantage of gathering data from teachers who have actually left the profession rather than those who have considered leaving while continuing to teach. NCES

has not conducted a follow-up survey in conjunction with the NTPS, nor have they announced plans to do so.

My classification of Latinx teachers, minority teachers, and White teachers is based on the NTPS teacher respondent's identification of their race and ethnicity in the NTPS instrument. Non-minority includes all teachers identified as White, non-Hispanic. Minority includes the following classifications: Hispanic, regardless of race; Black, non-Hispanic; Asian, non-Hispanic; Native Hawaiian/Pacific Islander, non- Hispanic; American Indian/Alaska Native, non-Hispanic; and Two or more races, non-Hispanic. Latinx includes all teachers who identified as Hispanic, regardless of race.

In the first stage of the data analysis, I use univariate analyses of variance and Tukey post-hoc analysis to determine whether different ethnic groups differ significantly on measures of job dissatisfaction and teacher attrition presented on the NTPS. The data analysis will include a series of ANOVA's to determine whether the effect of three school culture variables differs significantly among Black, White and Latinx teachers. Based on previous research, the three variables will be classroom autonomy, input into site-based decision-making and the presence of an effective, supportive principal. I will perform the data analysis using IBM's advanced statistical analysis software, SPSS. This stage of the analysis will utilize the 2015-16 NTPS. In the statistical models, the dependent variables – teacher attrition and the related variable "job satisfaction"– are dichotomous based on answers given to related items on the 2015-16 NTPS administration.

Information for data sampling, and data analysis comes from the "Considerations for Analysis of NTPS and PFS Data" (NCES, 2016). The sampling frame for public schools includes traditional public schools, public charter schools, DoD-operated domestic military base schools,

Bureau of Indian Education-funded schools, and special purpose schools, such as special education, vocational, and alternative schools. Schools outside of the United States, schools that teach only prekindergarten, kindergarten, or postsecondary students, and administrative units that do not offer teacher-provided classroom instruction were deleted from the CCD frame prior to sampling for NTPS. Public schools that closed in the school year 2013–14 or were not yet opened were not included.

The sampling frame for the teacher questionnaires consisted of lists of teachers who worked at schools selected for the NTPS sample. Teachers were defined as any staff who taught a regularly scheduled class to students in grades K–12 or comparable ungraded levels. Teacher Listing Forms (TLFs) were collected from sampled schools by mail or online, via clerical lookup, or through vendor purchase. Schools were asked to provide teachers' full- or part-time teaching status and their subject matter taught, and the sample of teachers was selected from all sampled schools for which a Teacher Listing Form was completed.

There were two key differences between the SASS and NTPS in the survey structure. First, unlike SASS, the 2015–16 NTPS is not explicitly designed to produce state-level estimates. Second, private schools were not included in NTPS data collection for the 2015–16 cycle. In addition, for the 2011–12 SASS, regular public schools were separated into four strata (primary, middle, high, and combined schools) while charter schools were separated into three strata (elementary, secondary, and combined). For the 2015–16 NTPS, all regular public schools and charter schools used the same four strata for grade level. In the 2011–12 SASS, teachers were placed into strata for sampling based on years of experience, with four experience levels as follows: first year; 2-3 years; 4-19 years; and 20+ years. This stratification was used to sort after control number, with teacher subject used later in the sort order. For the 2015–16 NTPS,

experience as a teacher did not factor into the sort order. Instead, teachers were placed into strata based on a combination of subject taught (Math, Science, English/Language Arts, Social Studies, Other) and teacher order within the teacher listing for the school. This process led to a diversification of the sort order with respect to these variables.

The 2015–16 NTPS used a combination of mail-based methodology and Internet reporting for questionnaires, with telephone and in-person field follow-up. An advance letter was mailed to sampled schools during the summer of 2015 to verify school addresses and eligibility. Subsequently, a package containing school and principal surveys and explanatory information was mailed to sampled schools. The Census telephone center called sampled schools to verify school information, establish a survey coordinator, and follow up on the Teacher Listing Form (TLF), which served as the teacher list frame. Sampled teachers were mailed questionnaires. Field follow–up was conducted for schools that had not returned the TLF. Schools were called from census telephone centers to remind the survey coordinator to have staff complete and return all forms. Sampled principals and teachers were called from the telephone centers to attempt to complete the questionnaire with them over the phone. Field follow–up was conducted for schools and teachers that had not returned their questionnaires.

The U.S. Census Bureau conducted the data processing. Each questionnaire was coded according to its response status—for example, whether the questionnaire contained a completed interview, a respondent refused to complete it, or a school closed. The next step was to make a preliminary determination of each case's interview status, i.e., whether it was an interview, a non–interview, or if the respondent was ineligible for the survey. Once the data were compiled, a computer program conducted a series of quality control checks, such as range checks, consistency edits, and blanking edits, and generated a list of cases where problems occurred in

each survey. After the completion of these checks, the program made a final determination of whether the case was eligible for the survey, and if so, whether there was sufficient data for the case to be classified as an interview. As a result, a final interview status recode value was assigned to each case. Data files for 2015-16 NTPS are available for both Stata and SPSS.

Secondary data analysis easily lends itself to the study of minority teacher recruitment and retention. There are very large, national and international databases replete with data on why teachers get into teaching and why some stay in teaching and others leave teaching. There is also an established line of research using these databases to examine issues in teacher recruitment and retention (Ingersoll, 2001; Ingersoll & May, 2011; Ingersoll, May & Collins, 2019). Secondary data analysis as a research methodology has both pitfalls and advantages. As an advantage, it allows researchers to access data on a scale that they cannot hope to replicate firsthand. The expertise involved in developing good surveys and good data sets can lead to very high-quality data. In my case, it allowed me to use data from the National Center for Education Statistics' recent National Teacher and Principal Survey (NTPS). It also allows data to be analyzed from different perspectives, providing opportunities to discover new relationships not considered in the primary research.

The chief concern with secondary data analysis is that, because of the socially constructed nature of education data, the act of reducing social data to simple numeric form cannot fully encapsulate the complexity of human behavior (Smith, 2010). The perceived holes left in research by data analysis can be filled by the use of qualitative research, specifically narrative inquiry.

1.7 Narrative Inquiry

Connelly and Clandinin (1990) pioneered the use of narrative inquiry in their groundbreaking research into what teachers know and how they come to know it, however narrative inquiry can easily be expanded to other fields of education research or research in general. The *Handbook of Narrative Inquiry: Mapping a Methodology* (Clandinin, 2006) demonstrates that narrative inquiry is a leading way to study educational experience in the world. The chapter by Pinnegar and Daynes is (2006) is especially important since it chronicles the emergence of narrative inquiry as a grounded and defensible research method. Gomez (2007) describes the narrative inquiry handbook as representative of "a broad-ranging overview of a nascent branch of study."

According to Craig (2011), teacher education is "inextricably linked to teachers' lives" and "the link between teacher education and narrative inquiry could not be stronger" (p. 20). Teacher recruitment and retention are also inextricably linked to teachers' lives and to narrative inquiry. Likewise, while secondary data analysis can never successfully encapsulate the complexity of teaching, since teachers live complicated lives and practice cannot be reduced to simple numeric form, narrative inquiry more closely and more fully approximates the actual stories and lived experiences of teachers.

My work lends itself especially well to narrative inquiry. My research looks at organizational conditions that are related to minority teacher attrition and retention. Narrative inquiry has frequently been used to document tensions and resistance in teachers' stories (Connelly & Clandinin, 1999; Huber & Clandinin, 2004; Craig, 2006, 2009). My research adds

to a growing body of research in narrative inquiry focusing on multiculturalism and diversity in education (Conle, 1999; Ross & Chan, 2008). Young et al. (2010) explored aboriginal teacher narratives in Western Canada and Xu and Connelly (2009) used the narrative inquiry process to examine the need to create curious, creative minds in multicultural educational settings. Rodriguez (2007), in a narrative inquiry piece somewhat similar to my research, examined the experiences of burnout felt by male Hispanic teachers in the southern United States. As such, I am building on a long line of narrative inquiry research in multicultural settings.

Clandinin and Connelly (1996) originated a set of useful narrative terms and narrative inquiry "teacher stories – stories of teachers – school stories – stories of school." Teachers' stories are the stories teachers live and relive and tell and retell, while stories of teachers are stories that others tell for teachers (Craig, 2011).

An important concept related to teacher stories that will play a role in my narrative research is *counter-storytelling* (Lindemann Nelson, 2001) an often-used tool of narrative inquiry. Lindemann Nelson described identify markers, such as Latinx, Black, female or gay, that indicate people as candidates for certain treatment in society, including what they can do and what they can know. Lindemann Nelson used counter stories as a means to contest the identities established by the majority society and advocated for the restorative function of counter-stories as a way to rebut the master narrative created by majority society. Counterstories have also been used as a tool to counter dominant narratives by Latinx researchers, most notably Solórzano and Yosso (2002). As they describe how they compose counter-stories, the authors discuss how the stories can be used as theoretical, methodological, and pedagogical tools to challenge racism, sexism, and classism and work toward social justice (Solórzano & Yosso, 2002, p. 23). Irizarry & Donaldson (2012) use counter-storytelling in describing the reasons why Latinxs enter the

teaching pipeline. The teaching profession, as narrated by the dominant White majority, is composed largely of "good girls" (Galman, 2006), who had positive experiences in schools and entered the profession inspired by teachers with whom they had positive interactions (Lortie, 1975). The Latinx students in Irizarry and Donaldson's research did not conform to that dominant narrative. The majority of the high school students interested in teaching and the preservice Latinxs were motivated by a desire to redress negative experiences and make schools better for Latinxs. One high school student explained:

I want to be that teacher that I really never had. Most of the teachers, not all but most of them, like, hate Latinos. They just don't like us. That's it. They treat us bad and don't teach us the right way. They don't think we are going to make it in life, so they like, don't do anything to help us. (Irizarry & Donaldson, 2012, p. 161).

In contrast to the well-entrenched belief that teachers enter the profession as a result of positive experiences in schools and caring relationships with teachers, Latinx student teachers cited a desire to combat the negative experiences they had as K - 12 students as their primary motivation for entering teaching. According to the authors, they viewed schools as "sites of transformation and possibility" (p. 167) and overcame numerous obstacles to pursue a teaching career. Thus counter-narratives and counter-storytelling will be an important part of my research as I seek to focus on Latinxs and their specific reasons for entering teaching, staying in teaching, and leaving teaching, reasons which challenge the traditional, dominant, White narrative.

Two commonplaces of narrative inquiry as described by Craig (2011) are germane to my research. Narrative resonance is in illuminative tool that arose in the context of teacher education research. As described by Conle (1996), it is:

A process of dynamic, complex, metaphorical relations. It is not confined to one single strand of connections. It is a complex relationship among many aspects of a story. The metaphorical connections or correspondences come holistically as a field, a scene, a narrative image. (p. 313). Resonance can be found as teachers narrate their experiences in later narratives of their experiences alongside one another. Thus, resonance can be a valuable tool in interpreting data and may be used to triangulate teacher experiences.

A second concept I will seek in my narrative inquiry is narrative authority as described by Olson (1995). In contrast with the positional or epistemic authority offered by positivism and post-positivism, the concept of narrative authority develops through experience made manifest in relationships with others. Olson states that

Authority comes from experience and is integral as each person shapes his or her own knowledge and is shaped by the knowledge of others. Thus, narrative authority becomes the expression and enactment of the person's personal practical knowledge that develops as individuals learn to authorize meeting in relationship with others. (Olson & Craig, 2001, p. 670) Craig (2011) points out that one of the advantages of narrative authority is that it is

"knowledge carved from experience over time and across context" (p. 27). Thus, in my research, I will attempt to gain understanding into the difficult decision surrounding teacher attrition and retention based on teachers' narrative authority gained by experience over time through different contexts.

The qualitative portion of my research will focus on narrative inquiry using semi structured interviews. Narrative inquiry is well-established as a research methodology yet is comparatively new in the education field. Thus, it's important to turn to a discussion of narrative research, how its truth claims are supported, and measures that may be taken to improve reliability and validity.

Narrative inquiry as a research method, while well documented as a viable and defensible methodology and as a significant contributor to the fields of teacher education and curriculum for more than 30 years, does face some challenges. For example, dogmatic, overly conservative

institutional review boards and journal editors as well as research colleagues may consider the approach under-theorized and at times tend to equate relationship with research contamination (Craig & Huber, 2006).

In the USA, increased attention has been paid to reliability in qualitative research in part due to federal attempts to generally discredit qualitative research and its accompanying validity constructs. For example, The No Child Left Behind Act of 2001 calls for "scientifically based research" which it defines as 'the application of rigorous, systematic, and objective procedures to get reliable and valid knowledge. The research ... must employ rigorous data analysis to test the stated hypothesis ... The definition includes the expectation that the studies are replicable." (AACTE, 2002; NRC, 2002). Flinders (2003) asserts that the U. S. Department of Education's *Strategic Plan 2002-2007* supports only "studies that are backed by 'qualified scientists," that "address causal questions," and that employee "randomized experimental designs" (p. 380-381). Many will recognize this as an attempt to discredit any research that is not based on purely experimental designs.

Regardless of the USDE's attempts to discredit any research that is not purely experimental in design, a long line of research addresses increasing reliability and validity in narrative research. Scholars have addressed validity concerns in many types of qualitative research, including: action research (Bradbury & Reason, 2011), ethnography (Hammersley, 1998), discourse analysis (Seale, 1999), feminist/post structural research (Lather, 2001), and social science and applied fields like education (Eisenhardt, & Howe, 1992; Maxwell, 1992). Traditionally, validity in qualitative research involves determining the degree to which researchers' claims about knowledge correspond to the reality (or the reality as constructed by research participants) being studied (Eisner & Peshkin, 1990). Qualitative researchers routinely

employ member checking, triangulation, thick description, peer reviews, and external audits. Researchers engage in one or more of these procedures and report results in their investigations. Typically, validity is grounded in active interaction between the inquiry and the research participants by means of such techniques as member checking (reassuring the credibility of the constructions of the participants) (Lincoln & Guba, 1985, 2000) and triangulation (verifying facts through multiple data sources) (Hammersley & Atkinson, 1995; Seale, 1999).

My research addresses concerns about validity by triangulation with quantitative analysis and thick descriptions. The purpose of the thick description is to create verisimilitude, the feeling that readers have experienced or could experience the events being described in a study. In this way credibility is established with readers who read a narrative account and are translated into a setting or situation. A thick description provides as much detail as possible and may involve describing an interaction, experience, or action which brings a relationship or an interaction alive between two or more persons or provides a detailed rendering of how people feel (Denzin, 1989). Thick descriptions are holistic and involve prolonged engagement, and they involve triangulated, descriptive data (Cho & Trent, 2006).

This third article isclaro qualitative research focused on myself as a Latinx teacher and later as a Latinx principal, including both my stories of staying and my stories of leaving (Craig, 2014). The autobiographical narrative inquiry I use will explore why different factors, such as those explored in the quantitative analysis, influence Latinx teachers' decisions to remain in or to leave the teaching profession. By undertaking three different types of research I hope to provide a robust look at Latinx issues in teacher recruitment and retention, and by using three different data sources, I will be able to triangulate data adding reliability and validity to my findings.

1.8 Why reduce the gap between Latinx teachers and students?

There are three conceptual arguments for why the gap between Latinx teachers and students is detrimental and why increasing the racial/ethnic diversity of the teaching force would be beneficial. The first argument, the "demographic parity" argument holds that minority teachers are important as role models for both minority and white students. The underlying assumption is that the racial/ethnic makeup of the teaching force should reflect the student population and the larger society (Banks, 1995; Cochran-Smith, 2004; Dilworth, 1992).

The second argument, the "cultural synchronicity" argument, holds that minority teachers are likely to have "insider knowledge" due to shared life experiences and cultural backgrounds that will benefit their minority students. Proponents of the "cultural synchronicity" argument cite a growing number of empirical studies showing that minority teachers have a positive impact on minority students (Villegas & Lucas, 2004).

A third related argument holds that not only are minority teachers better suited to teaching minority students, but they are also likely to be motivated by a "humanistic commitment" to making a difference in the lives of disadvantaged students. In turn, this argument holds, minority teachers are more likely than nonminority candidates to seek employment in schools serving predominantly minority student populations, often in lowincome, urban school districts (e.g., Foster, 1997; Haberman, 1996; Ladson-Billings, 1995; Quiocho & Rios, 2000). Research has shown that these same kinds of schools—urban, poor public schools serving minority students— disproportionately suffer from general teacher shortages (e.g., Liu, Swann, & Khalil, 2008). Hence, diversification of the teaching force in this view is a solution to the more general problem of teacher shortages in disadvantaged schools.

1.9 What causes minority teacher shortages?

Several factors have traditionally been attributed to causing minority teacher staffing problems (Zumwalt & Craig, 2005; Villegas & Irvine, 2010). These factors concerned different stages in the pipeline of supply into teaching. One prominent factor, according to this "deficiency" view, has been that minority student underachievement has resulted in fewer minority students entering the postsecondary level and lower graduate rates for those who do enter college (Banks, 1995). In turn, shrinking percentages of minorities enter teaching.

While not all critics have subscribed to the deficiency view of minority teacher shortages, many critics have typically identified problems with recruitment as being the major issue in the shortage of minorities in the teaching occupation (Zumwalt & Craig, 2005; Villegas & Irvine, 2010). The prevailing policy response to the staffing problems has been to attempt to increase the supply of minority teachers (Hirsch, Koppich, & Knapp, 2001; Liu, Rosenstein, Swann & Khalil, 2008; Rice, Roelke, Sparks, & Kolbe, 2008). However, recent research indicates that recruitment has little to do with the minority teacher shortage and that our failure to retain minority teachers has caused the current minority teacher shortage (Ingersoll & May, 2011; Ingersoll, May & Collins, 2019). As a result, more attention needs to be paid to why minority teachers leave teaching and how this affects the overall minority teacher shortage (Ingersoll & May, 2011). This is a primary reason why I have chosen the dissertation study that I have.

1.10 The Economic Theory of Supply and Demand

Another concept underlying the minority teacher shortage is the economic theory of supply and demand which numerous authors have applied to the teaching labor market (Hagstrom, Darling Hammond, and Grissmer, 1988; Boardman, Darling Hammond, & Mullin, 1982). The *supply* can be defined as the number of qualified teachers willing to teach at a given level of compensation. Compensation includes salaries and bonuses and other forms of monetary compensation, expected future earnings, and benefits in addition to other types of rewards derived from teaching that can be included under the headings of "working conditions" and "personal satisfaction." The teacher supply model draws upon the multiple-choice model of McFadden (1973) assuming that each adult in the state must make 2 choices: (1) what district to live in, and (2) whether to apply for a teaching position or for some other occupation. The decisions regarding occupation and location depend on which alternatives maximize his/her utility. According to this theory, utility is considered a function of p, the teacher's income; Ω , a vector of characteristics that describe his work environment; Ψ a vector of characteristics describing his/her location; and C, a vector of individual characteristics which reflect the teacher's taste, (Boardman, Darling Hammond, & Mullin, 1982):

 $U = U(p, \Omega, \Psi, C)$

The *Demand* can be defined as the number of teaching positions offered at a given level of compensation. The demand side theory of the teacher labor market typically follows Deacon's (1978) approach, which supposes that demand in each district relies on the district's ability to maximize a social welfare function, *W*, subject to income, education production, and municipal budget constraints. *W* is an increasing function of four vectors: Y_Y which is a vector of educational output levels for each student in district Y; B_Y which denotes the output level of non-

educational public goods and services, and I_V which measures district V's total after-tax income. Furthermore, each districts welfare function, W, depends on a vector of exogenous district characteristics, Z_V , which controls for different districts' tastes for education and different tax base compositions. Thus, in this model, W may be expressed as a vector consisting of the following inputs:

$$W_Y = W(y_Y, B_Y, I_Y; Z_Y)$$

The basic principle behind supply of teachers is this: people will become or remain teachers if teaching is the most attractive activity to pursue among all activities available to them. An activity is attractive when it's desirable in terms of ease of entry and overall compensation including salary, benefits, working conditions, and personal satisfaction. In designing policies that promote recruitment and retention the goal would be to increase the rewards of teaching relative to those of the competing occupations. Potential policy levers that are well-suited for research include ease of entry, monetary compensation, working conditions, and personal satisfaction. As a Latinx teacher, the primary features that attracted me to teaching were the ease of entry and the monetary compensation (I received a \$4,000 annual bilingual stipend beginning with my first year of teaching). Later a principal working with Latinx teachers, I personally witnessed how working conditions and personal satisfaction influenced their decision to stay in teaching.

1.11 Critical Race Theory and Latinx Critical Race Theory

The final conceptual theory underlying my research is Critical Race Theory (CRT) and Latina/o Critical Race Theory (LatCrit). First developed within legal studies, critical race theory and Latina/o critical race theory have gained traction within educational research as scholars have sought to understand the role of race, racism, and racialization in the educational experiences and outcomes for communities of color (Dixson & Rousseau, 2006; Ladson-Billings & Tate, 1995; Milner, 2008). CRT and LatCrit challenge hegemonic ideologies such as meritocracy, objectivity, and neutrality and seek to expose the ways in which racialized power relations shape the experiences of people of color (Chapman, 2007; Sleeter & Delgado Bernal, 2004). Both theoretical frameworks examine race at the center of relations of power, however LatCrit extends the focus to include the intersections between race, class, gender, language, ethnicity, and immigration status among others (Delgado & Stefansic, 2001; Huber, 2010; Yosso, 2006). This is personally relevant to me. As a Latinx teacher working for a White principal at the beginning of my career, I felt the effects of being left out of site-based decisionmaking as the principal continually relied on advice from her favorite (i.e. White) teachers to make decisions that affected the entire faculty. Drawing on these experiences I was later able to create a more inclusive environment for all teachers as a Latinx principal.

1.12 Framework

The disheartening academic outcomes for Latinxs may be connected to the lack of Latinx teachers who are uniquely equipped to meet the needs of the students (Monsó & Rueda, 2001; Ochoa, 2007). White European Americans comprise 83% of all teachers while Latinxs account for only about 7% of teachers in the U. S. (National Center for Education Statistics, 2009). Research shows that academic, psychological, and social benefits accrue to minority students who are taught by minority teachers (Gay, Dingus, & Jackson, 2003; Villegas & Lucas, 2004). Teachers of color tend to hold higher expectations for minority students (Romo & Falbo, 1994; Yeo, 1997); are more likely to value the knowledge and cultural frames of reference students "bring to school" (Irvine, 1989; Monsó & Rueda, 2001), and typically enter the profession with a heightened awareness of the sociopolitical contexts in which students of color are educated (Beaubeouf-LaFontant, 1999; Quiocho & Rios, 2000). They are also more likely to work in "hard to staff," high-minority, high-poverty schools (Ingersoll & May, 2011) and have greater retention rates in those settings (Villegas, 2007, 2009).

