

CONSIDERING THE NEEDS OF MEXICAN IMMIGRANT STUDENTS:  
AN EXAMINATION OF SPECIAL EDUCATION PRACTICES IN MEXICO AND  
THE UNITED STATES

by

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## Dedication

This study is dedicated to the professionals who shared their stories  
with me in Arizona and Guanajuato.

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## ABSTRACT

Although Mexican Americans are by far the largest foreign-born group in the United States (U.S.), very little information about Mexico's educational system is currently available to practicing school psychologists and special education teachers in the U.S. This qualitative study aimed to understand the lived experiences of former and current special education teachers and school psychologists who work with Mexican and Mexican American students in Guanajuato, Mexico and Arizona, U.S. Moreover, the study examined the similarities and differences in special education practices and policies between the U.S. and Mexico. The researcher conducted semi-structured interviews with five participants from both countries; findings revealed eight major themes. The first three themes related to practitioners' experiences working with Mexican students with disabilities and their families: 1) lack of understanding surrounding special education, 2) limited educational resources, and 3) economic factors impacting Mexican students and their families. Three findings emerged from data collected in Arizona: 1) perceived immigrant generational differences, 2) limited understanding of special education in Mexico, and 3) emphasis on establishing rapport with immigrant families. The final two major findings comparing special education in Mexico and the U.S included: 1) differences and similarities in special education eligibility categories, and 2) variance in annual requirements and availability of services. Implications for Mexican and U.S. school psychologists and special education teachers working with Mexican and Mexican immigrant students and families are discussed. Additionally, areas for future research are provided.

## CHAPTER 1: OVERVIEW OF THE STUDY

This study sought to explore the experiences of special education teachers and school psychologists from Arizona, United States (U.S.) and Guanajuato, Mexico. The purpose of this study was twofold. The researcher sought to compare special education service provisions in the U.S. and Mexico and to offer school psychologists and special education teachers in the U.S. strategies to improve how they provide special education services to Mexican immigrant students with disabilities and their families. This qualitative research study employed a case study analysis to explore the phenomenon under investigation. The participants included two school psychologists and three special education teachers from Guanajuato, Mexico and two school psychologists and three individuals who currently or previously worked as special education teachers from Arizona, U.S. All participants were employed in school districts serving students with disabilities. The researcher gathered information through the analysis of in-depth interviews, observations, and field notes.

This chapter offers an overview of the context and background that framed this study. In addition, this chapter includes a statement of the problem, an explanation of the purpose, research questions, the researcher's assumptions, the rationale and relevance of this information to the field of special education, and the researcher's perspective. The chapter concludes with definitions of key terminology.

### **Background and Context**

Families immigrate to the U.S. for various reasons, including political freedom, protection from conflict and violence, economic prosperity, family reunification, and educational opportunities (Plata-Potter & de Guzmán, 2012). Over the last century, more immigrants have entered the U.S. from Mexico than any other country (Alarcón, 2017; Bauman, 2017; Rhodes,



2000), making Mexicans by far the largest foreign-born group in the U.S. (García-Cedillo, Romero-Contreras, & Fletcher, 2014; Migration Policy Institute, 2017) accounting for 25% of 44.5 million immigrants (Zong & Batalova, 2018). As a direct result of migration patterns, the number of Mexican American students enrolled in U.S. schools, colleges, and universities has doubled from 8.8 million to 17.9 million since 1996 (Bauman, 2017). The sheer number of Mexican American students enrolled in U.S. educational institutions underscores the important role that school personnel have in helping these students succeed (Pew Research Center, 2014). Each year thousands of children from Mexico come to the U.S. who require academic, social-emotional, physical, and language support (Harris & Barton, 2017). Unfortunately, many school psychologists and special education teachers are ill equipped with information regarding special education procedures in Mexico, which has created a barrier to providing culturally appropriate services to Mexican immigrant students (Lian & Fontanez-Phelan, 2001; Rhodes, 2000; Salas, 2004).