Researchers have concluded that the minority teacher shortage has resulted in unequal access to quality teaching for urban public schools serving minority students. Unequal access to educational resources has long been considered a primary cause of the stratification of educational opportunity, the achievement gap and unequal occupational outcomes for disadvantaged students (Dreeben & Gamoran, 1986). In light of this shortage of minority teachers, there is a surprisingly limited supply of empirical investigation, especially using nationally representative data, into how the minority teachings force has changed in recent years, whether there is still insufficient employment of minorities and where minority teacher staffing

problems originate. Previous research has performed comprehensive data analyses using data from the SASS and the TFS to compare White and minority teacher recruitment and retention (Ingersoll and May 2011; Ingersoll, May & Collins, 2019). In my research, I performed a similar data analysis using data from the more recent NTPS, however, whereas previous studies group all minorities into the same non-White category, my research focuses solely on teachers who identify as Latinx.

A traditional and oft-cited "deficiency" perspective has placed the blame for the minority teacher shortage at the feet of minority teachers and teacher candidates during different stages in the pipeline of supply into teaching. One prominent factor, according to this "deficiency" view, has been that minority student underachievement has resulted in fewer minority students entering postsecondary level studies. The lack of minorities entering colleges and universities in turn leads to lower graduation rates for those who do enter college (Banks, 1995). In turn, shrinking percentages of minorities enter teaching.

However, research shows that minority recruiting efforts have been largely successful. A more logical approach to understanding the minority teacher shortage uses the organizational framework. The organizational theory of staffing looks at organizational factors such as school conditions, school leadership and recruitment and retention efforts to understand job satisfaction and teacher attrition. In a classical use of the organizational theory of staffing, Ingersoll, May and Collins (2019) found that minority teacher retention was not influenced by the same demographic factors which typically influence White teacher retention (i.e. percentage of low-SES students, percentage of minority students, percentage of minority staff). Rather they found that the two biggest factors influencing minority teacher retention were both organizational conditions: the amount of classroom autonomy teachers had in a school and the amount of

influence teachers had in site-based decision-making. However, most research on minority teacher recruitment and retention has grouped all teachers together. Just as the factors influencing minority teacher retention are different from those influencing White teacher retentions, it is likely that the factors influencing Latinx teacher retention will be different than those influencing other minorities. It is important then to empirically ground the arguments surrounding Latinx teacher recruitment and retention by examining data from the National Teacher and Principal Survey and other sources.

In the "sociology of organizations" framework or the organizational theory of teacher retention teacher employment and staffing issues, like those in other industries, cannot be fully understood without "putting the organization back" into the analysis. When applied to teacher turnover, organizational theory looks beyond increases in teacher retirement and in student enrollment as the primary causes of teacher shortages. It investigates the possibility that there are other factors – those kinds of organizational characteristics and conditions of schools – that are driving teacher turnover and, in turn, school staffing problems. Organizational theory shows that popular educational initiatives, such as teacher recruitment programs, will not solve the staffing problems schools face if they do not also reverse the organizational sources of teacher retention (Ingersoll, 2001).

1.13 Review of the Literature

In the United States, about 8% of teachers leave the profession annually and another 8% leave their schools to work at a different school (Carver-Thomas & Darling-Hammond, 2017). This is about twice the rate of high-performing educational jurisdictions found in countries such as Canada, Finland and Singapore (Carver-Thomas & Darling-Hammond, 2019). First, it is

important to examine why teacher retention is important. Next, it is relevant to look at existing research and the gaps that exist in the research among different regions and teacher ethnicities.

The high rate of teacher attrition takes a toll on all teachers, students, schools and districts. When turnover leads to teacher shortages, schools often respond by hiring inexperienced, unqualified teachers, or by increasing class sizes, both of which impact student learning (Sutcher, Darling-Hammond, & Carver, 2019). A study of approximately 850,000 New York City fourth- and fifth-grade students over an eight-year period found that teacher turnover has a significant negative effect on student achievement, particularly in schools serving large proportions of low-performing students and students of color (Ronfeldt, Loeb, & Wyckoff, 2013). Kini and Podolsky (2016) found that students at schools with high turnover are at a decided disadvantage because teacher inexperience and rates of turnover both negatively impact student learning. High rates of turnover can affect the achievement of all students since it impedes teacher collaboration and instructional improvements, not only because districts must allocate time and resources to preparing new teachers, but because teacher attrition often necessitates moving experienced teachers into grade levels or subjects they have not taught before (Guin, 2004).

An existing line of research shows that teacher effects are of central importance in student outcomes, including student achievement (Wong, 2018; Sykes & Martin, 2019). Miller and Chait (2018), in a meta-analysis, found that students with teachers in the top quartile of the talent pool achieve an additional two to three months per year compared with students in the bottom quartile of teacher distribution. In much of Europe one of the goals of education is to increase the proportion of highly educated citizens. Hanushek (2011) for example, equates teacher performance of one standard deviation above the mean with annual marginal salary gains

of \$20,000 for students in their future careers. Thus investments in secondary education and professionalization of teaching staff are seen as crucial.

In addition to studies showing that teacher retention has an important influence on academic achievement it is important to note that teacher turnover is very costly with some estimates showing that it can cost over \$20,000 to replace a teacher who leaves (Darling-Hammond & Podolsky, 2019). One study found that replacing teachers who leave—which can cost in today's dollars in the vicinity of \$20,000 per teacher in a large urban district—produces a national price tag of \$8.5 billion a year (Carroll, 2007).

A great deal of research has been done especially in the United States examining the reasons why teachers leave the profession. Carver-Thomas and Darling-Hammond (2019) found that more than two thirds of teachers in the United States leave for reasons other than retirement, citing dissatisfaction with accountability policies, lack of administrative support, and lack of opportunities for decision-making input and collaboration, all of which are factors amenable to policy intervention. Mentoring and induction programs, class sizes, teacher autonomy, and the level of administrative support teachers receive all appear to play an important role in teachers' decision to leave or stay in the profession.

In an analysis of NCES's 2013 Teacher Follow-up survey, which gathers data from teachers who left the profession, Podolsky, Kini, Darling-Hammond, and Bishop found the following factors were cited as extremely or very important in leaving the teaching profession (in order of frequency):

Personal life reasons, including pregnancy and childcare (37%); Pursuit of a position other than that of a k-12 teacher (28%);

Dissatisfaction with school assessment and the effects of accountability measures on their teaching or curriculum (25%)

Dissatisfaction with the school's administration (21%);

Dissatisfaction with teaching as a career (21%);

Dissatisfaction with support preparing students for assessments (17%);

The need for a higher salary (13%);

Lack of influence over school policies and practices (13%); and

Lack of autonomy over the classroom (13%) (2019, p. 6).

In an earlier study, Ingersoll and Smith (2003) identified the following as factors contributing to teacher attrition in the United States: cutbacks and layoffs (19%), personal reasons (42%), better job or career change (39%), and job dissatisfaction (29%). Under job dissatisfaction teachers leaving the field listed: low teacher salaries (78.5%), inadequate support from school administration (26.1%), student discipline problems (34.9%), and limited faculty input into school decision-making (6.0%). Borman and Dowling (2008) performed a metaanalysis of 34 quantitative studies which led them to conclude that "the odds of attrition are higher among teachers who are female, White, young, and married and who have a child" (p. 396). They also found that teachers with an undergraduate degree in math or science are twice as likely as other graduates to leave the profession and that teachers who receive less administrative support and experienced less teacher collaboration were more likely to leave teaching. Higher salaries were also associated with decreased thoughts of leaving the profession. Keigher (2010) found that the top reason teachers selected to leave the profession was "personal life factors," cited by 42.9% of leavers. Additionally, 14.8% cited "other career factors," 9.8% cited "school factors," and 4.0% cited "salary and benefits." Ingersoll and Smith (2003) found that teachers

who left teaching cited student discipline problems, lack of support from school administration, student motivation, and lack of teacher voice and classroom autonomy as influencing the decision to leave.

High-poverty, high-minority districts in the United States, where many Latinx teachers are found, face unique challenges. Studies have shown that teacher qualifications, including years of teaching experience, credentials, test scores, advanced degrees and quality of undergraduate institution, among others are inequitably distributed (Clotfelter, Ladd, & Vigdor, 2007a, 2007b; Goldhaber, Quince, & Theobald, 2018). High-minority, low SES schools are much more likely to have uncertified teachers. According to NCES data, 30% of uncertified teachers leave the profession within their first five years, compared to 15% of certified teachers (Gray & Taie, 2015). The highest-poverty school districts have the highest rates of teacher turnover (Podolsky, Kini, Darling-Hammond, & Bishop, 2019; Allensworth, Ponisciak, & Mazzeo, 2009). Schools serving low-income and under-served students typically include more novice teachers, teachers with nonstandard credentials, and teachers whose academic qualifications are weaker. Teacher turnover requires schools to reconfigure teaching assignments which adversely affects student achievement particularly in lower-achieving schools due to the loss of experience and productivity following reallocation of incumbent teachers to different grades (Hanushek, Rivkin, & Schiman, 2016).

Teachers in more economically advantaged communities often experience smaller class sizes and pupil loads, and greater influence over school decisions (Boyd et al., 2011; Ladd, 2011). Teacher turnover is 50% higher in high-poverty schools compared to low-poverty schools. Multiple studies suggest, however, that teachers are not leaving high-poverty schools because they do not want to teach high-need students, but rather because of lower salaries and

more stressful teaching conditions(Ingersoll, 2001; Loeb, Darling-Hammond, & Luczak, 2005). As a result of this vicious cycle of teacher turnover, high-needs schools must repeatedly invest in recruitment, professional support and training for new teachers, and often do not reap the benefits of these investments since these teachers often transfer after gaining a certain modicum of experience (Caroll, Reichardt, & Guarino, 2000; Shields et al., 2001). In 2012-13, almost one in 10 teachers in high-poverty public schools left the profession. In contrast, less than one in 15 teachers in low-poverty schools did so. This suggests that organizational conditions and student characteristics in low-poverty schools correlate with teacher retention.

Other studies from the United States show that schools with greater percentages of minority and poor students usually have fewer qualified teachers (Lankford, Loeb, and Wyckoff 2002; Clotfelter, Ladd, and Vigdor 2005). Additionally, teachers in those schools were found to be very likely to transfer to other schools (Ingersoll, 2001; Imazeki, 2004; Hanushek. Kain, and Rivkin 2004). According to Kain (2011), at least 20% of teachers in urban schools leave on a yearly basis. Research shows teacher education programs can address concerns of teaching in urban schools that could minimize the discomfort for beginning teachers (Rolbert, 2015).

In the field of education, many teachers enter the profession while undergoing their training or beginning their training. These teachers are disproportionately concentrated in hard-to-staff schools, typically under-resourced, low-performing schools serving large proportions of underserved students (Orfield, Ee, Frankenburg, & Siegel-Hawley, 2016). The skills needed to teach in the schools are greater because teachers must adapt to diagnosing student learning, differentiating, addressing gaps while accelerating instruction and supporting social, emotional, health and psychological needs all of which teachers at more affluent schools do not often face. Numerous studies have documented the disproportionate concentration of underprepared

inexperienced teachers in low-income, high-minority schools (Boyd, Lankford, Loeb, Rockoff, & Wyckoff, 2008; Goldhaber, Lavery, & Theobald, 2015; Office for Civil Rights, 2014; Sass, Hannaway, Xu, Figlio, & Feng, 2012).

The Association between lack of job satisfaction and teacher attrition has been extensively documented (Johnson, Kraft, & Papay, 2012; Kraft, Marinell, &Shen-Wei Yee, 2016; Scheopner, 2010). Carver-Thomas and Darling-Hammond (2017) found that dissatisfaction with teaching is mediated by pressures associated with testing accountability, unhappiness with administrative support, a poor teaching career, and financial and personal reasons, in that order. Teachers who leave their schools routinely report dissatisfaction with their administration as a chief reason. Thus, improving the quality of principals in high-poverty schools would be a high-leverage approach for districts intent on retaining teachers (Simon & Johnson, 2015; see also Burkhauser, 2017).

Toreenbek and Peters (2017) identify teaching as one of the most stressful occupations. Teaching involves emotional labor in which teachers must deal with students who, at times, demonstrate poor behavior, attitudes, motivation and performance while the teachers must follow strict rules regarding their behavior (e.g. restrain their frustration and irritation) (Naring, Vlerick & Van de Ven, 2011). These studies show that student behavior and teacher-student relationships affect teacher job satisfaction. Adding to the inherent occupational stress involved in teaching, research shows that statewide accountability policies are associated with attrition in lowperforming schools (Clotfelter, Ladd, Vigdor, & Dias, 2004).

Initial teacher assignments can discourage new teachers together with the absence of support provided by competent mentors and induction programs (Feng, 2010; Liu & Johnson, 2006). Often more experienced, more qualified teachers are assigned to work with advanced

students with fewer behavior problems, either at the teacher's request or at the prerogative of the administration. Effective schools provide novice teachers with more equitable teaching assignments (Loeb, Kalogrides, & Beteille, 2012). Some research shows that new teachers who reported lower self-efficacy are more likely to leave teaching (Tschannen-Moran, Woolfolk, & Hoy, 1998). First-year teachers who feel well-prepared for teaching (certification is one of many factors which contribute to teachers' feelings of being well-prepared) are much more likely to stay in teaching than those who feel poorly prepared (DeAngelis, Wall & Che, 2013).

Teacher salaries vary significantly, not just between states but within states from one district to the next, which provides a recruitment advantage for wealthy districts serving advantaged students (Adamson & Darling-Hammond, 2011; Baker & Weber, 2016). Because of this same recruitment advantage, experienced teachers are more likely to transfer into these wealthier districts which serve advantage students. This leaves more positions open for new teachers in high-poverty public schools which lose about 20% of their faculty annually (Ingersoll, 2001). Additionally teachers in those schools were found to be very likely to transfer to other schools (Ingersoll, 2001; Imazeki, 2004; Hanushek. Kain, and Rivkin 2004). In the United States, the problem is particularly pronounced in urban districts. According to Kain (2011), at least 20% of teachers in urban schools leave on a yearly basis.

Stockard and Lehman (2004) found that new teachers experienced lower rates of satisfaction with teaching in schools with higher rates of behavioral problems and schools in which they felt they had less influence over their work, less support and less effective leadership. Additionally, some research (Clotfelter, Ladd, Vigdor, & Dias, 2004) shows that a statewide accountability policy was associated with attrition in low-performing schools.

However, educational systems are strengthened when school districts invest time and resources in retaining teachers. When school districts invest time and resources in supporting, training and retaining teachers, teachers are more satisfied with their jobs and more committed to their classrooms. Additionally, research shows teacher education programs can address concerns of teaching in urban schools that can minimize the discomfort for beginning teachers (Rolbert, 2015).

Important working conditions supporting retention include opportunities for teachers to professionally collaborate and to contribute to decisions; school leadership that supports teachers individually and collectively; providing a collegial environment; and providing enough resources for teaching and learning (Podolsky, Kini, Darling-Hammond, & Bishop, 2019). The quality of preparation for teaching is related to a teacher's sense of self-efficacy, which is, in turn, related to the likelihood that the teacher will remain in the teaching profession. An analysis of the NCES's Schools and Staffing Survey found that new teachers with at least one semester of practice teaching were less than three times as likely to leave teaching after the first year as those who had no practice teaching (Ingersoll, Merrill, & May, 2014).

Strong induction support for new teachers during the first years can increase retention. Induction supports that enhance retention include orientation sessions, retreats and seminars for novice teachers, coaching and feedback from experienced teachers, the opportunity to observe expert teachers, extra classroom assistance, reduced workloads, and mentoring (Ingersoll & Strong, 2011). Smith and Ingersoll (2004), found that teachers who receive a comprehensive set of support in the first year of teaching, are more than twice as likely to stay in teaching as teachers who lack similar support. They found that having a mentor in the same field, having common planning time with teachers who teach the same subject, having regularly scheduled

collaboration with other teachers and being part of an external network of teachers were all effective in increasing teacher retention. Additionally, effective schools provide novice teachers with more equitable teaching assignments (Loeb, Kalogrides, & Beteille, 2012). Initial teacher assignments can discourage new teachers together with the absence of support provided by competent mentors and induction programs (Feng, 2010; Liu & Johnson, 2006).

School leadership has also been proven to have an important effect on teacher retention. In fact, some studies identify it as the top reason teachers give for staying in the profession, attributing more importance to school leadership than to salary (Boyd et al., 2011; Kraft, Marinell, & Lee, 2016). Administrator support and leadership style are two major components of school leadership that contribute to teacher retention. Teachers are more likely to remain in teaching when they feel supported by school leadership (Johnson, Kardos, Kauffman, Liu, & Donaldson, 2004). The types of support can take many forms, including emotional, environmental, and instructional support (Hughes, Matt, & O'Reilly, 2015).

In high-needs schools, there is some evidence that financial incentives promote teacher retention. In California, state-wide stipend payments of \$20,000 were paid out over four years to teachers who earned National Board Certification and either transferred to or remained in lowperforming schools. This may have contributed to California having a greater percentage of Board-certified teachers in low-income high-minority schools than other states (Humphrey, Koppich, & Hough, 2005). The research suggests that this effort was successful in increasing teachers' commitment to serving in high-need schools, rather than in recruiting expert teachers away from non-needy schools to high-needs schools. However, other research suggests that these efforts are only successful during the period in which financial incentives are given. The Talent Transfer Initiative offered a \$20,000 bonus to teachers in 10 school districts in seven states who

had high value-added scores and transferred to teach in schools with low-average test scores. However, it was found that the increase in transfer and retention only lasted during the two years incentive was offered (Glazerman, Protik, The, Bruch, & Max, 2013).

Darling-Hammond and colleagues have studied international policies that support highperforming educational jurisdictions for decades (Darling-Hammond, 1999; Darling-Hammond, 2017; Carver-Thomas & Darling-Hammond, 2019). In a recent study of five such nations (Darling-Hammond. et al., 2017), the common policies they shared included:

Equitable funding of schools

Teacher compensation competitive with other college-educated professions High-quality preparation available at little or no cost to entering teachers Careful recruitment of candidates with the commitment and dispositions for teaching Readily available support from trained mentors for beginning teachers Ongoing time and support for professional learning and collaboration.

The research on teacher attrition and retention in Latin America and Mexico is not nearly as extensive as it is in the United States and Europe. In Latin America, in countries like Chile, 40% of teachers leave the profession after the fifth year (Ávalos & Valenzuela, 2016). This is commensurate with attrition rates in the United States (8% attrition multiplied by 5 years equals 40% over five years). Other studies show that 68% in Peru, 47.5% in Argentina, 40% in Brazil, and 36% in Uruguay leave teaching during the first five years (Fanfani, 2005). In Chile, Paredes et al. (2013) found that salary limitations, inadequate school environment, and lack of administrative support may prompt new teachers to search for another school. Avalos and Valenzuela (2016) found that from 2000-2009 in Chile, about 39% of teachers with three years or less of experience left the profession. The same study found that the reasons for leaving the profession clustered around lack of job satisfaction, related to school characteristics, such as school culture and working conditions. Research on teacher job dissatisfaction in Latin America found that third and sixth grade teachers from 15 Latin American countries indicated satisfaction with their profession, but not with their salaries (Weinstein, 2016; Ramirez & Viteri, 2016).

The information on teacher attrition and retention in Mexico is decidedly sparse. Marcelo and Vaillant (2017) compared five Latin American countries, including Mexico, on teacher induction policies. They found that in primary education only one in four new teachers benefitted from some type of teacher induction. However, the percentage is higher for secondary school teachers. Mexican education code, specifically the General Law for Professional Teaching Service (La Ley General de Servicio Profesional Docente) of 2013 specifies that every new teacher has a right to a mentor teacher for a period of two years however the law is being implemented slowly and unevenly throughout Mexico. Furthermore Martinez Mendez (2015) found that the system of mentor teachers isn't functioning as well as designed due to a lack of resources to attract qualified mentors. Madero (2019) used data from the Teaching and Learning International Survey (TALIS) to perform a comparative analysis of factors influencing teacher satisfaction and job attrition in three countries: Mexico, Brazil and Chile. He found that teachers in Mexico were overall less likely to report job dissatisfaction than those in Brazil or Chile. He found that the concept of a professional learning community, plays a significant influence on job satisfaction in all three countries. He also found that a culture of collaboration and influence in decision-making both played important roles in job satisfaction.

Most research studies relate the dominant narrative of white teachers who have left the profession. Other research suggests that among minorities, the reasons for entering and leaving the profession may be different. Ingersoll and May (2011, 2019) found that minority teachers are much more likely than White teachers to leave the profession when there are low levels of classroom autonomy and influence on site-based decision-making. Irizarry and Donaldson (2012) found that the dominant motivator among Hispanic youth to enter teaching was to overcome "antagonistic and unfriendly" conditions that they experienced as students. The students were motivated to enter teaching because of their desire to create better learning environments for Latinxs than they themselves at experience. This is in contrast to the dominant White narrative which associates positive school experiences with the desire to enter the teaching profession.

A school's demographic characteristics (e.g. minority student population and low-SES population) appear to strongly influence White teacher attrition. However, these factors do not appear to play a major role in minority teacher attrition. Organizational conditions such as classroom autonomy and influence in site-based decision-making play a much stronger role in minority teacher attrition (Ingersoll & May, 2011; Ingersoll, May & Collins, 2019). However, research on organizational conditions influencing minority teacher retention has tended to group all minorities together. Research is needed which will help determine which organizational conditions most strongly influence Latinx teacher retention and attrition and in what ways.

This is especially true in light of the tremendous gap between the Latinx teaching population and Latinx students. Nearly one in every 4 children currently attending schools is Latinx and Latinxs are already a plurality in 22 states (Fry & Gonzales, 2008). Demographic projections suggest that by 2050, the Latinx school-aged population will more than double.

Latinxs will then constitute the largest group of students in U.S. schools (Fry & Gonzales, 2008). However, the growth in Latinx students in the United States does not correspond to a similar growth in Latinx teachers. White European Americans comprise 83% of all teachers while Latinx teachers account for only about 7% of teachers (National Center for Education Statistics, 2009).