As a result of culturally uninformed practices, Mexican immigrant students' academic success continues to plateau in relation to their White peers (García-Joslin, et al., 2015). As the fastest-growing minority population in the U.S., supporting these students must be a priority. If these students are not successful in school, the U.S. will experience dire economic and social consequences (San Miguel & Valencia, 1998; Tienda & Mitchell, 2006). Special education teachers and school psychologists can work toward closing the achievement gap and promoting the success of Mexican immigrant students by recognizing their academic potential and distinct needs (Fletcher & Kaufman de Lopez, 1995; García-Joslin, et.al., 2015).

### **Statement of the Problem**

Students with disabilities who immigrate to the U.S. from Mexico often bring

documentation and pertinent information related to their past academic experiences and disability services provided in Mexico (Fletcher & Kaufman de Lopez, 1995). Yet, despite the fact that the U.S. and Mexico share a border, special education teachers and school psychologists often overlook immigrant students' educational documentation and information regarding prior educational services due to the long-held belief that teaching approaches used by dominant Western culture are universally applicable regardless of race or culture (Cross, Bazron, Dennis, & Isaac, 1989; Figueroa & García, 1994; Rhodes, 2000). Furthermore, U.S. educators know very little about special education assessment and eligibility procedures in Mexico (Fletcher & Kaufman de Lopez, 1995; García-Cedillo et al., 2014). Upon entering the U.S., immigrant students who received special education services for years in Mexico are frequently reevaluated by school psychologists who treat the assessment as an initial psychoeducational evaluation and placement process without a comprehensive understanding of the students' prior academic services (Rhodes, 2000; Tienda & Mitchell, 2006). Moreover, school personnel with limited understanding of the second language acquisition process and culturally responsive instruction may draw inaccurate conclusions when conducting psychoeducational evaluations for immigrant students (Al-Hassan & Gardner, 2002; Klingner, Boelé, Linan-Thompson, & Rodriguez, 2014). To accurately implement appropriate services for Mexican students with known or suspected disabilities transitioning into the U.S. educational system, school personnel must be, at a minimum, familiar with special education procedures and policies in Mexico, as well as culturally relevant practices (García-Cedillo et al., 2014).

### **Purpose**

The purpose of this study was to examine the lived experiences of special education

teachers and school psychologists in Guanajuato, Mexico and Arizona, U.S. The researcher's findings are important in providing practicing school psychologists and special education teachers in the U.S. with a comprehensive understanding of special education services in Mexico and best practices for working with Mexican immigrant students with disabilities and their families. The researcher utilized a phenomenological approach to guide the research process (Moustakas, 1994). In-depth interviews conducted in Mexico focused on assessment procedures, eligibility determination, and special education services provided in Guanajuato public schools. In-depth interviews in the U.S. focused on practitioners' experiences working with Mexican immigrant students, their knowledge of special education practices in Mexico, and barriers they have faced while working with Mexican immigrant students with disabilities and their families.

### **Research Questions**

- 1) What experiences have special education teachers and school psychologists in Guanajuato, Mexico had working with students with disabilities and their families?
- 2) What experiences have special education teachers and school psychologists in Arizona, U.S. had working with Mexican immigrant students with disabilities and their families?
- 3) What are the similarities and differences between special education practices and policies in the U.S. and Mexico?

### **Research Approach**

The researcher used a phenomenological approach to inform this study to understand participants' experiences and perceptions of their work as special education teachers and school psychologists. Before collecting data, the researcher completed a comprehensive review of the literature, which shaped data collection methods (Marshall & Rossman, 2016). The researcher conducted semi-structured interviews with five participants from Guanajuato and five

participants from Arizona. She conducted the first set of interviews over two-months while living in Mexico during the summer of 2018. Before collecting data in Mexico, the investigator received approval from her University's Institutional Review Board, two school directors in Guanajuato, and Mexico's Secretariat of Education (Appendix A). Moreover, the researcher spent several weeks volunteering in Mexican schools to establish rapport with potential participants. Participants in Mexico included three special education teachers and two school psychologists from two different schools. All Mexican participants were above the age of 18 and employed at schools with special education programs.