The lack of Latinx teachers who are uniquely equipped to meet the needs of the students (Monsó & Rueda, 2001; Ochoa, 2007) may be related to the disheartening academic outcomes experienced by Latinxs thus far. Nearly 24% of all Latinx adults in the U.S. have less than a ninth grade education and almost one in four Latinxs under 21 is either not enrolled in high school or lacks a high school diploma (National Center for Education Statistics, 2008). Fewer than 13% of Latinxs are college graduates (Lopez, 2009), which presents a severe pipeline problem that is another complicating factor.

Research shows that academic, psychological, and social benefits accrue to students of color taught by teachers of color (Gay, Dingus, & Jackson, 2003; Villegas & Lucas, 2004). Teachers of color tend to hold higher expectations for minoritized students (Romo & Falbo, 1994; Yeo, 1997), are more likely to value the knowledge and cultural frames of reference students "bring to school" (Irvine, 1989; Monsó & Rueda, 2001), and typically enter the profession with a heightened awareness of the sociopolitical contexts in which students of color are educated (Beaubeouf-LaFontant, 1999; Quiocho & Rios, 2000). They are also more likely to work in "hard to staff," high-minority, high-poverty schools (Ingersoll & May, 2011) and have greater retention rates in those settings (Villegas, 2007, 2009).

Several factors have traditionally been attributed to causing minority teacher staffing problems (Zumwalt & Craig, 2005; Villegas & Irvine, 2010). These factors concerned different

stages in the pipeline of supply into teaching. One prominent factor, according to this "deficiency" view, has been that minority student underachievement has resulted in fewer minority students entering the postsecondary level and lower graduate rates for those who do enter college (Banks, 1995). In turn, shrinking percentages of minorities enter teaching.

The prevailing policy response to the staffing problems has been to attempt to increase the supply of minority teachers (Liu, Rosenstein, Swann & Khalil, 2008; Rice, Roelke, Sparks, & Kolbe, 2008). However, recent research indicates that recruitment has little to do with the minority teacher shortage and that our failure to retain minority teachers has caused the current minority teacher shortage (Ingersoll & May, 2011; Ingersoll, May & Collins, 2019).

To examine possible solutions to the United States' challenges with teacher recruitment and retention, it can be instructive to look at other countries. Other high-functioning educational jurisdictions throughout the world provide models in the area of teacher recruitment. Some highly ranked jurisdictions such as Finland, Australia and Canada, make certain teachers' initial preparation offers intensive clinical training. Others, such as Singapore and Shanghai, provide extensive clinical training during the first year on the job. Still others like Israel and Norway have government supported mentor programs that bridge the preservice preparation and induction years of employment (Orland-Barak, 2010). The career ladder systems that place expert mentors in every school support this model and support teacher retention as well (Darling-Hammond, 2017, p. 49). In these countries teacher recruitment is not an issue. By and large, teaching as a profession is held in high esteem. Teacher compensation in these high-performing systems tends to be comparable to that of other well-regarded professions, so the challenge is selecting the most promising applicants to teacher preparation programs. While U.S. teachers earn, on average, about 70% of what other college graduates earn, teachers in high-performing

systems generally earn between 90% and 105% of the average for college-educated workers (OECD, 2014). In Alberta, for example, teachers are among the highest paid of all professions in the province. Utilities and oil and gas extraction are the only two job categories with higher wages (Alberta learning information services, 2013).

Teachers are also generally well-paid in Australia. In 2012, new graduates who enter teaching ranked seventh among 27 professional occupations and their level of compensation. Teaching was behind several medical fields and engineering but ahead of law, computer science and other sciences, pharmacy, and accounting (Graduate Careers Australia, 2013). In Singapore starting salaries for teachers are similar to those for other university educated workers, such as civil service engineers and accountants. In Singapore, teachers start receiving a monthly salary when they enter preservice training. Salary growth over their career remains competitive. China requires all school districts to keep the average salary of teachers above the average salary of all public servants in the same districts, in accordance with the Teacher Law of 1993. Salaries for teachers in Shanghai are among the highest in the country. Although teacher salaries in other areas of China are lower, the Chinese government has made large investments in boosting salaries and creating incentives such as housing subsidies, especially in poor rural areas (Darling-Hammond, 2017, p. 52).

In all these countries, candidates are also financially supported in their study of education. In Singapore, the Ministry of education pays all tuition, fees and a monthly stipend to undergraduate teaching candidates. For those who enter teacher preparation at the graduate level, the stipend is equivalent to what they would have made as college graduates in a civil sector job. This stipend must be repaid if the candidate fails the program or leaves before the stipulated time. Therefore, it is a powerful incentive for serious commitment to the program (Sclafani &

Lim, 2008, p. 3). Finnish teacher education is tuition-free and candidates receive a stipend while they are in training. In Australia government subsidies cover more than two thirds of the cost of a public Commonwealth university. Additional scholarships are available for teachers in high need fields.

In these countries – Finland, Canada, Australia, Singapore and China – recruitment is influenced by teaching's reputation as a high status field. In Finland, teaching is the top choice profession for college students (Liiten, 2004). Teaching is highly ranked in Singapore as well. The attrition rate is below 3% annually (Darling Hammond, 2017, p. 53). In Ontario, initiatives in the last 15 years have substantially improved the status of teaching because they replaced in an era of teacher disinvestment in public education with a supportive approach from the provincial government. Subsequently, attrition has declined to about 4% annually, which is about half the rate in the United States (Darling Hammond, 2017, p. 53).

In Finland the teaching profession is particularly prestigious. Surveys of high school graduates in Finland show that teaching is consistently the most admired profession (Martin & Pennanen, 2015). Finns regard teaching as a noble profession, similar to medicine, and one driven by moral purposes rather than financial rewards. As a result, about 20,000 students apply annually for about 4, 000 slots in teacher education institutions, allowing the country to be very selective about who enters the teaching profession (Darling Hammond, 2017, p. 55).

The incentives that U. S. schools have employed to retain urban teachers are numerous. One response to the nationwide teacher shortage has been to increase the number of alternative teacher certification programs designed to put teachers in the classrooms more quickly. However, these programs have only been minimally effective. Darling-Hammond (1999) found that about 60% of individuals who enter teaching through such programs leave the profession by their third year as compared to about 30% of traditionally prepared teachers and only about 10 to 15% of teachers prepared in an extended five-year education programs (p. 14). In response to the difficulties they experience attracting and retaining quality teachers, some U.S. states and districts are experimenting with financial incentives to attract and retain high-quality teachers in high-need, low-achieving, or hard-to-staff schools and districts (Murphy & DeArmond, 2003). Incentives include signing bonuses, pay supplements ("combat pay"), loan forgiveness, tuition subsidies, and housing assistance. In 2006 the U.S. Congress allocated \$99 million to the U.S. Department of Education for Teacher Incentive Fund grants for recruitment, retention, and performance incentives for teachers in high-need schools. The basic theory behind incentives is that they provide a compensating differential for potentially unattractive job characteristics associated with poverty and low student achievement. Some research suggests that higher pay improves teacher retention (Guarino, Santibanez, Daley, & Brewer, 2004) and that higher salaries improve the quality of new teachers attracted to a district (Figlio, 2002).

Other research suggests that teacher labor market characteristics may outweigh the advantages of financial incentives. Many teachers prefer to teach in a school close to their community of origin (Boyd, Lankford, Loeb, & Wyckoff, 2003). Other studies suggest that labor markets for teachers are segmented based on ethnicity, teacher training programs completed, and qualifications. Burian-Fitzgerald & Agnostopolus, (2005) found that new teachers' ethnicity and perceptions of their own qualifications influence the jobs for which they considered applying. If this is true, districts may have to compete for local supply of teachers which, in the short run, is relatively fixed.

Research has identified other factors which may be just as important as or more important than salary in attracting teachers. These factors include administrator support (Loeb, DarlingHammond, & Luczak, 2005), the presence of a mentor induction programs (Smith & Ingersoll, 2004), collegial support (Johnson & Birkeland, 2003), class size (Ingersoll, 2003), teacher autonomy and involvement in decision-making (Ingersoll, 2003), and school facilities (Buckley, Schneider & Shang, 2004).

As a Latinx researcher in the field of education I can look back on my years as a beginning teacher when I lacked the support of an effective principal and had very little input into site-based decision-making. In my third dissertation article, I will relate some of the dramatic events that nearly led me to leave teaching. Because of my overwhelming desire to take care of my two young sons and due to the support of my Latinx knowledge community I ended up staying in K-12 education for twenty years. In the latter part of my career, when I was a Latinx principal, my earlier experiences strongly motivated me to create a school environment where that was inclusive and promoted teacher retention. Despite a very difficult first year as a principal, where accountability pressures nearly cost me my job and led to me losing half of my teachers, I persevered and was able to create a school environment that promoted both academic success for my students and teacher retention among my teachers. My motivation in leaving K-12 education and entering higher education was to learn more about practices that promote teacher retantion and to have a greater sphere of influence in promoting school cultures that support Latinx teachers as well as all beginning teachers. This is the reason I selected Latinx teacher retention as the theme that unites my three dissertation articles.

CHAPTER II

ARTICLE ONE

2.1 Introduction

This article analyzes data on teacher recruitment, preparation and retention from OCED'S Teaching and Learning International Survey. The article focuses on comparing school climate factors that influence job satisfaction and teacher retention in Mexico. The study joins the limited body of research on teacher attrition in Latin America and Mexico (see Avalos & Valenzuela, 2016; Marcelo & Vaillant, 2017; Madero, 2019). While researchers have studied many factors related to teacher dropout in the United States and Western Europe, research on teacher dropout in Latin America and especially in Mexico is much more limited. This article uses data from the 2013 Teaching and Learning International Survey and found a variety of results. The results showed effects by gender, years of experience, age, and discipline problems, relationships between students and teachers, and perceptions of collaboration in both job satisfaction and work regret. More research is needed to examine the influence of other factors, as well as to explain the teacher's variables that influence these factors.

The research on school and district characteristics that promote teacher retention is abundant. Mentoring and induction programs, class sizes, teacher autonomy, and the level of administrative support teachers receive all appear to play an important role in teachers' decision to leave or stay in the profession. Teacher attrition rates, especially among underserved students (Smith & Ulvik, 2017), are increasing globally. In the United States, the attrition rate is at 8%

annually, and two thirds of those teachers leave for reasons other than retirement (Carver-Thomas & darling-Hammond, 2017). In Latin America, 68% of teachers in Peru leave the profession after five years, while 47.5% in Argentina, 40% in Brazil, 36% in Uruguay (Fanfani, 2005), and 40% in Chile (Avalos & Valenzuela, 2016) do so. Many reasons may be cited for teachers leaving the profession, however overall teacher job dissatisfaction stands out above all others. Although Madero (2019) recently compared teachers' dissatisfaction among teaching professionals in Brazil, Chile, and Mexico, there is very little literature that focuses on teacher dissatisfaction and job attrition in Mexico specifically. Therefore this study focuses on job dissatisfaction and its relation to teacher attrition in Mexico.

Smith and Ingersoll (2004), in a sample of more than 3,000 beginning teachers, found that teachers who received induction and mentoring support in their first year of teaching were less likely to leave teaching or change schools. They found that the types of induction support that had the strongest correlation with retention were having a mentor in the same field, having common planning time with teachers who teach the same subject, having regularly scheduled collaboration with other teachers and being part of an external network of teachers. Stockard and Lehman (2004) found that new teachers experienced lower rates of satisfaction with teaching in schools with higher rates of behavioral problems and schools in which they felt they had less influence over their work, less support and less effective leadership. Additionally, some research (Clotfelter, Ladd, Vigdor, & Dias, 2004) shows that a statewide accountability policy was associated with attrition in low-performing schools.

Other studies from the United States show that schools with greater percentages of minority and poor students usually have fewer qualified teachers (Lankford, Loeb, and Wyckoff 2002; Clotfelter, Ladd, and Vigdor 2005). Additionally teachers in those schools were found to

be very likely to transfer to other schools (Ingersoll, 2001; *Imazeki*, 2004; Hanushek. Kain, and Rivkin 2004). In the United States, the problem is particularly pronounced in urban districts. According to Kain (2011), at least 20% of teachers in urban schools leave on a yearly basis. However, educational systems are strengthened when school districts invest time and resources in retaining teachers. If school districts invested in supporting, training and retaining teachers, teachers would be more satisfied with their jobs and more committed to their classrooms. Research shows teacher education programs can address concerns of teaching in urban schools that could minimize the discomfort for beginning teachers (Rolbert, 2015).

The international body of research in teacher attrition is quite large as well, especially in Europe. In much of Europe one of the goals of education is to increase the proportion of highly educated citizens. Hanushek (2011) for example, equates teacher performance of one standard deviation above the mean with annual marginal salary gains of \$20,000 for students in their future careers. Thus investments in secondary education and professionalization of teaching staff are seen as crucial. A number of studies find a U-shaped relationship between the level of experience and teacher attrition (Guarino, Santibanez & Daley, 2006; Ingersoll, 2001) with beginning teachers and those nearing retirement most likely to leave the profession. Toreenbek and Peters (2017) identify teaching as one of the most stressful occupations. Teaching involves emotional labor in which teachers must deal with students who, at times, demonstrate poor behavior, attitudes, motivation and performance while the teachers must follow strict rules regarding their behavior (e.g. restrain their frustration and irritation) (Naring, Vlerick & Van de Ven, 2011). These studies show that student behavior and teacher-student relationships affect teacher job satisfaction.

In France, Perier (2003) found gender differences in teacher attrition with more men than women leaving the profession during their careers. However, in the United States, Strunk and Robinson (2006) found no significant differences on professional attrition rates between genders. In Belgium, Dupriez, Delvaux and Lothaire (2016) found that primary teachers are generally more stable and less likely to leave the profession than secondary teachers.

The research on teacher attrition and retention Latin American, and specifically in Mexico, is not nearly as extensive as it is in the United States and Europe. School principals note low to medium levels of teacher stability in Brazil, Argentina, Peru, Paraguay and Chile (UNESCO, 2008). In Chile, Paredes et al. (2013) found that salary limitations, inadequate school environment, and lack of administrative support may prompt new teachers to search for another school. Avalos and Valenzuela (2016) found that from 2000 to 2009 in Chile, about 39% of teachers with three years or less of experience left the profession. The same study found that the reasons for leaving the profession clustered around lack of job satisfaction, lack of professional development opportunities and school management conditions.

The information on teacher attrition and retention in Mexico is decidedly sparse. Marcelo and Vaillant (2017) compared five Latin American countries, including Mexico, on teacher induction policies. They found that in primary education only one in four new teachers benefitted from some type of teacher induction. However, the percentage is higher for secondary school teachers. Mexican education code, specifically the General Law for Professional Teaching Service (La Ley General de Servicio Profesional Docente) of 2013 specifies that every new teacher has a right to a mentor teacher for a period of two years however the law is being implemented slowly and unevenly throughout Mexico. Furthermore Martinez Mendez (2015)

found that the system of mentor teachers is not functioning as well as designed due to a lack of resources to attract qualified mentors.

Due to the sparse research on teacher retention and attrition in Mexico, the purpose of this study will be to examine factors that lead to teacher attrition in Mexico, specifically using data from TALIS (Teaching and Learning International Study) from 2013.

2.2 Methodology

In Mexico, children are enrolled in public school in the year when they turn three and go through three years of kindergarten. They begin the first year of primary school which is usually separate at the age of six. Elementary school lasts for six years, from the 1st through 6th grades, and middle school lasts for three years from 7th through 9th grades. Senior high school or preparatory school lasts three years from 10th to 12th grades although students may also opt for technical or vocational schools called "escuelas vocacionales." Students in grades PK-12 are formally evaluated on a scale of 1-10. Elementary school teachers typically are educated through a university teacher-training program that lasts four years, although normal schools which are colleges specifically for teachers still exist in Mexico and some Mexican "normalist" teachers received their teaching degree in three years or less. Teacher education programs that last about a year are available for those who already have a Bachelor's degree.

The target population for TALIS 2013 consisted of schools providing ISCED Level 2 education as well as their principals and their teachers. In Mexico this corresponded to "escuela secundaria" or secondary school which is the common name for grades 6-8. TALIS countries that had participated in PISA in 2012 had the option of implementing TALIS in the same schools that implemented PISA and Mexico chose to do so. Additionally, TALIS schools that had

participated in PISA 2012 had the option of giving the TALIS survey in ISCED Level 1 (primary school) and ISCED Level 3 (senior high school) schools and Mexico elected to do so.

A total of 3198 teachers from 194 different Mexican schools were surveyed. Teachers were selected for the study based on a random stratified sample. First the country provided OCED with a list of all schools which provided education at ISCED Level 2. A stratified sampling of schools was randomly selected. Stratification in Mexico was selected based on both school size and source of funding. 200 schools were selected out of a total of 15,881 schools in Mexico that provide ISCED Level 2 education. From these 200 schools 20 teachers were selected at random from each school. Thus the teacher sample expected size was 4000. The actual sample size of 3198 teachers was arrived at after eliminating schools who opted out of the study and teachers who were non-respondents.

The TALIS survey found the following characteristics of teachers in Mexico. 54% of teachers are women and the average age is 42. 90% completed university or other equivalent higher education. 62% completed a teacher education or training program. The average Mexican teacher has 16 years of teaching experience. Mexican teachers have an average of 33 students in class on average.

2.3 Instruments

Level of education—Level of education was measured by the following question "What is the highest level of formal education you have completed?

- a) Less than a bachelor's degree
- b) Bachelor's degree
- c) Master's degree
- d) Doctoral degree

Formal teacher training—Formal teacher training was measured by the question "Did you complete a teacher education or training program?

Collaboration--A factor analysis was performed on items related to school climate on the TALIS survey. It was found that these items showed strong affinity for three factors. The first factor comprised six items: "This school provides staff with opportunities to participate in school decisions," "This school provides parents with opportunities to participate in school decisions," "The school provides students with opportunities to participate in school decisions," "The school provides students with opportunities to participate in school decisions," "This school provides students with opportunities to participate in school decisions," "This school provides students with opportunities to participate in school decisions," "This school has a culture of shared responsibility for school issues," "There is a collaborative school culture which is characterized by mutual support," and "If a student needs extra assistance, the school provides it." Cronbach's alpha for these six items was .891 which indicates a high degree of internal reliability. These six items were grouped under the heading, "Collaboration."

Relationships— Student/teacher relations was measured by three items which displayed a strong affinity for the second factor on the factor analysis. The items were: "In this school, teachers and students usually get on well with each other," "Most teachers in this school believe that the students' well-being is important," "Most teachers in this school are interested in what students have to say." Cronbach's alpha for these three items was found to be .796 which is also very high. These items were grouped under the heading "Relationships."

Job satisfaction—Four items were found to display a strong affinity in the factor analysis: "I enjoy working at this school," I would recommend my school as a good place to work," "I am satisfied with my performance in this school," and "All in all, I'm satisfied with my job." Cronbach's alpha for these four items is .748 which is also well above the generally accepted measure of .70. These items were grouped under the heading "Satisfaction."

Desire to leave the teaching profession—Desire to leave the teaching profession was measured by two separate items: "I regret that I decided to become a teacher," and "I wonder whether it would have been better to choose another profession." These items are not closely related so they will be considered separately.

Because discipline problems and disruptive student behavior were found in the literature review to have a strong influence on teacher satisfaction and attrition, three items were determined to be related to discipline issues: "When the lesson begins, I have to wait quite a long time for students to quiet down," "I lose quite a lot of time because of students interrupting the lesson," and "There is much disruptive noise in this classroom." Cronbach's alpha for these three items was .778 which is well above the generally accepted level of .70.

Data analysis—I tested the theoretical model by data analysis using the SPSS program to explore relations between the variables. Analysis of variance was used to determine the influence of school climate factors and student behavior on job satisfaction. In a similar vein, the two statements under "Desire to leave the teaching profession" were analyzed separately against student discipline, school climate and job satisfaction to determine what influence they had in "Desire to leave the teaching profession." Further analysis was carried out to determine if these variables differed greatly based on level of education, age and formal teacher training.

	1	2	3
School Climate/ Agreement with/ This school provides staff with	<mark>.826</mark>		
opportunities to participate in school decisions			
School Climate/ Agreement with/ This school provides parents with	<mark>.809</mark>		
opportunities to participate in school decisions			
School Climate/ Agreement with/ This school provides students with	<mark>.823</mark>		
opportunities to participate in school decisions			
School Climate/ Agreement with/ This school has a culture of shared	<mark>.762</mark>		.314
responsibility for school issues			
School Climate/ Agreement with/ There is a collaborative school	<mark>.716</mark>		.385
culture which is characterised by mutual support			
School Climate/ Agreement with what happens/ In this school, teachers			<mark>.719</mark>
and students usually get on well with each other			
School Climate/ Agreement with what happens/ Most teachers in this			<mark>.796</mark>
school believe that students' well-being is important			
School Climate/ Agreement with what happens/ Most teachers in this	.229		<mark>.760</mark>
school are interested in what students have to say			
School Climate/ Agreement with what happens/ If a student needs extra	<mark>.475</mark>		.505
assistance, the school provides it			
School Climate/ About your job/ The advantages of being a teacher		.321	.225
clearly outweigh the disadvantages			
School Climate/ About your job/ If I could decide again, I would still		<mark>.654</mark>	
choose to work as a teacher			
School Climate/ About your job/ I would recommend my school as a	.377	<mark>.480</mark>	.381
good place to work			
School Climate/ About your job/ I think that the teaching profession is	.324	.221	
valued in society			
School Climate/ About your job/ I am satisfied with my performance in		<mark>.719</mark>	
this school			
School Climate/ About your job/ All in all, I am satisfied with my job		<mark>.745</mark>	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Figure 1—Factor Analysis for School Climate Items

2.4 Results

To begin the data analysis, I analyzed the correlation between six items on the TALIS survey. I chose six variables: Total Experience, Satisfaction, Collaboration, Relationships, and the survey items "I wonder whether it would have been better to choose another profession" (Profession Regret) and "I regret my decision to become a teacher" (Teacher Regret). Table One illustrates the results of the correlation:

		C	Correlations				
		TotalExperienc e	Satisfaction	Collaboration	Relatioinships		School Climate/ About your job/ I regret that I decided to become a teacher
TotalExperience	Pearson Correlation	1	.056**	124**	068**	-0.005	0.020
	Sig. (2-tailed)		0.003	0.000	0.000	0.779	0.286
	N	2940	2883	2861	2918	2909	2911
Satisfaction	Pearson Correlation	.056**	1	.361	.357**	306**	259**
	Sig.(2-tailed)	0.003		0.000	0.000	0.000	0.000
	N	2883	2883	2822	2877	2870	2874
Collaboration	Pearson Correlation	124**	.361**	1	.495**	077**	050**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	800.0
	Ν	2861	2822	2861	2858	2848	2849
Relatioinships	Pearson Correlation	068**	.357**	.495**	1	107**	082**
	Sig.(2-tailed)	0.000	0.000	0.000		0.000	0.000
	N	2918	2877	2858	2918	2903	2905
School Climate/About your job/Iwonderwhetherit would have been better to choose another profession	Pearson Correlation	-0.005	306**	077**	107**	1	.439**
	Sig.(2-tailed)	0.779	0.000	0.000	0.000		0.000
	N	2909	2870	2848	2903	2909	2899
School Climate/ About your job/ I regret that I decided to become a teacher		0.020	259**	050**	082**	.439**	1
	Sig.(2-tailed)	0.286	0.000	800.0	0.000	0.000	
	N	2911	2874	2849	2905	2899	2911

**. Correlation is significant at the 0.01 level (2-tailed).

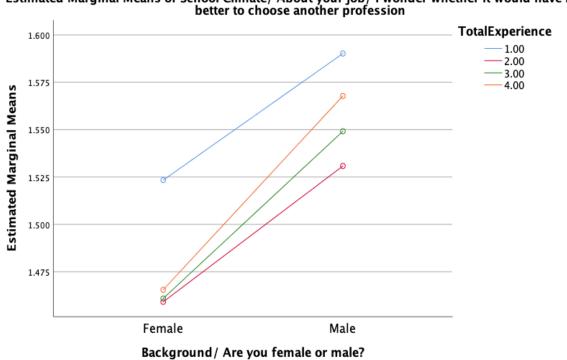
Table 1—TALIS Correlation Analysis

The results show that there is a significant positive correlation between Total Experience and Satisfaction. There is also a significant negative correlation between Total Experience and Collaboration, Relationships and Profession Regret. There is also a significant positive relationship between Satisfaction and Collaboration and Relationships and a significant negative relationship between Satisfaction and Profession Regret and Teacher Regret. There is a significant positive relationship between Collaboration and Relationships and a significant negative correlation between Collaboration and Profession Regret and Teacher Regret. There is a significant negative correlation between Relationships and Profession Regret and Teacher Regret. There is a significant negative correlation between Relationships and Profession Regret and Teacher Regret. Finally, there is a significant positive correlation between Profession Regret and Teacher Regret. There are no other significant correlations.

In order to further analyze job satisfaction, I categorized Years of Experience into four groups: 1) 0-5 years 2) 6-10 years 3) 11-20 years and 4) more than 20 years. I then performed a univariate ANOVA using Gender and Total Experience as Independent Variables and measured them against the aggregate variable "Satisfaction." The data shows there is no significant effect for Gender or for the interaction between Gender and Total Experience. However, there is a significant effect for Total Experience, F(3)=2.98, $p \le 0.05$. A Tukey Post Hoc analysis was performed on the Total Experience variable. The Tukey post-hoc analysis shows that there is a significant positive difference (Mean=.0717, p= 0.035) between Category 4 and Category 1 on Satisfaction. Thus, teachers who have more than 20 years in teaching experience significantly greater job satisfaction than teachers who have 5 years or less experience.

I used the same variables and measured them against the survey item, "I wonder whether it would have been better to choose another profession," which will be labeled "Job Regret." The

results show no significant effect for Gender (TT2G01) and for the interaction between Gender and Total Experience. Thus, the null hypothesis is not rejected for these variables. However, there is a significant effect for the Gender variable on Job Regret, F()=7.67, p=.006. Figure Two illustrates that scores on Job Regret were significantly higher for males than females.



Estimated Marginal Means of School Climate/ About your job/ I wonder whether it would have been

Figure 2—Experience and Gender vs. Profession Regret

Interestingly, while gender had no effect on the Satisfaction variable, it did have a significant effect on the Job Regret variable. Additionally, while Teacher Experience had a significant effect on Satisfaction, it did not have an effect on Job Regret.

To analyze mean differences on the Discipline variable, teachers' responses were grouped into four categories using the transform function in SPSS. Teachers were categorized from 1 for those who encountered few difficulties with student discipline or behavior to 4 for those who encountered a great many issues with discipline or behavior. A one way ANOVA was then performed which showed there were no significant differences related to gender. However, a significant difference on Discipline was found on the Age variable. Furthermore, a Scheffe Post-Hoc analysis revealed that the group of teachers who are over 35 years of age were much more likely to be in Category 1 than in Category 2. This means that the Over-35 group of teachers was much more likely to be in the group with very few reported discipline issues than in the group with moderate amounts of discipline issues. Figure One demonstrates the significant differences on reported discipline issues for the teachers who are over 35.

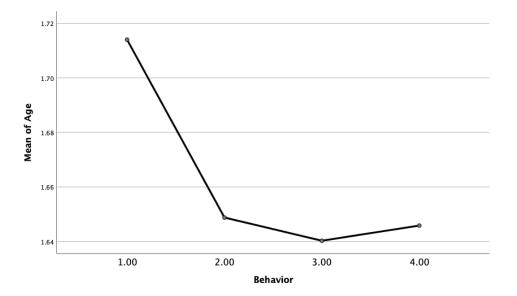


Figure 3—Relation of Teacher Age to Student Behavior Issues

An additional One Way ANOVA revealed a significant negative relationship between Discipline and Satisfaction, F(3) = 8.072, p<.001. This indicates, not surprisingly, that as

perceived discipline incidents increase, the teacher's satisfaction with his or her job decreases. Figure four demonstrates the negative relationship between mean perceived behavior issues and mean job satisfaction.

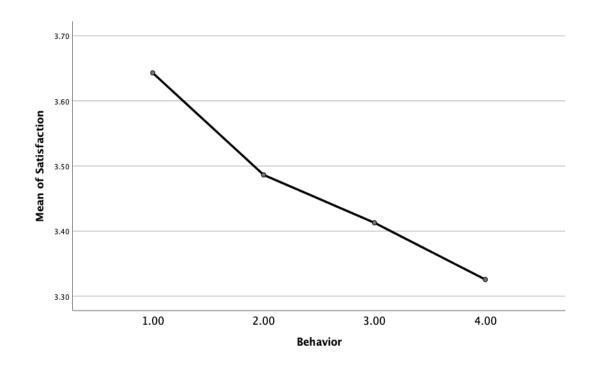


Figure 4—Relationship between student behavior and teacher satisfaction

Additionally, ANOVA tests showed that there was a significant relationship between satisfaction and both of the items used to measure job attrition, Profession Regret and Job Regret (F(12)=29.83, p<.001 and F(12)=25.58, p<.001 respectively). The tables below show the relationship between satisfaction and the two items: "I wonder whether it would have been better to choose another profession," and "I regret that I decided to become a teacher."

ANOVA

School Climate/ About your job/ I wonder whether it would have been better to choose another profession

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	160.617	12	13.385	29.832	.000
Within Groups	1281.867	2857	.449		
Total	1442.484	2869			

Table 2—Relation between job satisfaction and profession regret

ANOVA

School Climate/ About your job/ I regret that I decided to become a teacher

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	79.765	12	6.647	23.583	.000
Within Groups	806.396	2861	.282		
Total	886.161	2873			

Table 3—Relation between job satisfaction and job regret

A multivariate ANOVA (MANOVA) was performed on the two items which were used to indicate job attrition ("I wonder whether it would have been better to choose another profession" and "I regret that I decided to become a teacher") using the variables of Behavior Issues, Age and Gender. It was found that Behavior (Wilks Λ =.000) and Age (Wilks Λ =.025) both had a significant effect on job attrition. Also it was found that the interaction between Behavior, Age and Gender had a significant effect (Wilks Λ =.016). On both of the attrition items, behavior was found to have a significant effect (p<.001 for both items). On the item "I wonder whether it would have been better to choose another profession" there was a significant (p<.05) difference between the genders with males having a significantly higher score indicating greater agreement with this statement. Additionally there was a significant (p<.01) effect for the interaction between Behavior, Age and Gender for the item "I regret that I decided to become a teacher."

2.5 Discussion

The results section showed a significant positive correlation between Total Experience and Satisfaction, yet a significant negative correlation between Total Experience and Collaboration and Relationships. This means that as teachers gain experience in Mexico, they are likely to report greater degrees of job satisfaction, yet less likely to report a great deal of inter school collaboration and satisfactory student-teacher relationships. This may be because many Mexican teachers with a great deal of experience have arrived at a point where they are very satisfied with their careers, yet they still rely on traditional Mexican ideals of student-teacher relationships which emphasize the teacher as a person of great wisdom regardless of their ability to relate to students. Additionally, traditional Mexican values may tend to idealize the teacher as an expert in his/her field regardless of his/her ability to collaborate with teachers. Interestingly, there is a significant negative correlation between Collaboration and Relationships and Profession Regret and Job Regret, indicating that teachers who experienced high degrees of inter-school collaboration and positive student-teacher relationships were less likely to report regret regarding their job or the teaching profession.

The results also showed that teachers who have 20 or more years' experience were significantly more likely to report a high degree of job satisfaction than teachers who have five

years or less teaching experience. There was no significant effect for gender on this variable. However, there was a significant effect for gender on Profession Regret, with males being much more likely to regret entering the teaching profession. There was no similar effect for Total Experience on Profession Regret. It is quite understandable that teachers who stay in the profession are those who experience greater job satisfaction, however it is a bit more difficult to explain why there was no effect for gender on job satisfaction and yet males were significantly more likely to report regret on entering the teaching profession. This may reflect that males and females both experience the same degree of satisfaction with teaching and yet males who are the traditional breadwinners in Mexican households are more likely to experience regret about becoming teachers because of the extremely low salaries. Another theory holds that male teachers in Mexico, who typically teach in the Science, Technology, Engineering and Mathematics field, often leave prominent highly-esteemed jobs in the sciences to enter teaching. While they derive personal satisfaction from teaching, they may regret entering the profession due to the loss of status they faced when moving from a position in the STEM fields to a less highly-esteemed teaching position (H. Manzanilla, personal communication, October 14, 2019).

The literature review also suggested that discipline issues have a significant effect on job satisfaction and regrets about entering the teaching profession. Data analysis showed that gender had no effect on reported discipline problems. However, it was determined that the age of the teacher did have a significant effect on discipline problems. Specifically, teachers who are over 35 are much more likely to be in the group with very few reported discipline issues than in the group with moderate amounts of discipline issues. This means that teachers who have reached a certain age may have either grown to have a great deal of expertise in classroom management, or they may simply have grown tired of reporting discipline problems. This research has shown that

teachers over a certain age are likely to report having very few discipline issues. However, analysis of TALIS data can not reveal the reasons why. Further qualitative analysis involving semi-structured interviews would be useful to establish why this relationship exists.

The results further showed that reported discipline problems had a negative effect on job satisfaction. That is, as discipline problems increased, overall job satisfaction decreased. Additionally, it was found that teachers who reported regret with entering the teaching profession, not surprisingly, reported lower degrees of job satisfaction. When a MANOVA was performed on the two items, "I wonder whether it would have been better to choose another profession" and "I regret that I decided to become a teacher" using the variables of Discipline Problems, Age and Gender, it was found that both Discipline Problems and Age had a significant effect on regret about becoming a teacher and that the interaction between all three variables also had a significant effect on the item, "I regret that I decided to become a teacher." Teachers who report higher levels of discipline problems as well as teachers who are male are more likely to report regret at their decision to become a teacher.

There are several limitations inherent in this study. The principal one is that the TALIS survey was administered to teachers who are currently active. No teachers who have already left teaching were surveyed for this study. Analyzing data for people who have already left teaching would give new insight into the reasons teachers lack job satisfaction and the reasons teachers ultimately leave the profession. This study has shown important effects for both age, gender and their interactions with teachers' degree of dissatisfaction and their regret about entering the teaching profession. This study has also confirmed previous research that shows the effect of student discipline issues on profession regret. Further research is called for, especially qualitative research that includes teacher interviews and interviews of those who have left teaching, which

could answer important questions of how and why different factors influence job dissatisfaction and teacher attrition.

A further limitation of the study is that it doesn't examine the geographical differences for the data on Mexican teachers. Mexico is divided into thirty-one states and one federal district. It's very likely that the political and sociological conditions in the different states would create differences in the survey data as well. For example, the states of Guerrero and Oaxaca are known for having much higher degrees of both union activity and teacher strikes. Historically, they have been the centers of a great deal of persecution and violence against teachers. In 2016, eight teachers from Oaxaca were fired on and killed during a teacher protest march. In 2014, fortythree student teachers from the Ayotzinapa Normal School were assassinated in Iguala, Guerrero on their way to a peaceful protest in Mexico City. Because of the unusual levels of teacher persecution and violence in these states it would be fascinating to examine state data on job satisfaction and teacher attrition. Research using survey analysis that is disaggregated by geographic region as well as qualitative analysis involving semi-structured interviews would be useful in determining the possible influence of geographical regions on job dissatisfaction and profession regret.

CHAPTER III

ARTICLE TWO

3.1 Introduction

This article examines and compares the recruitment and retention of Latinx and White school teachers and attempts to empirically ground the debate over minority teacher shortages. A large gap persists between the increasing percentage of Latinx students in U. S. schools and the percentage of Latinx teachers in the U. S. school system. Nearly one in every four children currently attending U. S. schools is Latinx and demographic projections suggest that by 2050, the Latinx school-aged population will more than double. Despite consistent, successful efforts to recruit minority teachers, Latinx teachers make up only about 7% of teachers (Fry & Gonzales, 2008). While efforts to recruit minority teachers have been largely successful, turnover rates among minority teachers have been significantly higher than among White teachers. Research suggests organizational conditions like classroom autonomy and influence in site-based decision-making appear to have the strongest influence on minority teachers' decisions to stay in teaching or to leave the profession (Ingersoll, May & Collins, 2019).

However, most of the research on minority teacher retention has grouped all minorities into one non-White category. Thus, this research uses empirical data to determine which organizational conditions are most strongly related to Latinx teachers' decisions to stay in

teaching or to leave the profession. This paper examines data from the National Center for Education Statistics' nationally representative National Teacher and Principal Survey to determine what organizational conditions most strongly influence Latinx teachers' decisions to stay in teaching or to leave the profession. The data in this article showed that classroom autonomy, influence in site-based decision-making and having an effective supportive principal were very strong factors influencing job satisfaction and teacher retention among Latinx teachers.

A major issue currently facing U.S. education is the disparity between Latinx teachers and Latinx students in the U.S. educational system. Currently, nearly one in every four students in the U.S. is Latinx. Projections suggest that by 2050, the Latinx school-aged population will more than double. Latinxs will then constitute the largest group of students in U.S. schools (Fry & Gonzales, 2008). Despite the rapidly growing population of Latinx students in U.S. schools there has been no corresponding growth in Latinx teachers. White European Americans comprise 83% of all teachers while Latinxs account for only about 7% of teachers in the U.S. (National Center for Education Statistics, 2009).

Growth in the Latinx population in U.S. schools has not necessarily equated to success for Latinx students. Nearly 24% of all Latinx adults in the U.S. have less than a ninth grade education and almost one in four Latinxs under 21 is either not enrolled in high school or lacks a high school diploma (National Center for Education Statistics, 2008). Fewer than 13% of Latinxs are college graduates (Lopez, 2009).

The disheartening academic outcomes for Latinxs are connected to the lack of Latinx teachers who are uniquely equipped to meet the needs of the students (Monsó & Rueda, 2001; Ochoa, 2007). Research shows that academic, psychological, and social benefits accrue to

minority students who are taught by minority teachers (Gay, Dingus, & Jackson, 2003; Villegas & Lucas, 2004). Minority teachers tend to hold higher expectations for minority students (Romo & Falbo, 1994; Yeo, 1997); are more likely to value the knowledge and cultural frames of reference students "bring to school" (Irvine, 1989; Monsó & Rueda, 2001), and typically enter the profession with a heightened awareness of the sociopolitical contexts in which students of color are educated (Beaubeouf-LaFontant, 1999; Quiocho & Rios, 2000). They are also more likely to work in "hard to staff," high-minority, high-poverty schools (Ingersoll & May, 2011) and have greater retention rates in those settings (Villegas, 2007, 2009).

Traditionally, the shortage of minority teachers has been attributed to factors concerning different stages in the pipeline of supply into teaching (Zumwalt & Craig, 2005; Villegas & Irvine, 2010). One prominent "deficiency" view attributed low minority enrollment in postsecondary education and lower graduation rates to minority student underachievement (Banks, 1995). In turn, the shrinking percentages of minorities entering teaching was attributed to the lower rate of minorities graduating college and passing certification exams.

While most researchers have turned away from this "deficiency" view, typical policy responses to the staffing problems have continued to involve attempts to increase the supply of minority teachers into the teaching pipeline (Liu, Rosenstein, Swann & Khalil, 2008; Rice, Roelke, Sparks, & Kolbe, 2008). However, research suggests that, while U. S. efforts to recruit minority teachers have been largely successful, the corresponding efforts to retain them in the teaching profession have not been nearly as successful (Ingersoll & May, 2011; Ingersoll, May & Collins, 2019) and have been largely responsible for the shortage of minorities in teaching (Carver-Thomas & Darling-Hammond, 2019)

Research has pointed to several school culture factors which contribute to minority retention in teaching including: classroom autonomy and influence over site-based decisionmaking (Ingersoll & May, 2011; Ingersoll, May & Collins, 2019) as well as the presence of an effective, supportive principal (Carver-Thomas & Darling-Hammond, 2019). However, research on the conditions that influence minority teacher recruitment and retention has tended to group all minorities together. In these studies, Latinx teachers are grouped together with other culturally and socially distinct minorities including African-Americans, Asian-Americans, Native Americans and Native Hawaiians. Thus, it's imperative that empirical data be used to ground the argument over what conditions influence Latinx teacher retention and attrition.

3.2 Conceptual framework for the research

Several conceptual arguments ground the debate over why the disparity between Latinx students and teachers is detrimental and why increasing the racial/ethnic diversity of the teaching force would be beneficial. The "demographic parity" argument holds that minority teachers are important as role models for both minority and white students. The underlying assumption is that the racial/ethnic makeup of the teaching force should reflect the student population and society at-large (Banks, 1995; Cochran-Smith, 2004). The "cultural synchronicity" argument holds that minority teachers are likely to have "insider knowledge" due to shared life experiences and cultural backgrounds that will benefit their minority students. Proponents of this argument cite a growing number of empirical studies showing that minority teachers have a positive impact on minority students (Achinstein & Aguirre, 2008; Villegas & Lucas, 2004). The "humanistic commitment" argument holds that not only are minority teachers better suited to teaching minority students, but they are also likely to be more motivated to help make a difference in the

lives of disadvantaged students. In turn, this argument holds, minority teachers are more likely than nonminority candidates to seek employment in schools serving predominantly minority student populations, often in low-income, urban school districts (e.g., Ladson-Billings, 1995; Quiocho & Rios, 2000). Therefore, in this view diversification of the teaching force is a solution to the more general problem of teacher shortages in disadvantaged schools.

A theoretical concept underlying this study is the "sociology of organizations" framework or the organizational theory of teacher retention as employed by eminent researchers Ingersoll and May (see Ingersoll, 2003; Ingersoll & May, 2011; and Ingersoll, May & Collins, 2019). In this theoretical framework, teacher employment and staffing issues, like those in other industries, cannot be fully understood without "putting the organization back" into the analysis. When applied to teacher turnover, organizational theory looks beyond increases in teacher retirement and in student enrollment as the primary causes of teacher shortages. It investigates other factors – those kinds of organizational characteristics and conditions of schools – that are driving teacher turnover and, in turn, school staffing problems. Organizational theory postulates that popular educational initiatives, such as teacher recruitment programs, will not solve the staffing problems schools face if they do not also reverse the organizational sources of teacher retention (Ingersoll, 2001).

A final framework underlying this study is Critical Race Theory (CRT) and Latina/o Critical Race Theory (LatCrit). Critical race theory and Latina/o critical race theory help scholars who have sought to understand the role of race, racism, and racialization in the educational experiences and outcomes for communities of color (Dixson & Rousseau, 2006; Milner, 2008). CRT and LatCrit challenge hegemonic ideologies such as meritocracy and seek to expose the ways in which racialized power relations shape the experiences of people of color (Chapman,

2007; will). Both theoretical frameworks examine race at the center of relations of power, however LatCrit extends the focus to include the intersections between race, class, gender, language, ethnicity, and immigration status among others (Delgado & Stefansic, 2001; Huber, 2010).

3.3 Methodology

The data for this study comes from the National Center for Education Statistics' (NCES) nationally representative National Teacher and Principal Survey (NTPS). This is the largest and most comprehensive data source available on occupational and organizational variables involved in staffing U. S. schools. The 2015-16 NTPS sampled a total of 49,470 teachers divided between traditional public and charter schools. The very large sample sizes included in these databases will increase the reliability of the data analyses I will perform. Each cycle of the NTPS includes separate questionnaires for school and district administrators and for a random sample of teachers in each school.

My classification of teacher ethnicities is based on the teacher respondents' identification of their race and ethnicity in the NTPS instrument. The NTPS asks whether teachers are of "Hispanic" or "Latino" origin to which teachers may respond yes or no. The NTPS also asks, "What is your race?" with the possibility of five different answers to which teachers may mark one or more of the following: White, Black or African-American, Asian, Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native. The resulting answers and the combination of ethnicity in various races resulted in 49 different overall combinations of ethnicity and race. To simplify data, all teachers who responded Latinx were grouped into a

binary Latinx category, and six other non-Latinx categories were created: Native American non-Hispanic, Native Hawaiian non-Hispanic, Asian non-Hispanic, Black non-Hispanic, White non-Latinx and Multiple Races non-Hispanic. Because Latinx is the preferred non-gender specific term inclusive of Hispanics, it will be used in this article. For the sake of brevity, all teacher ethnicities may be assumed to be non-Latinx, unless specifically designated as such.

In the NCES's previous iteration of the NTPS, the Schools and Staffing Survey (last administered in 2011-2012), the survey was accompanied by the Teacher Follow-up Survey which was given one year after the SASS to teachers who had left teaching, teachers who had stayed in teaching but moved to another school and teachers who had stayed in teaching and at the same school. This survey of "leavers," "movers," and "stayers" provided invaluable data as to the reason teachers actually left teaching. The survey increased the validity of research surrounding teacher attrition because it compared teachers who had actually left teaching to those who remained in the profession. However, the Teacher Follow-Up Survey has not been administered since 2013, the year following the most recent SASS (2011-2012) and did not accompany recent administrations of the National Teacher and Principal Survey.