After receiving approval from her dissertation committee, the researcher conducted five additional interviews with school psychologists and special education teachers in Arizona from three different school districts. All participants were over the age of 18 and currently employed at schools less than 100 miles from the Mexican-American border. The researcher provided all interviewees oral (Appendix B and C) and written consent forms (Appendix D and E). She used pseudonyms to keep participants' identities confidential. To gather additional information about participants, the researcher provided a short demographic questionnaire (Appendix F) and collected information through direct observations and field notes.

Following data collection, the researcher developed coding categories with two doctoral colleagues and analyzed interviews taking into consideration the culturally specific contexts of Guanajuato, Mexico and Arizona, U.S. Various strategies were employed to ensure the validity and reliability of the data. For example, a native Spanish speaker in Mexico reviewed all interviews conducted in Spanish, the researcher examined interview data with others, and participants were able to review their transcribed interviews to check for accuracy.

### **Assumptions**

The researcher drew the following assumptions based on her prior experiences, which should be considered when reviewing this study. First, the researcher assumed that participants accurately and honestly shared information during their interviews. This may have been difficult for Mexican participants because the researcher was an outsider from another country who spoke Spanish as a second language. To mitigate this concern, the researcher spent several weeks becoming familiar with the schools and volunteering with school staff before conducting interviews.

Second, the researcher assumed that if special education teachers in the U.S. were to have a better understanding of special education procedures in Mexico, they would be able to more accurately tailor interventions and educational plans to meet the needs of immigrant students. This assumption was based on previous research which has shown that teachers who gain information about students' backgrounds and previous schooling experiences are more likely to avoid alienation, clashes, and misunderstandings (de Souza, 2017). Mexico has numerous laws and procedures, which positively impact students receiving special education services, and this information should be shared (Dirección de Educación Especial del Distrito Federal [DEE-DF, Direction of Special Education-Federal District], 2010; Rhodes, 2000).

Third, the researcher assumed that she would be able to conduct her investigation without the assistance of an interpreter. Articles and documents obtained by the researcher for this investigation were mostly written in Spanish and she conducted all interviews in Mexico in Spanish. The researcher, who was not a native Spanish speaker, ensured that research documents interpreted and translated from Spanish to English reflected accurate information by recruiting a native Spanish speaker to review transcriptions.

## **The Researcher**

As a school psychology graduate student and former teacher who has worked for nearly a decade in low-income Title I schools, I take a strong stance on the encouragement and expansion of bilingual educational programs, diversity courses, and professional development in culturally competent practice. Furthermore, I advocate that schools actively seek to hire diverse staff and that staff incorporate culturally relevant curricula into practice. In order to better serve diverse students, I strive to increase my knowledge of cultural differences. I acquired conversational Spanish while teaching abroad in Bolivia and have attended numerous conferences and professional development trainings related to working with Latinx students.

While I strive to one day conduct assessments and facilitate multidisciplinary meetings in Spanish, I recognize the cultural barriers that will continue to exist between the Latinx families that I serve and myself. First, I am not a native Spanish speaker. While living in Guanajuato, I often had to ask people to repeat themselves and look up unfamiliar words. This created a slight barrier between the community and me. Second, I am not religious. Guanajuato, Mexico is a community in which 97% of residents are Catholic, causing me to often feel out of place when conversations centered around church events and religious holidays. Third, I am White, a cultural difference that I viewed as a barrier to building relationships with Latinx parents. Fourth, because of my cultural beliefs tied to individualism, I often place my personal goals before the goals of my family. In contrast, Latinx families often see collective family values as a priority over one's personal goals (Uttech, 1999). To conduct this research, I had to constantly monitor my self-presentation, expressive behavior, and nonverbal affective displays. Moreover, I had to reflect on my perceptions and the preconceived notations that my participants may have had about me.

### **Rationale and Significance**

The researcher sought to gain a deeper understanding of special education practices by working directly with special education teachers and school psychologists in Mexico and the U.S. The knowledge gained from this study should be used to support U.S. school staff in becoming familiar with Mexico's special education procedures and policies to increase their capacity to implement appropriate services for Mexican students with disabilities transitioning into the U.S. educational system. School psychologists should be aware of Mexican immigrant students' former medical diagnoses and special education goals and services to create effective educational plans (Morales, 2015; Rhodes, 2000). In addition, school psychologists who are aware of education procedures and academic terms in Mexico are more apt to include Mexican immigrant parents in school-based decisions (Dabach, Suárez-Orozco, Hernandez, & Brooks, 2018; Morales, 2015) and offer Mexican immigrant students with disabilities equitable educational opportunities in relation to their U.S. peers. Although both Mexico and the U.S. promote education for all students, there are significant differences in how special education services are implemented and determined.