Since there is not a current equivalent survey of teachers who have left teaching, in this article I will look at data in the NTPS related to teacher attrition as well as job dissatisfaction. Following the 2012 administration of the SASS, the precursor to the current NTPS, the last administration of the Teacher Follow-Up Survey (TFS) was given. This survey was given to teachers who had left the profession one year after the administration of the 2012 NTPS. The TFS provided invaluable information about the reasons teachers leave teaching. Ingersoll and May (2013, 2019) and other researchers used this data to gain valuable insight into teacher retention and attrition. However, following the conversion of the SASS to the current NTPS in

2016, the Teacher Follow-Up Survey hasn't been administered. Therefore, gaining current information on teacher retention and the various factors influencing it would rely on using items related to retention in the NTPS. Only one item is directly related to teacher attrition in the current NTPS. It asks, "How long do you plan to remain in teaching?" The answer choices are:

- 1) As long as I am able
- 2) Until I am eligible for retirement benefits from this job
- 3) Until I am eligible for retirement benefits from a previous job
- 4) Until I am eligible for Social Security benefits
- Until a specific life event occurs (e.g. parenthood, marriage, retirement of spouse or partner)
- 6) Until a more desirable job opportunity comes along
- 7) Definitely plan to leave as soon as I can
- 8) Undecided at this time

Of these answer choices only "Definitely plan to leave as soon as I can" clearly indicates a preference for leaving over continuing in teaching. The others are much more open to interpretation and give no indication regarding how long a teacher plans to continue in the profession. Thus, this study will look at various organizational factors which influence job satisfaction, since a strong relationship exists between job satisfaction and teacher retention.

The association between lack of job satisfaction and teacher attrition has been extensively documented (Johnson, Kraft, & Papay, 2012; Kraft, Marinell, &Shen-Wei Yee, 2016; Scheopner, 2010). Carver-Thomas and Darling-Hammond (2017) found that the influence of dissatisfaction with teaching on attrition is mediated by pressures associated with testing

accountability, unhappiness with administrative support, a poor teaching career, and financial and personal reasons, in that order. Teachers who leave their schools routinely report dissatisfaction with their administration as a chief reason (Simon & Johnson, 2015; see also Burkhauser, 2017). Thus, improving the quality of principals in high-poverty schools would be a high-leverage approach for districts intent on retaining teachers (Simon & Johnson, 2015; see also Burkhauser, 2017).

Toreenbek and Peters (2017) identify teaching as one of the most stressful occupations. Teaching involves emotional labor in which teachers must deal with students who, at times, demonstrate poor behavior, attitudes, motivation and performance while the teachers must follow strict rules regarding their behavior (e.g. restrain their frustration and irritation) (Naring, Vlerick & Van de Ven, 2011). Adding to the inherent occupational stress involved in teaching, research shows that statewide accountability policies are associated with attrition in low-performing schools (Clotfelter, Ladd, Vigdor, & Dias, 2004).

Initial teacher assignments can discourage new teachers together with the absence of support provided by competent mentors and induction programs (Feng, 2010; Liu & Johnson, 2006). Often more experienced, more qualified teachers are assigned to work with advanced students with fewer behavior problems, either at the teacher's request or at the prerogative of the administration. Effective schools provide novice teachers with more equitable teaching assignments (Loeb, Kalogrides, & Beteille, 2012) and in this way, principals play a supportive role for new teachers by establishing equitable teaching assignments and by providing effective mentors

Stockard and Lehman (2004) found that new teachers experienced lower rates of satisfaction with teaching in schools with higher rates of behavioral problems and schools in

which they felt they had less influence over their work, less support and less effective leadership. Additionally, some research (Clotfelter, Ladd, Vigdor, & Dias, 2004) shows that a statewide accountability policy was associated with attrition in low-performing schools.

However, educational systems are strengthened when principals invest time and resources in supporting, training and retaining teachers; teachers are more satisfied with their jobs and more committed to their classrooms. Additionally, research shows teacher education programs can address concerns of teaching in urban schools that can minimize the discomfort for beginning teachers (Rolbert, 2015).

Because job dissatisfaction and teacher attrition have been determined to have a close relationship, this study will examine items on the NTPS that relate to both job dissatisfaction and teacher attrition. Because many studies on job dissatisfaction and teacher attrition group all minorities together, my data analysis will use a series of analyses of variance to compare the effects of classroom autonomy, influence in school-based decision-making, and the presence of an effective, supportive principal on teacher attrition among Black, White and Latinx teachers.

I will perform all statistical analyses using IBM's advanced statistical analysis software, SPSS. I will examine three groups of predictors of turnover: classroom autonomy, influence in site-based decision-making and presence of an effective, supportive principal. I will focus on these three characteristics of schools because they have long been considered important aspects of effective school organization (e.g., Goodlad, 1984; Chubb & Moe, 1990; Ingersoll, 2003). They also are amenable to policy changes and are available from the data source. In Ingersoll's seminal work on teacher attrition and retention (Ingersoll, 2003; Ingersoll & May, 2011, Ingersoll, May & Collins, 2019), classroom autonomy and input into site-based decision-making have been found to be the two most influential factors in retention among minority teachers A

third factor, the presence of an effective, supportive principal, was found to be an influential factor, but only at a significant level for White teachers. However, previous studies on minority teacher retention haven't disaggregated the data for different minority groups. Thus, it will be interesting to see whether, when disaggregated by ethnic group, the data shows a significant relationship between having an effective, supportive principal and Latinx teacher retention.

3.4 Variables

Seven items were found on the NTPS which correlate with teacher influence in site-based decision-making. Teachers were asked "How much influence do you think teachers have over school policy AT THIS SCHOOL in each of the following areas?" The seven areas were "Setting performance standards for students at this school;" "Establishing curriculum," Determining the content of in-service professional development programs," "Evaluating teachers," "Hiring new full-time teachers," "Setting discipline policy," and "Deciding how the school budget will be spent." Factor analysis revealed that these items all have an affinity for a singular factor and Cronbach's alpha for the seven items was found to be 0.829 indicating a high degree of internal reliability. The R² value revealed that these seven items accounted for 49.7% of the total variance of this variate.

Classroom autonomy is another variable which has been shown to correlate with increased job satisfaction among minority teachers (Ingersoll & May, 2011; Ingersoll, May & Collins, 2019). To determine the amount of classroom autonomy Latinx teachers feel they have, six items on the NTPS survey were combined. Teachers were asked to rate whether they have "No control," "Minor control," "Moderate control," or "A great deal of control" on the six

following items: selecting textbooks and other instructional materials; selecting content, topics, and skills to be taught; selecting teaching techniques; evaluating and grading students; disciplining students; and determining the amount of homework to be assigned. Using a factor analysis, the six items were all found to extract to the same component which has been titled "Classroom Autonomy." The six items were found to have a Cronbach's alpha of .786, indicating a high degree of internal reliability. These six factors were found to account for 50.1% of the total variance on classroom autonomy.

A third factor which has been found to influence teacher attrition and retention is the presence of an effective, supportive principal. Carver-Thomas and Darling-Hammond (2019) found that the presence of an effective, supportive principal had a stronger effect on teachers' decision to stay in the profession than even monetary compensation. However, their data did not look at minorities, specifically Ingersoll, May and Collins (2019) found that the presence of an effective, supportive principal was influential in teacher retention, however they found that this was significant for White teachers but not so for minority teachers. However, their research did not disaggregate data among minorities. Therefore, it's worthwhile to examine this factor in this study, looking at the amount of influence it carries with different minority groups of teachers. In a factor analysis, six items from the NTPS were found to extract to the same component and were thus included in the variate "Supportive, effective principal." These items were: "The school administration's behavior toward the staff is supportive and encouraging," "Necessary materials such as textbooks, supplies, and copy machines are available as needed by the staff," "My principal enforces school rules for student conduct and backs me up when need it," "My principal knows what kind of school he or she wants and has communicated it to the staff," "In this school, staff members are recognized for a job well done," and "I am given the support I

need to teach students with special needs." Factor analysis revealed that these items all extracted to the same principal component. Additionally, Cronbach's alpha for these six items was 0.789, indicating a high degree of internal reliability. These six factors were found to account for 53.1% of the total variance in the variable "Presence of an effective, supportive principal."

The "Leave Teaching" variable was created by examining the NTPS item "How long do you plan to remain in teaching?" A binary variable was created by assigning a value of 1 to teachers who responded either "Until a more desirable position comes along "or "As soon as possible." A value of 0 was assigned to teachers who marked any of the other responses.

The job dissatisfaction variable was created by performing a factor analysis on the items surrounding satisfaction in the survey. Five items were found with an affinity for the same component. They are:

- The stress and disappointments involved in teaching at this school aren't really worth it.
- 2) If I could get a higher-paying job, I'd leave teaching as soon as possible.
- 3) I think about transferring to another school.
- 4) I don't seem to have as much enthusiasm now as I did when I began teaching.
- 5) I think about staying home from school because I'm just too tired to go.

Cronbach's alpha for these five items was found to be 0.788, which is well above the accepted standard for internal reliability.

3.5 Research questions and hypotheses to be tested

I will attempt to address the following research questions in this study:

1) What is the relation between marginal means of job dissatisfaction and the desire to leave teaching among teachers of different ethnicities?

2) What is the correlation between job dissatisfaction and teacher attrition among Black, White and Latinx teachers?

3) What influence does having more classroom autonomy have on teacher attrition and job satisfaction and how does this differ among Black, White and Latinx teachers?
4) What influence does having more influence on site-based decision-making have on teacher attrition and job satisfaction and how does this differ among Black, White and Latinx teachers?
5) What influence does having an effective, supportive principal have on teacher attrition and job satisfaction and Black, White and Latinx teachers?

3.6 Results

A univariate analysis of variance found that there are significant differences for Ethnicity on the Leave Teaching variable, F(1,6) = 9.305, p \leq .001, however no significant variance was found for gender nor the interaction between Ethnicity and gender (see Figure One). Furthermore, Tukey post-hoc tests showed that Latinx teachers scored significantly higher than White teachers at the p \leq .001 level and significantly lower than Black teachers at the p \leq .05 level. This can be interpreted to mean that Latinx teachers are significantly more likely than White teachers to leave teaching, but significantly less likely to do so than Black teachers. The only other significant result involved those teachers in the "Multiple Races" category. It was found that "Multiple Races "teachers were significantly more likely to indicate they planned to leave teaching than White teachers at the p \leq .05 level.

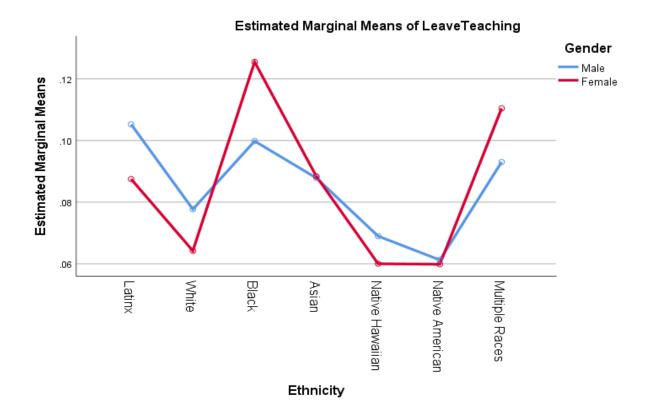


Figure 5—Ethnicity vs. Marginal Means of Leave Teaching

A univariate analysis of variance revealed that females of all ethnicities were more likely to indicate job dissatisfaction, however the differences were not statistically significant (see Figure Two). However, a significant amount of variance by ethnicity was found on the Job Dissatisfaction variable. The variance was very similar to that found on the Leave Teaching variable. Latinx teachers were found to score significantly higher on the Job Dissatisfaction variable than White teachers at the 0.001 level, yet significantly lower than Black teachers at the 0.05 level. The only significant result on the Job Dissatisfaction variable was that teachers of Multiple Races were found to score significantly lower than Black teachers at the 0.01 level.

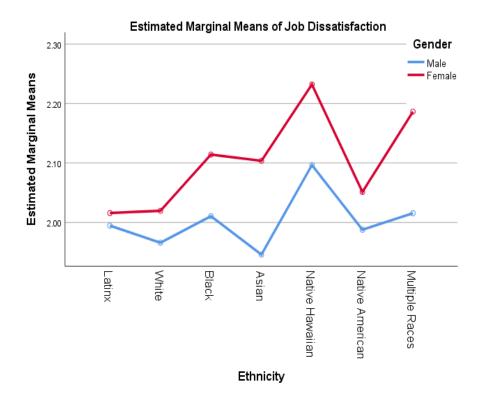


Figure 6—Ethnicity vs. Marginal Means of Job Dissatisfaction

A simple linear regression was calculated to determine the correlation between the Job Dissatisfaction and Leave Teaching variables. A significant yet weak correlation of .318 ($p\leq0.001$) exists between these two variables. For White teachers examined alone, the correlation was slightly lower, r=.313, p \leq 0.001. For Latinx, r=0.328, p \leq 0.001, and Black, r=0.350, p \leq 0.001, teachers, the correlation was slightly higher.

Because significant differences for both the Job Dissatisfaction and the Leave Teaching variable were found only for the Black, White and Latinx teacher groups, analysis in the rest of this paper will focus on differences among those three groups. Additionally, Black and Latinx teachers are the two largest minority groups among teachers in the United States and are typically grouped together in studies on minority teacher retention. Thus, it will be informative to see how these two groups differ from one another

Research has shown that the amount of influence minority teachers in the United States have on site-based decision making positively influences retention in the teaching profession (Ingersoll & May, 2011; Ingersoll, May & Collins, 2019). However, this research has grouped minorities together as one non-White unit. When looking at Latinx teachers as a separate group, there is a need to determine whether site-based decision-making input is a strong influencer in the desire to leave or to stay in teaching. Interestingly, a univariate analysis of variance found significant differences among almost all ethnic groups and between genders, however there was no significant effect for the interaction between gender and ethnicity. Ethnicity was found to have a significant effect on perceived influence on site-based influence, F(1,6) = 14.179, $p \le 0.001$, as was gender, F(1,6) = 4.740, $p \le 0.001$. Tukey post-hoc tests found that Latinx teachers reported significantly more influence in site-based decision-making than Black, White, Native Hawaiian, and Multiple Races teachers, all at the $p \le 0.001$ level, while reporting significantly less influence than Asian teachers, also at the $p \le 0.001$ level.

When a univariate analysis of variance was used to measure the effect of site-based decision-making on the Leave Teaching variable for Latinx teachers, Black teachers and White teachers, significant effects were found for Ethnicity, F(1,2) = 25.272, p ≤ 0.001 , Control over Site-Based Decision-Making, F(1,3) = 62.691, p ≤ 0.001 and for the interaction between Ethnicity and Control over Site-Based Decision-Making, F(1,6) = 2.557, p ≤ 0.05 (see Figure Three). It was found that the effect of Control over Site-Based Decision-Making on Leaving Teaching was significantly higher for Latinx teachers than it was for White teachers. It was also lower for

Latinx teacher than for Black teachers, significantly so for those who perceived little or no control over site-based decision-making.

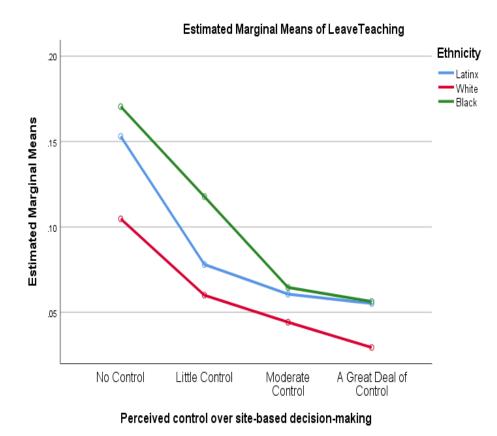


Figure 7--Perceived control over site-based decision-making vs. Leave Teaching

When an ANOVA was used to measure the effect of site-based decision-making on the Job Dissatisfaction variable for Latinx teachers, Black teachers and White teachers, significant effects were found for Ethnicity, F(1,2) = 9.054, p ≤ 0.001 and for Control over Site-Based Decision-Making, F(1,3) = 388.211, p ≤ 0.001 but not for the interaction between Ethnicity and Control over Site-Based Decision-Making, (see Figure Four). There is a significant inverse

relationship between perceived control over site-based decision-making and job dissatisfaction. As perceived control increases, job dissatisfaction decreases. Additionally, it was found that Black teachers scored significantly higher than Latinx and White teachers on the influence of site-based decision-making on job dissatisfaction at the p \leq 0.001 level for both groups. However, Latinx and White teachers were not found to differ significantly on this construct.

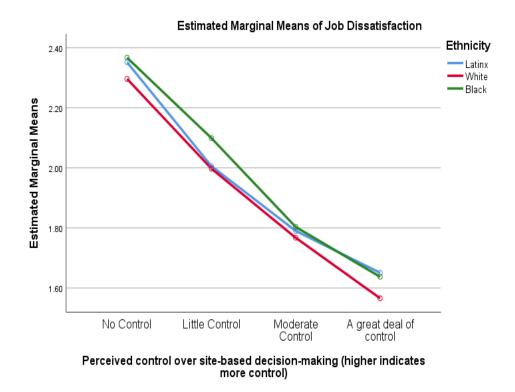


Figure 8—Perceived Control over Site-Based Decision-Making vs. Job Dissatisfaction

Classroom autonomy, like Control over Site-Based Decision-Making, has been found to have a significant effect on teacher retention (Ingersoll & May, 2011; Ingersoll, May & Collins,

2019). However, previous research has not disaggregated this data by minority group. Analysis of variance revealed a significant effect for both Ethnicity, F(1,6) = 10.707, p≤0.001, and Gender, F(1,6) = 6.009, p≤.05, on the "Classroom Autonomy" variable. Interestingly, Latinx teachers were found to perceive having significantly more classroom autonomy than Black teachers, however they were not found to differ significantly from other ethnic or racial groups on this variable. Also, males were found to perceive having significantly more classroom autonomy than females, t(31943) = 10.067, p≤0.05.

A univariate ANOVA found that there is a significant effect for Ethnicity as well as perceived classroom autonomy on estimated marginal means of job dissatisfaction. Additionally, there is an effect for the interaction between Ethnicity and Classroom Autonomy (see Figure Five). There is a significant inverse relationship between Classroom Autonomy and Job Dissatisfaction. As Classroom Autonomy increases, Job Dissatisfaction decreases. Further, it was found that job dissatisfaction is significantly lower for both White and Latinx teachers with higher levels of Classroom Autonomy. Job dissatisfaction is significantly higher for Latinx and Black teachers at the lowest level of Classroom Autonomy.

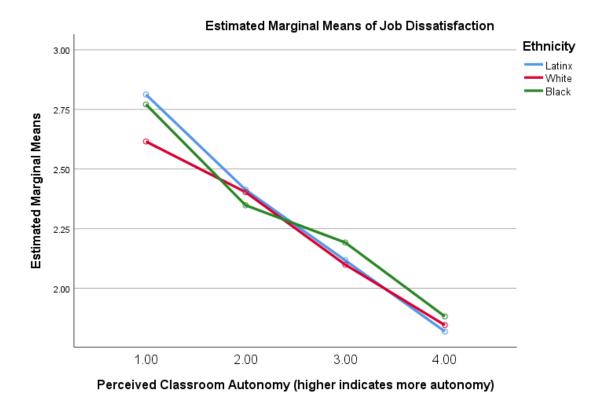


Figure 9— Perceived classroom autonomy vs. Mean Job Dissatisfaction

When Black, White and Latinx teachers are compared using a univariate analysis of variance on the influence of classroom autonomy on the Leave Teaching variable, a significant effect was found both for ethnicity, F(1,2) = 15.122, $p \le 0.001$, and classroom autonomy, F(1,3) = 54.496, $p \le 0.001$ (see Figure Five).

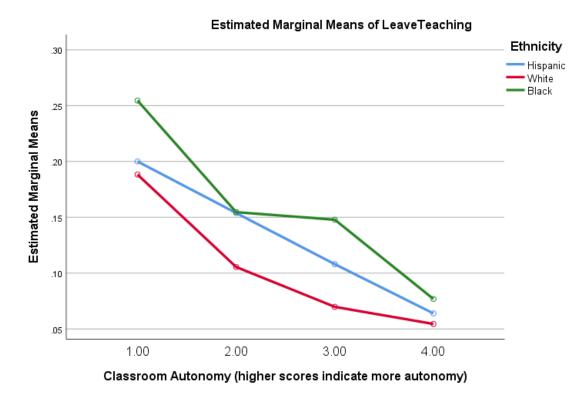


Figure 10—Classroom Autonomy vs. Marginal Means of Leave Teaching

Both Black teachers and Latinx teachers scored significantly higher than White teachers on marginal means of the Leave Teaching variable, however there were significant differences between Black teachers and Latinx teachers as well. Black teachers scored significantly higher than Latinx teachers on Leave Teaching, especially for those teachers who felt they had the smallest amount of classroom autonomy.

Analysis of variance found significant differences for the Presence of an Effective, Supportive Principal for both Ethnicity, F(1,6) = 5.071, p ≤ 0.001 , and for Gender, F(1,6) = 4.456, p ≤ 0.001 , however there is no effect for the interaction between Ethnicity and Gender. Male teachers were significantly more likely to report an effective, supportive principal than female teachers, t(14192) = -5.033, p ≤ 0.001 . Latinx teachers did not differ significantly from Black or White teachers on this variable, however it was found that Black teachers were more likely to agree that they have an effective, supportive principal than White teachers at the $p\leq0.01$ level.

When Hispanic, Black and White teachers were compared on the Leave Teaching variable, an analysis of variance found that there is an effect for both Ethnicity, F(1,2) = 183986, p≤0.001, and the Presence of an Effective, Supportive Principal, F(1,3) = 661.018, p≤0.001(see Figure Four). Additionally, there is an effect for the interaction between Ethnicity and the Presence of an Effective, Supportive Principal variable, F(1,6) = 2.534, p ≤ 0.05. For all teachers, there was an inverse relationship between the desire to leave teaching and the Presence of an Effective, Supportive Principal. As the degree of agreement with having an Effective, Supportive Principal variable decreased. For all levels of the effective, supportive principal variable, White teachers scored significantly lower than Black or Latinx teachers on the Leave Teaching variable. Latinx teachers at the highest and lowest levels of agreement with having an effective, supportive principal while Black teachers scored significantly higher than the other groups at all other levels of agreement.

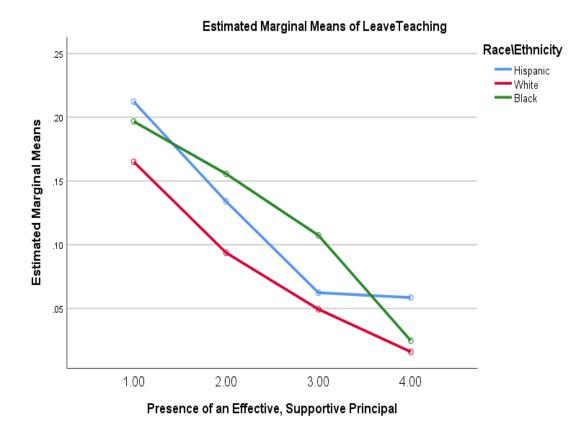
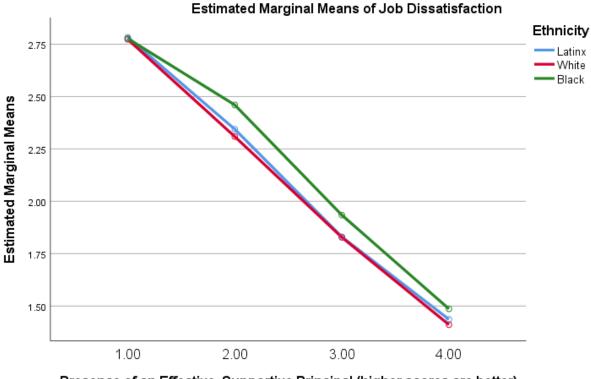


Figure 11—Presence of an effective, supportive principal vs. desire to leave teaching

When Presence of an Effective, Supportive Principal was measured against the Job Dissatisfaction variable on a univariate analysis of variance, an effect was found for both Ethnicity, F(1,2) = 7.058, p ≤ 0.001 and Presence of an Effective, Supportive Principal, F(1,3) =356.430, p ≤ 0.001 (see Figure Eight). However, there was no effect for the interaction of the two variables. Presence of an Effective, Supportive Principal had an inverse effect on Leave Teaching. As Presence of an Effective, Supportive Principal increased, marginal means of Leave Teaching decreased. Additionally, Black teachers scored significantly higher on the job dissatisfaction variable than both White teachers and Latinx teachers at the p ≤ 0.001 level. There were no other significant effects.



Presence of an Effective, Supportive Principal (higher scores are better)

Figure 12—Presence of an effective, supportive principal vs. desire to leave teaching

3.7 Discussion

The current gap between Latinx teacher populations and Latinx students in the United States is untenable. All students benefit from having a diverse teaching staff, yet academic, psychological and social benefits accrue to Latinx students when they have Latinx teachers. Latinx teachers are more likely to value the knowledge and cultural frames of reference Latinx students bring to school and are more likely to have a heightened awareness of the sociopolitical context their students are educated in. University educator preparation programs should actively recruit Latinx students since alternatively certified teachers are twice as likely to leave their teaching position as teachers who graduate from a traditional college preparation program (Carver-Thomas & Darling-Hammond, 2019). Additionally, school districts should raise salary scales since, since there is a correlation between the highest salary step on the scale and teacher retention (Carver-Thomas & Darling-Hammond, 2019). Mean beginning teacher salaries in the United States are 70% of the mean beginning salaries of other professions that require similar education and training (Darling-Hammond et al. 2017).

Yet, university preparation programs and salary scale are factors in the retention of all teachers and not just Latinx teachers and they are factors that are typically out of the control of local schools. This heighten the importance of organizational conditions which are under the control of local schools and can positively affect the retention of Latinx teachers. Retaining Latinx teachers requires a comprehensive approach that ensures teachers are well-prepared for the challenges, have an increasing degree of classroom autonomy and have influence over sitebased decision making. These conditions are all amenable to local school policy change, unlike other factors such as district salary scale.

It is interesting that, when comparing Black, White, and Latin teachers, Ethnicity influences the desire to leave teaching, as do the three variables studied: Influence in site-based decision-making, classroom autonomy, and having an effective, supportive principal. According to the data analysis, both Blacks and Hispanics were significantly more likely to state they would leave teaching "as soon as possible" or "as soon as another opportunity comes along" than White teachers in the absence of an effective, supportive principal.

When comparing the organizational factors that influence teacher retention and attrition, it's important to consider different minority groups separately since it is likely that each group

will have different factors which influence attrition to differing degrees. This study has shown that Latinx and Black teachers, the two largest minority groups, differ significantly on various factors revolving around teacher retention and attrition. Black teachers were significantly more likely to indicate they would leave teaching "as soon as possible" or "as soon as a better opportunity" came along than Latinx teachers who, in turn, were more likely to indicate this desire to leave teaching than White teachers. Similarly, Black teachers scored significantly higher on Job Dissatisfaction than Latinx teachers who in turn scored significantly higher than White teachers. Finally, the correlation between Job Dissatisfaction and Leaving Teaching is slightly higher for Black teachers than for Latinx and White teachers.

A clearer picture is emerging. It is evident that significant differences do exist among minorities on factors that influence teacher retention. Minorities do score higher than White teachers on job dissatisfaction and the expressed intent to leave teaching. However, there are significant differences among minority groups and thus they should be examined differently.

The three school culture factors examined demonstrate the differences between ethnicities and the need to study teacher retention factors using data disaggregated by ethnicity. Some things are consistent. Classroom Autonomy, Influence in Site-Based Decision-Making, and the Presence of an Effective, Supportive Principal all have significant inverse relationships with both Job Dissatisfaction and the likelihood that teachers will leave teaching. As these three school culture factors increase, the variables Job Dissatisfaction and Leave Teaching steadily decrease for all ethnicities. Yet the amount and the way in which these variables change is different for different ethnicities.

The effect for the "Influence in Site-Based Decision-Making" on the "Leave Teaching "variable was stronger for Latinx teachers than it was for White teachers and that it was even

stronger for Black teachers than it was for either Latinx or White teachers. This means that school administrators and district policymakers should pay special attention to the amount of Influence in Site-Based Decision-Making that is given to Latinx teachers and even more so to Black teachers if they wish to retain these effective teachers. This is especially true for schools where teachers feel they have "little control" or no control" over Site-Based Decision-Making.

The effect for the "Influence in Site-Based Decision-Making" on the "Job Dissatisfaction" variable was significantly greater for Black teachers than it was for either White or Latinx teachers, who did not differ significantly on this variable. This shows that policymakers and school administrators should pay special attention to the amount of influence teachers have in Site-Based Decision-Making when efforts are underway to increase teachers' job satisfaction. Special attention should be paid to this factor when there are Black teachers working on the campus.

When the relationship between Classroom Autonomy and Job Dissatisfaction is examined, the results showed that Latinx teachers are those who experience the highest level of Job Dissatisfaction when Classroom Autonomy is both at its lowest and at its highest. This means that Latinx teachers significantly differ from both Black and White teachers on Job Dissatisfaction in conditions where classroom autonomy is either very high or very low.

When the relationship between Classroom Autonomy on the "Leave Teaching" is compared among Black, White and Latinx teachers, the effect of classroom autonomy is stronger for both Black and Latinx teachers than it is for White teachers and significantly higher for Black teachers at the lowest levels of classroom autonomy. This means that policymakers at all levels should carefully consider the level of classroom autonomy teachers experience when discussing Job Dissatisfaction among Latinx teachers and should give special consideration to Classroom

Autonomy when considering factors that may influence Black teachers to leave teaching, especially at very low levels of classroom autonomy.

Research has shown that the presence of an effective, supportive principal has a significant effect on teacher retention, an effect which is even greater than the effect of pay scale increases (Carver-Thomas & Darling-Hammond, 2019). Yet this article shows that the effect of the presence of an effective, supportive principal varies significantly among different ethnic groups. When looking at the effect of the Presence of an Effective, Supportive Principal on the desire to leave teaching, the effect is significantly greater for both Black and Latinx teachers than it is for White teachers. Interestingly, the effect is significantly higher for Latinx teachers than for Black teachers, both for those who are most likely and least likely to report having an Effective, Supportive Principal. This means that school policymakers and administrators may wish to look at how they train principals to support teachers and schools with significant populations of Latinx and Black teachers.

Similarly, the effect of the presence of an effective, supportive principal is significantly higher on Job Dissatisfaction for Black teachers than either Latinx teachers or White teachers. This means that having an effective, supportive principal in a school is likely to increase job satisfaction for all teachers, but especially so for Black teachers. Therefore, district and school policymakers should consider principal evaluations when looking at job dissatisfaction among schools with significant populations of Black teachers.

3.8 Limitations and Future Research

There are several limitations inherent in this study. The principal one is that the NTPS was administered to American teachers who are actively teaching. No teachers who have already left teaching were surveyed for this study and unlike the previous SASS, there was not a Teacher Follow-Up Survey to accompany the NTPS. Thus, this study like other studies which desire to incorporate the most recent national level NCES data are restricted to surveys of teachers who have not left teaching. The responses to items reflecting leaving Teaching are mere speculation. Analyzing data for people who have already left teaching would give new insight into the reasons teachers ultimately leave the profession. Further research therefore is needed based on results from teachers who have already left teaching

The relationship between job satisfaction and teacher retention is well-established but incomplete. The regression analysis performed in this study showed that job satisfaction accounts for about 30% of the total variance in the decision to leave teaching. Thus, it is a significant but incomplete influencer in the decision to leave teaching. This was the chief reason behind examining school culture's influence on both job dissatisfaction and the desire to leave teaching, in this article.

This article has clearly established differences among ethnic minorities on factors that affect teacher retention. The article does not attempt to answer the question why these differences exist. Ethnic minorities all have different histories in the United States and live under different cultural norms. Only African-Americans experienced the unquestionably deleterious effects of slavery and the endemic, institutionalized racism that followed it and continue to follow it for generations. However, Latinxs in the United States also have experienced

segregated schooling and generations of discrimination. Cultural norms differ among ethnicities as well. Different groups place different values on school factors that influence teacher retention.

What is undisputable is that Black and Latinx teachers differ significantly from each other and from White teachers on Job Dissatisfaction, on the likelihood that they will leave teaching and the school culture factors that influence these variables. Future research into factors influencing teacher retention must disaggregate data by ethnicities. Research studies that lump all minorities into one non-White binary ignore the cultural histories and norms of different ethnicities in the United States and lose effectiveness since they do not tell the complete story of teachers in American schools.

This research has intentionally expanded the breadth of research into factors influencing teacher retention by examining the school factors that influence teacher retention and how they are different for Latinx teachers. Following this quantitative analysis, qualitative analysis is called for which will allow Latinx teachers to answer the question of why different factors influence them differently. Research is now needed which will burrow down into Latinx teacher stories, both to corroborate this quantitative analysis and to deepen understanding of why things work the way they do. This is what I will attempt to do in my third research article.

CHAPTER IV

ARTICLE THREE

4.1 Introduction

"Stories of living and stories of leaving: a Latinx autobiographical narrative inquiry" uses narrative inquiry to flesh out the relationship between school organizational factors and Latinx teacher retention and job satisfaction as experienced in my own career life. In the previous two empirical studies, quantitative analysis was used to examine how various school organizational factors influence job satisfaction in teacher retention among Latinx teachers in the United States and Mexico. While quantitative analyses are very valuable for encountering relationships among different variables. They are very limited in their ability to explain the how and why behind the relationship of these variables. In this article, qualitative analysis, specifically autobiographical narrative inquiry is used to fill in the details of how and why various factors influence Latinx teacher job satisfaction in teacher retention. The narrative inquirer's twenty-year career as a Latinx teacher and Principal in a large Metropolitan school district in the American Southwest is examined. Between 1997 and 2017, I worked for one of the largest Metropolitan school districts in the United States Southwest. I began as a bilingual first grade teacher and taught all of the primary grades. I later became a high school teacher, a high school dean, and a middle school assistant principal. During my last five years in the district I was principal of an elementary school consisting of 100% Latinx students, 66% of whom were immigrants from Mexico and Central America, or children of immigrants from those countries. In the middle of my twenty year stay in the district I left teaching for two years to pursue a career in another industry. In this

article I will focus on my "stories of living" and "stories of leaving." (Craig, 2014) as well as account for the "stories of living" and "stories of leaving" of my teacher colleagues. I will corroborate the stories of teacher attrition in this article with quantitative analyses of teacher retention data (e.g. Ingersoll, 2001; Darling-Hammond, 2017; Carver-Thomas & Darling-Hammond, 2019, especially minority teacher retention data (Ingersoll & May, 2011; Ingersoll, May & Collins, 2019), along with written accounts of teacher retention in the district during the periods I worked there (e.g. Terry, 2009; Carpenter, 2019).

I am a Latinx male who immigrated to the United States from Mexico when I was six years old. I spoke English fluently but was not familiar with American jargon. I still remember the feelings of shame and embarrassment I felt when a teacher ridiculed me in front of my overwhelmingly White classmates for not understanding a particular idiom she used. I still recall the stares of disapproval I received when I would speak Spanish in public in the White ranching community I grew up in. As a beginning teacher, I worked in a Latinx-majority city and school district. However, I worked for a White principal who consolidated power and voice among her White colleagues. Years later as a principal in the same district, these experiences drove me to create an inclusive school environment that valued students and teachers of all ethnicities. Following my twenty-year career in K-12 education, these same experiences led me to pursue a career in higher education and to focus my research efforts on minority teacher retention.

In this study, I illuminate and communicate how school organizational factors surface and co-mingle in the lived experiences and personal decisions of teachers in my particular urban milieu. I highlight three organizational factors which recent research has shown are influential in Latinx teacher attrition. Classroom autonomy and influence in site-based decision-making are two factors which have consistently been found to be influential factors in minority teacher

retention (Ingersoll & May, 2011; Ingersoll, May & Collins, 2019). The presence of an effective, supportive principal is a third factor which Carver-Thomas and Darling-Hammond (2019) found to be even more important than salary scale in teachers' decisions to remain in teaching. Recent statistical analysis has found that these are all important factors in teacher retention among Latinx teacher (Burgess-Monroy, under review). The experiences I relate in this study highlight and support the importance of these factors in teacher retention among Latinx teachers. While quantitative analyses can demonstrate a probable, statistical relationship between organizational factors and teacher retention, qualitative analysis, relying on narrative inquiry, can flesh out these relationships, giving life to them, using the evocative detail of lived experiences.

In using autobiographical narrative inquiry as a research methodology, I embrace a view of teacher knowledge that is personally and socially funded (Dewey, 1938). It is informed by Connelly and Clandinin's (1990) concept of narrative inquiry and Clandinin's (1986) concept of personal practical knowledge as "knowledge... constructed and reconstructed as [teachers] live [there] stories and retail and relive them through processes of reflection" (Clandinin, 1992, p. 125 as quoted in Craig, 2013). My research uses narrative inquiry both as a methodology and as a method of understanding experience. Clandinin and Connelly (1990) conceptualize narrative inquiry in the following manner:

Narrative inquiry is a way of understanding experience. It is collaboration between researcher and participants, over time, in a place or series of places, and in social interaction with milieus. An inquirer enters this matrix in the midst and progressive in the same spirit, concluding the inquiry still in the midst of living and telling, reliving and retelling the stories of the experiences that made up people's lives, both individual and social. Simply stated, narrative inquiry is stories lived and told. (p. 20)

This article explores the ways in which my situated experiences, personal motivations, beliefs about education, personal practical knowledge (Connelly & Clandinin, 1988), relationships, and support system contributed to my stories of living and my stories of leaving (Craig, 2014). Drawing on the narrative representational form of telling stories (Craig, 1997), my individual narrative as a teacher and the narratives of teachers I worked with as a principal are re-presented and interpreted.

Narrative inquiry, with its three-dimensional space of temporality, sociology, and place helps me revisit and understand my experiences. Narrative inquiry is more than simply storytelling. Clandinin and Connelly (2006) elaborate:

Narrative inquiry, the study of experience as story, then, is first and foremost a way of thinking about experience. Narrative inquiry as a methodology entails a view of the phenomenon. To use narrative inquiry methodology is to adapt a particular view of experience as phenomenon under study. (P. 375)

Autobiographical narrative inquiry has been used by Craig (2019), Dubnawek, Fox and Clandinin (2013), Tran (2019) and Gleddie and Schaefer (2014) among others. Engaging in autobiographical narrative inquiry, as conceptualized by Clandinin and Connelly (2000), offers the possibility of disrupting the dominant discourse of minority teacher shortages brought about by underachieving minorities (Banks, 1985) or by the failure to recruit minority teachers. It examines alternative stories from experiences which are in harmony with quantitative data (i.e. Ingersoll, May & Collins, 2019; Carver-Thomas & Darling-Hammond, 2019). In this article I use autobiographical narrative inquiry to examine the temporality, place and sociality of my own educator experiences as a teacher, principal and researcher.

Writing in Clandinin's oft-cited *Handbook of narrative inquiry: Mapping a methodology*, Freeman (2007) describes autobiography as the "inroad par excellence into exploring the dynamic features—as well as the profound challenges—of narrative inquiry" (p. 2). Freeman (2007) expanded his thinking this way:

Insofar as science sees "the real" as that which can be objectified and measured, narratives are bound to seem far removed from the scientific enterprise. And yet, a curious fact remains: Narratives often seem able to give us understandings of people in a way that more "objective" methodologies cannot. This is because they often emerge from a *true*, rather than a false, scientific attitude, one that practices fidelity *not* to that which can be objectified and measured but to the whole person, the whole human life, in all of its ambiguous, messy, beautiful detail (Freeman, 1997, 2005). (p. 14-15).

A great deal of quantitative research has focused on school culture factors that influence teacher attrition and retention (Ingersoll, 2003; Darling-Hammond, 2017; Carver-Thomas & Darling-Hammond, 2019). Within that research, some studies have examined minority teacher attrition and retention (Ingersoll & May, 2011; Ingersoll, May & Collins, 2019). Notably absent from the literature are studies that examine teacher attrition and retention among Latinx teachers especially research using narrative inquiry as a Methodology (see Irizarry & Donaldson, 2012 for a notable exception). In this article I use my position as a Latinx educator to examine Latinx teacher attrition and retention. I use narrative inquiry as a method because it practices fidelity to the whole human experience. Quantitative analysis, while extremely valuable, can only describe relationships between school culture factors and teacher attrition. It cannot explain how and why Latinx teachers leave teaching or stay in teaching based on school culture factors. In this article I draw on my personal practical knowledge and that of others to attempt to do so.

As I inquire into my own experiences as a teacher and as a principal, I will be living, telling, retelling and reliving (Clandinin, 2013) my stories and my teacher colleagues' stories. In Freeman's words, I'll be practicing fidelity to the whole person, the whole human life, in all my life's ambiguous, messy detail. Significantly, this article will bring understanding to how school culture influences Latinx teachers' experiences and their stories of living as well as their stories of leaving (Craig, 2014). Autobiographical narrative inquiry as used in this article locates the inquiry for both the author and the reader. It allows the author to begin to understand the relationship with the phenomenon under study (Schaefer & Clandinin, 2011; Schaefer, 2013). As Grumet (1979) observed, "The writer can turn back on her own texts and see her own processes and biases at work" (p. 25). Doing autobiographical narrative inquiry into my own experiences expresses my hope that I might better understand why I am who I am; why I do what I do; why I believe what I believe and how these experiences, in a narrative way, have been interconnected with my pedagogy (Schaefer, 2013).

4.2 My Story of Living and My Story of Leaving

My own "story of leaving" reaches back to 1998. I began my teaching career as a bilingual teacher in a large inner-city primary school in a very large metropolis in the midsouthern United States. The thought of teaching young children had never ever occurred to me. I had married young and had a small child before I graduated from college. I had worked a series of factory jobs before deciding to return to school to get a teaching degree at the age of 26. I ended up with a master's degree in teaching English as a Second Language (ESL), and promptly applied for a job teaching ESL to foreign military officers on an air force base in another large mid-Southern city. Months passed and I did not receive a reply from the United States Department of Defense. However, in August I was offered a contract to teach elementary school children in the large mid-southern city where I lived. Since I was a native speaker of Spanish and English and I had a growing family to consider, the offer of a \$4000 USD stipend annually for being a bilingual teacher appeared very attractive to me.

My induction experiences highlight some of the reasons beginning teachers quickly leave the teaching profession. Alternatively-certified teachers are twice as likely to leave the

profession in their first five years as teachers who go through a traditional college teacher preparation program (Darling-Hammond, 2000). I was placed on a district "deficiency plan". The "deficiency plan" was an emergency measure instituted by the district to make up for its shortage of teachers, especially in hard-to-staff schools with large populations of low-SES, and minority students, like the school where I taught. The deficiency plan allowed anyone with a college degree to become a teacher, provided they took university classes and passed the necessary exams to obtain teacher certification within three years. There were many teachers like me in the district who were completely unprepared to be a classroom teacher. Unlike me, most of them did not remain in the teaching profession (Terry, 2009).

My Master's degree in teaching ESL had focused on teaching ESL to adults. During the program, I had taught only one sample lesson in front of a group of teachers. I had no experience teaching K - 12, no idea how to write a lesson plan, and no clue about classroom management. However, I had an impressive degree from an institution of higher education and therefore it was assumed that I was ready to teach ESL to anybody, anywhere.

I was not. Research shows that teachers who receive alternative certification are much more likely to leave teaching during their first years than others. Darling-Hammond (2000) found that about 60% of individuals who enter teaching through such programs leave the profession by their third year, compared to about 30% of traditionally prepared teachers and only about 10 to 15% of teachers prepared in an extended five-year education programs (p. 14).

I soon learned that it was a challenge to successfully manage 25 children on a trip to the restroom, much less manage a multitude of such transitions throughout the day, write lesson plans for them, and prepare written and oral assessments in Spanish, ESL, science, math and social studies. I was fortunate to be placed at a grade level with a group of bilingual teachers who

had a great deal of experience at their grade level and were very willing to share their resources with me. This community organically grew from a group of Latinx teachers who planned together, shared resources, made countless trips to the district's media center together and attended professional development together. This knowledge community to which I became introduced was the main reason I stayed in primary education for five years. Teachers like Adriana (all of the names in my narrative are pseudonyms), Hilda, Diana, and the respected Doctora Gil, who had been a medical doctor in Mexico before immigrating to the U.S, became trusted confidantes and their eager sharing of resources and knowledge in a common planning time helped me rapidly develop as a teacher.