In concordance with much of the current research on special education in Mexico, this qualitative research study focused on inclusive services and practices for students in both self-contained and general education settings (Dirección General de Educación Especial, 1994; Fletcher & Kaufman, 1995; García-Cedillo et al., 2014; SEP, 2004). The majority of educational studies conducted in Mexico, however, have been located within larger, more affluent cities (Ponce, Hernandez, Lopez, & Perez, 2006; Rhodes, 2000). This study sought to examine special education in Guanajuato, a relatively small state in Mexico with a population of roughly 5.85 million (National Institute of Statistics and Geography, 2010). Therefore, information gathered during in-depth interviews with local school staff in Guanajuato provided a deeper understanding

of special education procedures in a more rural area of Mexico. Moreover, few studies have examined school psychology in Mexico, which is a relatively new and unexplored field (García-Cedillo et al., 2014; Rhodes, 2000.)

### **Definitions and Terminology**

This study contained a significant amount of terminology that was distinct to special education in Mexico and the U.S. The researcher defined salient vocabulary terms below to provide an understanding of the context of this study. The researcher wrote most terminology in Spanish and provided English translations.

**Escuelas Normales.** Normal schools are universities in Mexico for college students studying and training to become teachers. Students who complete roughly three years of coursework and a full year of student teaching may receive their bachelor's degree in one of the following areas: preschool education, primary education, secondary education, inclusive education, physical education, or indigenous pedagogy.

**Integración Educativa.** Integrative education is the process that aims to include students with disabilities into general education settings by offering services to all children based on their learning needs.

**La Secretaría de Educación Pública (SEP).** The Secretariat of Public Education (SEP) is a federal government authority with cabinet representation and responsibility for overseeing the development and implementation of national educational policy and school standards in Mexico.

**Las Unidades de Servicios de Apoyo a La Educación Regular (USAER).** The Units of Support for General Education (abbreviated as USAER) seeks to support the integration of students with disabilities into general education classrooms. Special education teachers who



work at USAER provide services to students using both the pull-out model (students with disabilities work in small groups separated from their nondisabled peers) and the co-teaching model (a special education teacher and a general education teacher instruct together in a mixed classroom containing students with and without disabilities). USAER units work in teams that consist of school directors, psychologists, social workers, speech pathologists, and special education teachers.

**Centros de Recursos de Información y Orientación (CRIO) and Las Unidades de Orientación al Público (UOP).** Resource and Information Centers for Educational Integration (CRIO) and Public Orientation Units (UOP) offer information, advice, and training to the staff, families, and communities about educational options and care strategies for students with special education needs. Likewise, these services carry out investigative studies to eliminate barriers to learning and are primarily funded by the National Education System.

**Los Centros de Atención Múltiple (CAM).** Multiple Attention Centers are self-contained school placements for students who require more restrictive settings. These centers serve students from preschool to age 22. Students at CAM usually have multiple disabilities and require individualized curricular instruction.

**Los Centros de CAM Laboral.** CAM training classrooms are designed for students with multiple disabilities between the ages of 15 and 22. The centers provide students with life skills training so that they will be able to live as independently as possible after graduation. When these centers were first established in 1980, they were known as Training Centers for Work and Protected Industries (*Centros de Capacitación para el Trabajo e Industrias Protegidas* [CECADEE]).

**Sistema Nacional para el Desarrollo Integral de la Familia (DIF).** The National System for Integral Family Development is a public institution founded in 1977 by Carmen Romano, Mexico's former First Lady. DIF focuses on the welfare of Mexican families by promoting and establishing social assistance for vulnerable and at-risk groups. DIF coordinates with both civil organizations and public institutions.