Craig (1995, 2009, 2013) clearly delineates the differences between district-mandated professional learning communities, which were in vogue during my time in the district. and knowledge communities. Knowledge communities are fueled by a practical view of knowledge, organically lived and can be found or made, while Professional Learning Communities (PLC's) are driven by a formal view of knowledge, are administratively introduced and require attendance by all participants (Craig, 2013). Knowledge communities allow for accounts of practice, while professional learning communities require accountability for results (Craig, 2009, p. 603). Although professional learning communities play a part in my narrative of experience, knowledge communities have continued to influence my professional learning.

My main challenge as a beginning teacher was the reading group I was assigned. Research shows that initial teaching assignments can be an important factor in teachers' decision to stay in teaching or leave the profession (Liu & Johnson, 2006). The school had a leveled reading program where students transitioned to a different classroom during the 90-minute reading period to be taught with other students on the same reading level. I was a bilingual

teacher and in my homeroom, I had a group of students who were recent immigrants from Mexico or Central America or whose parents had immigrated from Mexico or Central America. For all of them, Spanish was their native language. The group I received for the reading period was very different. I was very surprised when I was assigned a group of native English speakers for the reading period and was told to teach reading in English, even though all of my bilingual teacher peers were assigned Spanish reading groups. I was even more shocked when I learned that they were the largest group of students as well as the group reading at the lowest level of proficiency. I learned months later that the principal had assigned me this group of students because the grade level chair in first grade who had originally been assigned this group, had complained vociferously to the principal until she was given a "high" group of students. The principal wanted to keep her veteran teacher happy and suspected that I, being the least experienced member of the staff, would go along with it and accept the group without challenging her decision. She was right about this. I was in debt with student loans, had a small child to support and could not afford to be without a job or insurance.

The principal had allowed the grade level chair, the same veteran teacher who had complained about being assigned the group I was given, to establish the leveled reading groups. She did so by consulting with all of the other English reading teachers, except myself. I was the only Latinx teacher in the group and began to suspect early in the year that my voice would not be valued.

I enjoyed working with the group of Spanish-speaking immigrant children I had in my homeroom throughout the day and was surprised to learn that I could draw on my own experiences of learning Spanish as a child to help my students who were also beginning Spanish readers. I planned lessons with my knowledge community and relied on their advice when

dealing with difficult issues of classroom management. We all taught the same subjects with the exception of the reading class. Teaching Spanish reading is quite a bit different than teaching English reading and I would learn that the two reading programs had very little in common.

After three weeks of school, the leveled reading program began, and I learned that working with the group of English readers would present completely new challenges for me. The group was extremely large consisting of 30 students, with one third of the students falling under the special education umbrella, and I had to quickly learn how to document educational accommodations for their academic and behavior plans. Additionally, as I later learned, the principal had allowed the grade level chair (the one who did not want this class) to create the reading groups with input from the other grade level teachers. I was the only Latinx teacher among the group of English reading teachers and I was the only teacher who was not consulted in the grouping decisions. Some of the teachers had taken advantage of this opportunity to send kids to this group who they believed had behavioral issues or would somehow interfere with learning. Thus, my class of 30 beginning readers consisted of a majority who had behavioral or learning difficulties or who had been rejected from other reading classes. Reflecting back on this experience makes me think about the factors that influence minority teacher attrition. The decision to allow the grade level chair to create the groups for leveled reading classes reflected a good deal of input into site-based decision-making (Ingersoll, May & Collins, 2019) but only for those teachers "in the know." The final class groupings that were established did not invite the input of all teachers (I was excluded) and placed the most fragile group of students in the class of a new and completely inexperienced teacher. As I learned later as a principal and researcher in teacher retention, this type of class grouping was something an effective, supportive principal would not permit because of its direct contributions to teacher attrition.

Unsurprisingly, when I finally received my long-awaited job offer from the Department of Defense five months after school started, I was ready to leave the next day. The only reason I stayed at the school was because my child's mother refused to move to another city, and I did not want to break up my young family. Had it not been for these considerations, I would have been one of the urban school district's many teacher attrition statistics.

I had no experience in classroom management, and although I had some assistance in lesson planning, I did not know what it would look like to execute these lesson plans in my classroom environment. The fragile groups of students I was given needed a very experienced teacher to help them and instead they were assigned a neophyte: me. I was unable to manage the behavior of the students and realized that very little learning about reading subsequently happened.

I received no coaching or support in classroom practices yet in my sixth week of teaching an executive principal, my own principal's boss, visited my classroom for observation and feedback. The executive principal showed up during the reading period and the feedback I received was abysmal: "The teacher has no control over the classroom. The students are running around wild. While the teacher was reading a story to the class, one student pulled off another student's shoe and the two begin to fight. There was very little, if any, evidence of learning going on in the classroom." I was devastated when I received my evaluation. I had always been a very conscientious student and strove to do my best in academics. It was a shock to me to realize that I was not ready to be successful in a classroom environment. At that time, I was unable to see that my struggles as a teacher were a direct result of my extremely limited preparation as a teacher, the absence of classroom support on the part of the school administration, and the

unwise decision to send a very fragile and troubled group of students to the classroom of the teacher who had no prior experience.

At the time I did not realize that it was unusual for an executive principal to visit a specific classroom in a school and perform an observation. The executive principal was a midlevel management position in the district and usually managed principals and observed how the principals managed teachers. Only months later did I learn that the executive principal disagreed, correctly so, with the decision to group the most fragile learners in the school in a large group with a completely inexperienced and uncertified teacher. Apparently, her observation of me and her feedback were her way of highlighting her message to my principal that this class grouping was not working out. At this point in my career, I was naively unaware of the dysfunctional politics within a large school district that can sometimes hurt a beginning teacher's career. Years later, after having been a principal in the same district, I realized that the tremendous pressure of accountability testing caused people in charge to make unwise decisions. This is just one example of how accountability pressure can affect beginning teachers' decisions to remain in teaching or to leave the profession (NCES, 2009; Carver-Thomas & Darling-Hammond, 2019). I had been assigned the students unlikely to pass the state examinations, while the other teachers' reading groups were composed of students who possibly could or could pass the reading tests. The focus was not on advancing the learning of all students and placing all teachers in situations where they were likely to succeed; the intent was for the students most likely to pass the state test to pass it.

My early career experience underscores how an effective, supportive principal can promote teacher retention and how the lack of a supportive principal can lead to beginning teachers quickly leaving the profession as so many did during my time in the school district

(Terry, 2009). The principal's decision to group the most fragile reading students in the grade level in a large group with the most inexperienced teacher was disconcerting. My first year in teaching was extremely difficult. However, I stayed in teaching for the next five years for two reasons. First, I had a growing family that financially depended on me. By this time, I had two young sons and a spouse who refused to move to another city. Second, I knew I could count on my knowledge community to help me continue the growth that I was seeing in myself as a teacher. As the years passed, the school principal continually moved me up to higher grades, yet I continued to work with the same organic knowledge community that I formed in my first year and they continued to be a source of support throughout my stay at the school.

One of the issues that the faculty at my school experienced over the years with the principal had to do with contracts. Contracts for the upcoming year were to be passed out to teachers in the spring, then signed and returned by the end of the school year. Nevertheless, at my school, the principal continually passed out contracts for the upcoming year very late in the year, and often neglected to give them to some of the teachers, creating feelings of insecurity among the teaching faculty. After my fifth year of teaching at the school I had had enough. At the end of the year, I was one of the teachers to whom the principal "forgot" to give a contract. I had been taking classes in information technology and working part-time in the field to support my growing family. During summer vacation, I started my own IT company and when school began the following year, the school secretary phoned me and asked why I was not present for the annual two weeks of professional development prior to the beginning of classes. I told her since I had not received a contract, I assumed the school did not wish me to return. She assured me there had been some mistake. The principal sent me a contract overnight by certified mail, but I promptly returned it to him unsigned. I had had enough of the lack of administrative

support at that school and because I now had another career opportunity, I decided to take advantage of it. Research has shown that Latinx teachers who teach in the STEM field are three times as likely to leave the profession as their Latinx counterparts who teach other subject matters (Irizarry & Donaldson, 2012). One of the reasons is that the fields open to STEM workers provide greater salary benefits with the same level of training. During the two years I ran my technology business my net salary multiplied. I enjoyed the financial freedom that an increased salary brought. My mother was living in Mexico and when I began to earn a salary in American dollars, I did not hesitate to send her money frequently to take care of her needs there. It was also very important to me that my young kids have opportunities that I never had as a child. I suspect that many Latinx teachers like me, who left the teaching profession to pursue a career in a STEM field, did so to provide greater opportunities for their family. Many Latinx teachers, especially those of us who are immigrants or children of immigrants, feel the need to care for our families who may be living in less than desirable conditions in other countries. This may be one of many reasons that Latinx teachers in STEM fields leave the teaching profession and pursue other opportunities. However, this was my lived experience and my own "story of living" and "story of leaving" (Craig, 2013).

4.3 Place, sociality and temporality of my stories of my teacher colleagues

My "story to leave by" was nested in a "story to begin again by" (Craig, 2019). After two years of running an IT business, I was burned out. The salary was very good but running my own business required at least an 80-hour work week and I was missing out on the childhood growth of my two young sons. I returned to teaching, this time as a high school teacher teaching information technology to teenagers. Because I now was a certified network administrator and IT professional, I easily qualified for the Trade and Industry certification to teach secondary school

in my state. I was hired at a district magnet school for gifted and talented students that consisted of 98% Latinx students. I loved the school and my students. I found that even the high school students enjoyed speaking Spanish with a bilingual teacher and that teaching technology came naturally to me. The school had a dedicated group of high-achieving teachers and a Latinx principal for whom I loved working. After three years at the school I was named Teacher of the Year by my fellow faculty members. It was one of the proudest moments of my career. I only left the school after five years because I accepted an administrative position where I felt I could influence an even greater sphere of Latinx and other minority students in my district.

Finally, after 15 years as a bilingual teacher and a high school teacher and administrator, I became a first-year school principal in 2012 in a school that had been placed on "academic probation" under the state accountability system. I was in my first year as a principal at the school the same year the school was in its first year on "academic probation." The summer before I began as principal at the school, I learned that the district would implement scripted reading lessons for all reading teachers at schools on academic probation. Teachers at all of these schools would be assigned these scripted reading lessons regardless of their individual students' performance on the previous year's state-mandated exam. The scripted reading lessons would be assigned solely based on the school's academic ranking. Thus, in some cases very experienced teachers who had taught reading for many years and may have achieved very high test scores the previous year would be required to teach lessons that basically consisted of reading from a script.

I knew that this heavy-handed response would completely take away any shred of classroom autonomy that teachers previously had. Classroom autonomy is an important factor in job satisfaction in teacher retention, especially for minority teachers (Ingersoll, May & Collins, 2019). The overwhelming majority of teachers at my school were Latinx, followed by a smaller

yet significant group of African-American and very few white or Asian teachers. The issue of teaching scripted reading lessons was indeed a serious point of contention throughout the school year and may very well have influenced the high degree of teacher turnover the school subsequently experienced.

The school district also implemented periodic benchmarks in reading, writing, math and science, all the subjects tested in the state-wide accountability system. These benchmark tests were to be given every six weeks. Teachers repeatedly complained about the loss of instructional time due to pre-testing and testing activities especially teachers who were pulled out of class to participate in district testing strategy meetings. Teachers had long felt that there was too much testing in the school (state tests, norm-referenced national exams, G/T testing, etc.) which took away critical instructional time and effectively made the test the curriculum. Adding six tests a year only compounded this feeling. The previous year the state had decided to implement a redesigned state accountability test. The district we worked in had also adopted teacher evaluation based on value-added scores. In other words, a percentage of teacher evaluations would be based on student growth on the state accountability exam. The method of calculating these value-added scores was not made available publicly, further increasing the level of mistrust teachers felt towards the district in general and towards me as a principal as well. Teachers who once had willingly offered to take on the most academically or behaviorally challenged students now constantly maneuvered to have the brightest and most compliant students on their class rosters, knowing that it could impact their test scores, their teacher evaluations, and even their job security. This further contributed to students being left behind and ironically resulted in the opposite of what the NCLB Act (2002) purported to overcome.

Amrein & Berliner (2002) explained that many teachers changed their classroom practices "in order to reconcile the consequences attached to high-stakes tests" (p.48). This was especially true in urban or low-performing schools like mine (Faulkner & Cook, 2006; Diamond & Spillane, 2004). This commonly included the explicit teaching of test taking strategies and routine use of test-like materials for instruction and assessment (Amrein & Berliner, 2002; Dorn, 2007.) The increase teaching time devoted to test taking skills reduced the time allotted to non-tested content areas, leading to a narrowing of the curriculum (Nichols, 2011; Nichols & Berliner, 2007).

The place, sociality and temporality of my narrative inquiry are reflected in district statistics. District administered teacher exit surveys show that 19 percent of the district's teachers leave the profession after the first year of teaching and another 2 percent after the second (Terry, 2009, p. 1). Furthermore, nearly half of beginning teachers (47 percent) abandon their teaching careers by their fourth year (p. 1). Locally and nationally, teacher turnover further increases in urban schools characterized as low performing, high minority, and/or high poverty, (Barnes, Crowe, & Schaefer, 2007; Hanushek, Kain, & Rivkin, 2004; Ingersoll & Smith, 2004) adjectives which could all appropriately be applied to my school context.

The school I had inherited, Harrison Elementary (a pseudonym), was known as "the hole" as another principal from the region explained to me. One can only imagine the deleterious effect this unfortunate nickname had on school morale. It was considered the school where all the "bad teachers and bad students" ended up. The previous principal at the school had a policy of accepting any child who had received a complaint at one of the many nearby neighborhood schools. Other area schools knew that they could count on this principal to accept any child from

another school who was not' behaving or performing satisfactorily. While it is admirable to have an "open door" policy welcoming all kids (and the enrollment certainly increased the principal's budget since funding was based on average daily attendance), the principal unfortunately had not put any support structures in place to help deal with the constant influx of behaviorally and academically-challenged children.

I came to find out that veteran teachers had continually left the school over the previous principal's five-year tenure due to issues surrounding the population of the school. So, when I started as principal, the school was staffed with a mix of young, inexperienced teachers and older disgruntled veteran teachers, an amalgam that did not easily blend together. Teachers had already left the school in record numbers due to student discipline problems, and lack of administrative support. Now, I suspected that the accountability-related tensions and lack of classroom autonomy would further contribute to teacher turnover in my new school context.

4.4 The Fifth Grade Team

The fifth-grade team consisted of two very experienced teachers as well as one brandnew teacher. Jake, an experienced teacher, was White. Hannah, the second experienced teacher, and Aniyah, the newly-certified teacher, were both Black. Jake had been a teacher for nearly 20 years, most of them at Harrison. He was outraged that the district expected him, a veteran teacher, to teach scripted reading lessons, even though his students typically had very high performance on the standardized state exam. He was also very disturbed that the scripted reading lessons called for his students to be divided into small groups for leveled reading lessons. For years he was used to teaching to the whole group and felt that he would lose control of the classroom by not standing in front of the entire class and commanding their attention all at once. Hannah had also been a teacher for several years. Although she was new to Harrison, she had

previously taught reading to sixth graders and was also shocked when she realized that the district had scripted reading lessons that she would be required to teach. Research has shown that classroom autonomy is an important factor in both job satisfaction and teacher retention, and especially so for minority teachers (Carver-Thomas & Darling-Hammond, 2019; Ingersoll, May & Collins, 2019). These teachers felt, rightly so, that scripted reading lessons completely stripped them of their classroom autonomy and their abilities to be curriculum makers (Clandinin & Connelly, 1992; Craig & Ross, 2008). Aniyah was in her first year of teaching, and while she did not initially object to teaching scripted lessons (in a way she was relieved she did not have to prepare the lessons herself), as the year progressed she began to adopt her grade level colleagues' attitude that scripted reading lessons are a violation of teacher autonomy. In short, they made curriculum implementers of teaching professionals striving to be curriculum makers.

Begrudgingly, the teachers began to teach the scripted reading lessons. Following the district's directive to teach the lessons word-by-word, a difficult year ensued for the fifth-grade teachers. The school had a policy of transitioning all Spanish-speaking students into all English classes in fifth grade. This was very difficult for the majority of our students since they had never had reading classes in English before and it was even more difficult for the teachers, since they felt they were not able to teach the students as well as possible, their hands being tied by the scripted reading lessons. I did everything I could to support the teachers. None of them were bilingual and some of their students still had very low levels of English comprehension. I assigned bilingual teacher aides to the teachers during their reading lessons to help overcome communication difficulties. I also gave the teachers release days to plan reading instruction with our bilingual assistant principal. However, the pressure of testing accountability was very high since we had to give district mandated benchmark tests every six weeks and teacher level data

was made available to the entire district. The fifth-grade reading group was very low because they were experiencing the very real and difficult transition from Spanish reading to English reading and their benchmark scores in English were much lower than they had been the previous year in Spanish. This made the teachers look and feel bad. Nevertheless, I was able to maintain a good relationship with both Jake and Aniyah. They recognized that my hands were tied by the district and that I was doing everything possible to support their reading lessons. They dutifully made it through the year and continued teaching at Harrison for several years.

Hannah was a different story. Despite repeated reminders that the scripted reading lessons were a district initiative, Hannah continually blamed me, the principal, for the scripted reading lessons as well as the district-mandated benchmarks. She felt that the psychological, and social pressure created by scripted reading lessons and benchmark testing made her job unduly stressful. She began to miss work frequently in November and December and right before the winter break I learned that she was being placed on family medical leave due to psychological issues. She was out the rest of the year until she surprisingly decided she felt well enough to return the day after the state reading exam was administered in April. I had placed a bilingual assistant principal who was a reading specialist in her classroom while she was on leave and her students did quite well on the exam. The assistant principal, who was also an immigrant and bilingual, had done a great job with the students and their reading levels improved dramatically. Hannah transferred to another school with my blessing near the end of the school year. However, when the state reading scores came out the following year, reading scores in our school were reasonably good, and all the teachers received the same small but rewarding performance bonus. At that time Hannah, who had received the same bonuses the others, filed a grievance against me, claiming that she should have received a much higher bonus than other teachers, because her students did so well on the reading exam. This was despite the fact that she was not even in the reading classroom the majority of the year. Her grievance stated that I had prevented her from receiving a much higher bonus by forcing her to teach scripted reading lessons. When her grievance was denied at one level, she would move it to a higher level. As far as I know, it remained open when I eventually left the district after five years as principal.

Removing classroom autonomy from teachers is very difficult. My experience showed that it drastically reduced job satisfaction and increased the likelihood that teachers will leave their position. Not every teacher reacts to the loss of classroom autonomy as extremely as Hannah did. I was fortunate that Aniyah and Jake remained at the school during the rest of my tenure as principal there. They were good teachers and following the first year when the school escaped from academic probation, they were able to teach more freely and begin to collaborate freely on reading lessons they created themselves. The scripted reading lessons had completely removed the teacher's role as curriculum-makers (Clandinin & Connelly, 1992; Craig & Ross, 2008)) and firmly established them as mere "conduits" (Clandinin & Connelly, 1992; Craig, 2002). Fortunately, it only lasted one year at my school because test scores improved dramatically thanks to the hard work and efforts of the teachers.

4.5 The Fourth Grade Team

The story of Alexis, Amber, and Mariana illustrates the value of an organically lived knowledge community created among teachers, based on commonplaces of experience and fueled by accounts of practice. Following the large exodus of teachers after my first tumultuous year as principal, I hired Alexis, Amber, and Mariana to staff the three vacant positions which comprised the school's fourth grade team. After meeting the three teachers several times during various rounds of interviews I suspected that their personalities would mesh well. Little did I

know that they would collaborate to create a blossoming knowledge community that would lead to a phenomenal fourth grade experience and tremendous academic gains for the school's students.

At the beginning of the year, an opportunity arose to show the fourth-grade team that they had my support. Alexis and Amber, both Black teachers, brought a student, Mark, to my attention who consistently had issues with classroom conduct, refusing to do work and acting out in a manner that distracted his classmates. Since Alexis and Amber were both experienced teachers and adept at classroom management, I knew that the issue lay with the student rather than the teachers. After talking with the student himself, he revealed to me that his parents had told him that he did not have to do what his teachers told him to do at school. He only had to do what his parents told him.

I decided to invite the parents for a meeting in my office. When the parents arrived, I welcomed them and began the meeting by asking the teachers to describe the issues that had been occurring. I calmly stated that I would like for all of us to work together to help Mark overcome his classroom issues and be successful as a student. As the teachers described the issues Mark had been experiencing, the mother became increasingly agitated, frequently interrupting and referring to me as "homey" or "bro." I calmly reminded her that we were in a professional learning environment and that I would prefer to be referred to by my professional title. The teachers calmly finished describing the issues Mark was presenting in the classroom and the parents, in an increasingly agitated tone, began to deny that Mark could present any problems in the classroom, that he behaved perfectly at home and that any problems had to be related to the teachers' behavior. I tried explaining to the parents that Amber and Alexis were very successful teachers and had years of experience working with hundreds of students. I

realized that my efforts were in vain, when the parents bluntly stated, "Mark does not have to do anything those teachers tell him." When the parents referred to Amber and Alexis as "those teachers" and said their son didn't have to do anything they requested of him, I began to suspect an element of racial intolerance in their conversation. The parents, like me, were both Mexican-American and the teachers were both African-American. When I stated in a very straightforward fashion that schools do not work that way and that there is an expectation that students follow teacher's instructions, the parents angrily stood up and prepared to leave my office. As the mother left the front office, she wheeled, pointed her finger at me in a menacing way and said, "I will kill you, mother-f****r."

Still in a very calm and deliberate tone, I stated that the parents needed to leave the campus and that they would not be welcome back without my prior written permission. I used the school district's standard form issuing a parent ban from my campus and scheduled a meeting with the parents to give them the formal letter. Since I was aware of the mother's violent tendencies, I invited district police officers to be present at the meeting. The police officials arrived first and parked their SUV in front of the school. I looked out the window waiting for the parents to arrive. I saw the parents approaching the school. Apparently, they saw the police SUV and decided to turn around and leave. I explained the situation to the district police officers and they graciously agreed to hand-deliver the letter to the parents at their home. After several days of the grandmother dropping off and picking up Mark, the parents withdrew Mark from the school.

I felt no remorse about banning the violent, racially intolerant parents from the school context and knew I had taken the right action when I heard other teachers talking about how I had stood up for Amber and Alexis. The presence of an effective, supportive principal is a

significant positive influence in retaining teachers. (Carver-Thomas & Darling-Hammond, 2019; Ingersoll, May & Collins, 2019) and I felt that I had taken the right action to support my teachers and they ended up staying at the school for the remainder of my tenure there.

The fourth-grade team consisting of Amber, Alexis and their Latinx colleague, Mariana continued to flourish into a vibrant knowledge community throughout the year. The teachers' personalities naturally meshed and they enthusiastically met with each other after school and on weekends for both personal and professional reasons. At the end of the year when Mariana married, Amber and Alexis took charge of making the arrangements for her wedding. When I met with the group during the weekly district-mandated PLC meetings, they would typically take charge of the meeting, focusing my attention on efforts the three of them had collaborated on and school level initiatives they wished to lead. The group of three teachers brainstormed and spearheaded the idea of Writing across the Curriculum, an initiative which promoted writing across grade levels and subject matters. They were also responsible for having students read their creative compositions out loud during lunchtime in the cafeteria, an idea which was initially met with some trepidation on the students' part but later came to be accepted with a great deal of enthusiasm as students became more and more interested in their peers' creative writing. They all became important innovators and leaders in site-based decision-making, and I believe it was one of the reasons that all of them stayed at the school during my tenure there. They were well known for leading district professional development and doubtlessly had countless offers from other schools.

4.6 The First-Grade Team

The first-grade team was not quite as cohesive as the fourth grade team. Two of the team members did work closely together, yet the third team member seemed to be often excluded from their group, purposefully or not. Fiorella was a newly certified teacher who had previously worked in one of the cities many Head Start centers. Adriana was a veteran teacher of many years' experience who had begun her teaching career in Mexico before immigrating to the United States. Alicia was the third member of the first-grade team. Like the other two first grade teachers she identified as Latinx. She was also Native American, having grown up on a reservation on the Texas Mexico border. Alicia was a veteran teacher of nearly 30 years' experience who came to Harrison from a neighboring school district along with her best friend and close colleague, Rebeca, who taught third grade at the school.

Throughout the course of the year I noticed that Fiorella and Adriana typically stayed very late after school planning together in each other's classrooms. School let out at 3:15 and teachers were not obligated to stay past 3:30, yet I often would see Fiorella and Adriana planning together as late as 6:00 or 6:30 in the evening. At times, they would still be there when I left the campus at 7 o'clock. Fiorella and Adriana, because of their extreme dedication to their students, spent long hours after school planning together. While they were close friends they had also taken on a mentor-mentee relationship, with the veteran Adriana being newly certified Fiorella's mentor.

As the year progressed, I discovered that not only were Adriana and Fiorella extremely hard-working they were also very creative. They both expressed displeasure at having to follow the district's scripted reading lessons, but veteran Adriana, I suspect, felt a great deal of

obligation to her school and her district after having taught in the same school for many years and faithfully executed the scripted reading lessons day after day. Fiorella dutifully followed her mentor Adriana's lead and faithfully executed the district-mandated scripted lessons as well. Fiorella quickly became enamored of the small group component of the reading lessons and began to incorporate small group learning centers into other subject materials. It was fascinating to see how she and Adriana developed learning center rotations in mathematics, where groups of 4 or 5 students rotated from using Unifix cubes to learn two and three digit addition and subtraction, to using Cuisinart rods on mats to understand place value, to using money manipulatives to understand the value of different coin denominations, to a teacher-led group where struggling students worked directly with the teacher on objectives they had trouble capturing. They even augmented the scripted reading lessons by incorporating a listening center for students who were struggling with basic sound-symbol correspondences in reading. The students listened to tapes of beginning readers which the school had purchased for the first-grade classrooms while they followed along with their fingers in the corresponding text. The two teachers even incorporated math into their small group reading centers. Given the autonomy to make important decisions about curriculum, even with stringent requirements of scripted reading lessons, the two teachers blossomed as curriculum makers and their students showed outstanding academic growth in all subject materials.

Classroom autonomy has been shown to be an extremely important factor in teacher retention (Darling-Hammond, 2017: Carver-Thomas & darling-Hammond, 2019), especially so for minority teachers like Fiorella and Adriana (Ingersoll & May, 2011; Ingersoll, May & Collins, 2019). Importantly, when teachers are given classroom autonomy, they can grow in their role as curriculum-makers (Clandinin & Connelly, 1992; Craig & Ross, 2008). The district-

mandated scripted reading lessons attempted to reduce Fiorella and Adriana to roles as mere conduits (Clandinin & Connelly, 1992) of the curriculum. Yet their passion for education would not allow this. They worked tirelessly to overcome the bonds of the prescribed curriculum and to truly function as curriculum makers. Their students' success proved that this was the most appropriate role for them.

Although the third first grade teacher, Alicia, did not naturally mesh with Adriana and Fiorella in the district mandated professional learning community, she created her own knowledge community with best friend, Rebeca, and they too were able to express themselves as curriculum makers. While both dutifully followed the district's scripted reading lessons, they also created an afterschool book club for girls. They met after school with a group of seven or eight third and fourth grade girls to read books that would be of particular interest to girls of that age. Books about Cam Jansen, Dyamonde Daniel and Muggie Maggie enthralled the girls and piqued their interest in becoming lifelong readers. It is interesting how, despite the heavyhanded, prescriptive curriculum demands of the district, these teachers naturally formed organic knowledge communities which benefited their own growth as teachers as well as their students' academic achievement. Additionally, it allowed the teachers to function as curriculum makers, rather than as conduits the likes of which the district curriculum prescribed

4.7 Conclusion

When I began my work as a principal at Harrison, I had no idea I was stepping into the middle of the storm, not into the calm eye of the storm, but into the middle of the deepest darkest part of the night when floodwaters rise and threaten and heavy winds topple even the sturdiest of houses. Testing had a stranglehold grip on curriculum, instruction and assessment in my state,

which explained the prescriptive approach that dominated the district and required my teachers to teach scripted reading lessons.

The superintendent of the school district would periodically call meetings of the principals of the 30 schools who had been placed on academic probation the previous year. He would scream at us. "You have the worst schools in the district! What are you doing to make your schools better?" I was inclined to rise from my seat and yell back at the superintendent "I was not a principal at the school last year and did not get it in its current state, yet you were the superintendent and have 30 schools on academic probation, more than any other superintendent in the state. What are you doing to make your district better?" Yet I intuitively understood that the superintendent was not looking for anybody to recalibrate his moral compass and decided the best course of action for my campus--and my continued employment-- would be to remain silent.

"Sometimes [what is] called benevolent interest in others may be but an unwitting mask for an attempt to dictate to them what their good shall be, instead of an endeavor to free them so they may seek and find the good of their own choice." (Dewey, 1916, P. 121 as quoted in Craig, 2010). When reading teachers were given scripted reading lessons at the beginning of the year, it was nominally an effort to improve their students' reading comprehension. The teachers were expected to act as conduits funneling the curriculum into their students in the same way that a tape recorder could. This took away any conception of teachers as curriculum makers (Clandinin and Connelly, 2000; Craig & Ross, 2008) and completely removed their classroom autonomy. This was what Eisner (1988) described as the reduction of human experiences to automaton conditions of learning.

A 2019 article in the city's largest newspaper (Revolving Door, 2019) focused on one intermediate school in the district during a 10-year period. The school had no principal stay more

than two years and had 40% of teachers leaving the campus on average every year. Parents were quoted as saying, "I would not participate in anything at the school." The article found that there were dozens of campuses like the one mentioned, many of them serving the cities "most impoverished and neediest children." The newspaper analyzed 10 years of staffing data and found that nearly 40 of the districts' 277 schools have, on average, replaced one-third to one-half of their teaching faculty every year. During that same decade, 30 schools in the district had cycled through at least five principals. The eminent teacher retention researcher, Richard Ingersoll, was quoted as calling this pattern "disastrous." The article found that exit surveys of teachers leaving the district revealed that half of the teachers said school leadership and campus culture had a "large" or "certain" impact on their decisions. Furthermore, issues with student conduct, recognition and respect, workload and career advancement were chosen by about 35 to 40% of teachers. Only about 30% of the exiting teachers selected school compensation as their main reason for leaving.

In the United States, 50% of beginning teachers leave the teaching profession within their first five years of teaching (Carver-Thomas & Darling-Hammond, 2019; Ingersoll, 2004, Levine 2006). In the particular district in which I lived and experienced "coming to know" as a teacher, 47% of entry-level teachers terminated their positions by their fourth year of employment. A Research and Accountability Department exit survey was conducted at the end of the 2007-2008 school year (three years before I began as principal) and 46.3% of teachers associated their leaving with not feeling "valued in the workplace.", 45.2% to not receiving "administrative support" and 43.9% to "workplace conditions and policies."(Terry, 2009).

As an education researcher reflecting on my years as a principal working for a superintendent who felt that the key to urban school reform was "documenting teachers out," the

fact that this culture still exists in the district is not surprising. In district principal meetings, I witnessed the superintendent publicly chiding principals for not "moving [out] enough teachers." I was praised for the high teacher turnover at my school following my first year and it was thought that I had effectively "cleaned out" the school. However, this process had come at untold costs of reduced teacher morale in the loss of valuable as well as ineffective teachers. The school took a great deal of time to recover from these avoidable losses

However, in this article I have lived and relived, told and retold my stories of how potential "stories of leaving" were often, but not always, transitioned into "stories of staying" (Craig, 2014). Quantitative research and qualitative research are not necessarily point and counterpoint. They are not by definition antagonistic. In this article. I have attempted to show how narrative inquiry, a form of qualitative analysis, has the capacity to elaborate and flesh out quantitative analysis. It is able to illustrate how and why classroom autonomy, influence in sitebased decision-making, and the presence of an effective, supportive principal support teacher retention. In the years following my first turbulent year of principal, following which 50% of teachers left the school, teacher attrition was reduced to 5% or less. Teachers left the school, only when they decided to retire, or because of some other change in life situation (e.g. moving with a spouse). Quantitative analysis can demonstrate the relation between school culture and teacher retention, however only qualitative analysis, specifically narrative inquiry, can explain the how and the why of these relationships in all their ambiguous, messy, and beautiful detail.

CHAPTER V

CONCLUSION

A clearer picture of Latinx teacher retention is evident at the conclusion of these three articles than was the case in the beginning. A demonstrable gap exists in United States schools between Latinx teacher and student populations. Nearly one in every 4 children currently attending schools is Latinx and Latinxs are already a plurality in 22 states (Fry & Gonzales, 2008). Statistical models suggest that by 2050, the Latinx school-aged population will more than double at which point Latinx students will constitute the largest group of students in U.S. schools (Fry & Gonzales, 2008). However, the Latinx teacher population remains steady with no signs of growth at a relatively small seven percent. Because of the huge gap between student and teacher population (Gay, Dingus, & Jackson, 2003; Villegas & Lucas, 2004). Latinx teachers are likely to hold students to higher expectations (Romo & Falbo, 1994; Yeo, 1997); they will be more conscious of the cultural frames of reference their students bring to school (Irvine, 1989; Monsó & Rueda, 2001); and they will be more aware of the sociopolitical context in which Latinx students are educated (Beaubeouf-LaFontant, 1999; Quiocho & Rios, 2000).

However, current U.S. efforts to address the Latinx teacher shortage will only serve to maintain Latinx teacher populations at their current levels. Increased efforts must be undertaken to retain Latinx teachers in the teaching population. As is true for other minorities, teacher attrition is the primary cause of the Latinx teacher shortage in the United States. My first article "Teacher Attrition and Job Dissatisfaction in Mexico: Why Do Mexican Teachers Leave the Profession?" examined issues surrounding teacher retention in Mexico, a country where a large

part of Latinx teachers in the United States have roots. The study found correlations between job satisfaction and teacher retention and factors such as good student-teacher relations and having a high degree of collaboration within the school and with school and community partners. This was true for all Mexican teachers, except the most veteran group, those with twenty or more years of experience. These teachers expressed a great deal of satisfaction with their teaching careers regardless of their feelings about collaboration and student-teacher. It may be that this generation of teachers represents an "old school" view of education where teachers are esteemed because of their wisdom and ability to be the "sage on the stage" rather than their capacity to relate well or collaborate with others. However, it may also be true that this generation represents only the hardiest of survivors who have learned to be happy regardless of their circumstances. Regardless, more research is needed in this area. It was also found that Mexican males, while expressing the same level of satisfaction with their jobs as female teachers, were significantly more likely to report feelings of regret about entering the teaching profession. It's possible that males feel a greater responsibility to be the "breadwinner" in the Mexican family or that males, who typically teach in the STEM fields, feel a loss of self-esteem upon moving from a highlyesteemed career in Science, Technology, Engineering or Mathematics into a less-esteemed teaching position. Like the issues surrounding years of experience and feelings of satisfaction among Mexican teachers, more research is called for in this area.

However, one thing is clear, as American schools, districts and state and local education agencies reach out to Mexico, Spain and other Spanish-speaking countries to recruit Latinx teachers to fill the current gap in American education, it's important the they take under consideration these cultural factors if they wish to not only recruit, but also retain, Latinx immigrants in the teaching profession.

The need for research into school contextual factors that affect Latinx teacher retention in the United States is both broad and deep. The body of research looking into factors affecting minority teacher retention in the United States is growing (Ingersoll & May, 2011; Ingersoll, May & Collins, 2019; Irizarry & Donaldson, 2012; Carver-Thomas & Darling-Hammond, 2019), however research examining individual minority groups apart from the monolithic non-White binary is scarce. My second article "Job satisfaction and teacher attrition among Latinx teachers in the United States: a quantitative analysis" attempts to empirically ground the school culture factors that most influence teacher retention among Latinxs.

A clear picture emerged from this article that Latinx teachers differ significantly from other minorities and from White teachers on issues surrounding teacher retention. Using items related to a desire to leave teaching on the National Teacher and Principal Survey, it was found that Latinx teachers are significantly more likely to express a desire to leave teaching "as soon as possible" or "as soon as a better opportunity comes along" than White teachers and significantly less likely to do so than Black teachers. Similarly, Latinx teachers scored significantly higher than White teachers on Job Dissatisfaction, yet significantly lower than Black teachers.

When Black, White and Latinx teachers were compared on measures of school culture factors that affect job satisfaction and teacher retention, significant differences emerged as well. Latinx teachers did not differ significantly from White teachers on the effect of Influence on Site-Based Decision-Making on Job Dissatisfaction, however the same variable had a significantly greater effect on the Leave Teaching variable for Latinx teachers than it did for White teachers, yet significantly less than it did for Black teachers.

Latinx teachers were found to perceive having significantly greater classroom autonomy than Black teachers, however they did not differ significantly from other ethnic groups on the variable. Additionally, job dissatisfaction was found to be significantly lower for both White and Latinx than Black teachers at higher levels of Classroom Autonomy and significantly higher for Latinx and Black teachers as compared to White teachers at the lowest level of Classroom Autonomy.

Perhaps the most interesting of the three school culture variables studied was Presence of an Effective, Supportive Principal. Previous research has described the importance of the Presence of an Effective, Supportive Principal but has either not looked at differences for minority groups (e.g. Carver-Thomas & Darling-Hammond, 2019) or has not found a significant effect for ethnicity (e.g. Ingersoll, May & Collins, 2019). In my study, Black teachers were significantly more likely to report having an effective, supportive principal than White teachers but Latinx teachers were not found to differ significantly from other ethnic groups. When looking at the effect of having an effective, supportive principal on the Leave Teaching variable, it was found that Latinx teachers scored significantly higher than Black or White teachers for both those who Strongly Agreed and those who Strongly Disagreed that they had an effective, supportive principal. Additionally, on the Job Dissatisfaction variable, it was found that Black teachers scored significantly higher than Latinx or White teachers on the effect of having an effective, supportive principal on Job Dissatisfaction.

The picture that emerges is intricate and clear. School culture factors like classroom autonomy, influence on site-based decision-making and the presence of an effective, supportive principal affect different people in different ways. If the American education system truly wishes to improve teacher retention among Latinxs, Blacks or any other minority group, it's essential that we pay attention to how these factors differently affect different ethnicities. This also highlights the need to focus teacher retention research on different ethnic groups rather than lumping all of them together into one non-White binary.

My third article "Stories of living and stories of leaving: a Latinx autobiographical narrative inquiry" steps out of the realm of objective, measured data analysis and attempts to examine the stories told and retold in Latinx teacher retention in all of its ambiguous, messy detail (Freeman, 2005). The research literature on teacher retention is noticeably devoid of studies focusing on Latinx teachers. In this autobiographical narrative inquiry, I use my personal, practical knowledge as a Latinx narrative inquirer to look at how school culture influences teachers 'experiences and their stories of staying and their stories of leaving. Quantitative analysis can describe relationships between organizational factors but does not attempt to elaborate on how those relationships are carried out in teachers' lives and stories and does not attempt to elaborate on why these connections exist. The article looks at knowledge communities in the teacher story of a beginning Latinx teacher (the autobiographer) and then looks at other lived out knowledge communities that organically grew out of the lived experiences of teachers I worked with years later as a school principal. The article highlights why alternatively certified teachers are much more likely to leave teaching in their first few years of teaching and describes how the knowledge community I (the narrative inquirer) became a part of encouraged me to stay in teaching.

Accountability pressures come into play as test driven data led the school to assign me, a novice teacher, a group of students I was wholly unprepared to teach. The lack of an effective, supportive principal informed my narrative inquiry as a beginning teacher story and is contrasted with later stages of my story where I became a principal and was able to support teachers,

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influencing their stories of leaving and stories of staying. The lack of administrative support I received as a beginning teacher was the main reason I left the teaching profession for two years.

Accountability testing reared its ugly head again in my narrative inquiry when after many years of classroom teaching, I became a first-year principal at a school that had been placed on "academic probation" because of low state test scores. The district implemented scripted reading lessons at the school where I took over as principal and at schools throughout the district that were on academic probation. At this point in my narrative inquiry, classroom autonomy is completely stripped from my teachers, reducing them from curriculum makers to conduits or funnels for the district prescribed curriculum.

The scripted reading lessons and the concurrent district benchmarks were one of the reasons the school experienced a fifty percent turnover rate in my first year as principal. These two were the main factors in one teacher story of leaving where a teacher felt psychologically unable to continue teaching until accountability pressures were removed. She eventually left teaching and lashed out at me, filing a long-running grievance that she refused to close.

The stories of leaving and stories of staying in the third article are in harmony with the quantitative analysis performed in the first two articles. Quantitative analysis confirms that the presence of an effective, supportive principal can play an important role in the decisions Latinx teachers make about whether to stay in teaching or leave the profession.

The quantitative data surrounding the presence of an effective, supportive principal is further fleshed out by my story of finding a way to support teachers in an extremely hostile confrontation which may have influenced their decision to remain a part of the school community for several years. Just as data analysis shows that classroom autonomy is an important factor in the decision of minority teachers to stay in teaching, my story of the fifth grade teachers being completely stripped of autonomy led to a very stressful year for teachers, one of whom left the school in a very dramatic manner. Finally, data analysis rightly recognizes that input into site-based decision-making is an important factor in Latinx teachers' decisions to remain in teaching and my narrative inquiry tells stories of Latinx teachers who provided valuable input into decisions that affected the whole school.

What I have attempted to do is show how quantitative analysis and narrative inquiry can work together in harmony to tell a more complete picture of Latinx teachers and our decisions to stay in teaching or leave the profession. Quantitative analysis can make a strong case for the influence of various factors on Latinx teacher retention. However, qualitative analysis, using narrative inquiry as a methodology can flesh out how and why these factors influence Latinx teachers' decisions. Using both approaches, a more complete story can be told and more complete solutions to challenges we face in education can be sought.

The three articles in my dissertation have looked at Latinx teacher retention with both breadth and depth. It has become very clear that the factors that influence teacher retention among Latinx teachers differ from the factors that influence teacher retention among other minorities and the factors that influence White teachers. Latinx teachers value classroom autonomy, influence in site-based decision-making and the presence of an effective, supportive principal. Yet we value these factors, not surprisingly, differently than other teachers, whether they be White, Black or another ethnicity. This establishes a clear call to research Latinx teachers differently as well. All minorities should no longer be lumped together into a non-White binary when researching teacher retention. Latinx teachers should be given our own research space just as other minorities should. The quantitative portions of my dissertation demonstrate that Latinx teachers are more likely to express job dissatisfaction and a desire to leave teaching than their White counterparts and that Latinx teachers value organizational factors like classroom autonomy, influence in sitebased decision-making and the presence of an effective, supportive principal to a greater extent than White teachers do. The qualitative portion of my dissertation shows that Latinx teachers are still denied these school factors that we highly value. As a beginning Latinx teacher I was denied a voice in critical school decisions that nearly made me leave teaching. I had to leave teaching, change schools and eventually become a principal to have an effective voice in school decisions. My story is representative of what Latinx teachers face everywhere. Over the last twenty years, I have seen on a daily basis how Latinxs, as immigrants, as second language learners and as minorities are denied a voice in education.

This should be a wake-up call for American education. Projections suggest that by 2050, Latinx students will be the largest group of students in United States schools (Fry & Gonzalez, 2008). Nevertheless, Latinxs have steadily comprised a mere seven percent of American teachers for decades. This is unjust and must be addressed at local, state and federal levels. Current recruitment efforts are productive and should be continued yet they cannot keep pace with the effects of Latinx teacher attrition (Donaldson & Irizarry, 2012). Federal and state reform efforts have to focus attention on giving minority teachers, including Latinx teachers, a true voice in site-based decision-making. Local education agencies need to ensure that teachers are given the type of classroom autonomy that will promote retention among Latinx teachers. Higher education must ensure that aspiring principals of all ethnicities are trained in culturally relevant leadership that will allow them to effectively support Latinx teachers in a way that promotes their retention in the teaching ranks. Writing this dissertation has clarified my own research agenda for me. It has been concretely shaped by my career in K-12 education. I must continue to do large scale data analysis that will expand current understanding of the Latinx experience in education. I must also continue to do qualitative analysis that will allow me to gather stories of Latinxs in education and attempt to explain the phenomena of Latinx teacher retention through the lived experiences of Latinx teachers. Doing anything less would be to be untrue to myself. I have to remember the advice of the Latinx civil rights leader Cesar Chavez:

"We cannot seek achievement for ourselves and forget about progress and prosperity for our community...Our ambitions must be broad enough to include the aspirations and needs of others, for their sakes and for our own" (Chavez Foundation, 2018).

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