## CHAPTER 2: LITERATURE REVIEW

The current study examined special education procedures in Mexico and the relationship that the U.S. and Mexico share in serving students with disabilities. The literature reviewed in this chapter highlights pertinent current information about special education in Mexico and the U.S. (Dabach et al., 2018; Fletcher, Dejud, Klingler, & Mariscal, 2003; Valencia, 2004). Through the synthesis of current research, this chapter reviews the history of special education, state and federal laws, programs and services provided to students, and future directions for the field of special education and school psychology in both Mexico and the U.S. A review of the literature on special education in Mexico and the U.S. offers an understanding of the context and regulations under which school psychologists and special education teachers work. This chapter also examines barriers that Latinx students have encountered in the U.S. educational system, which demonstrate the current need in the field and frame the important role that school psychologists and special education teachers have in supporting this at-risk population (Moore & Klingner, 2014).

### **The Early Stages of Special Education in Mexico**

Mexico has provided services to students with disabilities long before the government officially enacted the first federal special education law (*la Ley General de Education*) in 1973 (Dirección General de Educación Especial, 1985; García-Cedillo et al., 2014; Shepared, Contreras, & Brown, 2002). For example, Benito Juárez, the president of Mexico from 1861 until 1872, was one of the first Mexican presidents to promote literacy in the deaf community and advocate for the legal rights of individuals with disabilities by approving two of the first special needs schools in Mexico (Padilla, 2010). With the financial backing from Juárez, Ignacio Trigueros, a Mexican philanthropist, established the National School for the Deaf (*la Escuela*

*Nacional de Sordomudos*) in 1867. The school initially opened in a two-room house with only three students (Padilla, 2010); however, it quickly expanded and was relocated to a larger campus. With the success and rapid expansion of the School for the Deaf, Trigueros received enough funding and support to open the National School for the Blind (*la Escuela Nacional para Ciegos*) three years later in 1870. In contrast to the School for the Deaf, the School for the Blind was a day school that provided services to students with disabilities by preparing them to read and write in Braille and develop basic academic and vocational skills to obtain jobs (Padilla, 2010).

In addition to funding schools for students with disabilities, Juárez established the Public Instructional Law (*la Ley de Instrucción Publica*) in 1861, which mandated that education be free and required for all children (García-Cedillo et al., 2014). Unfortunately, this educational reform was only valid in territories that depended on funding from the federal executive (DEE-DF, 2010). Nevertheless, Juárez was instrumental in bringing attention to the educational needs of students with disabilities and recognizing their academic potential. His national reform laid the foundation for future inclusive educational practices (SEP, 2004).

### **Special Education from a Medical Perspective**

During the late 19<sup>th</sup> century in Mexico, much of special education practice was focused on diagnosis. With more doctors seeking medical classifications for students with disabilities, Rodolfo Menendez, a Mexican lawyer and professor, published the first known classifications used to assess students with disabilities. Menendez's classifications included procedures for assessing (1) physical disabilities, (2) sensory impairments (e.g., deafness), (3) intellectual disabilities (e.g., so-called "imbeciles"), (4) neurological disorders (e.g., epilepsy), and (5) educational deficiencies (e.g., abandoned and neglected children) (DEE-DF, 2010). Although

this period marked a significant trend in the acknowledgment of childhood disabilities, special education services in Mexico for students with disabilities were largely limited to basic industrial training (García-Cedillo et al., 2014) and many students with disabilities did not receive any formal schooling (DEE-DF, 2010; Tec, Martín, & Pérez, 2011).

At the start of the 20<sup>th</sup> century, mandatory education gained momentum in Mexico and the government began to increase regulations on schools for the deaf, blind, and intellectually disabled (DEE-DF, 2010). In October of 1921, the Mexican President, Álvaro Obregón, established the Secretariat of Education (*Secretaría de Educación Pública* [SEP]) to develop and implement national educational policy and school standards in Mexico. As part of the mandate for a standardized special education model, Mexico established the Department of Psychopedagogy and School Hygiene (*el Departamento de Psicopedagogía e Higiene Escolar*) in 1925, later renamed the National Pedagogy Department (*Departamento Nacional de Pedagogía*) (García-Cedillo et al., 2014). The department oversaw the examination of school cleanliness by establishing medical hygiene inspections teams (*las Equipos de Inspección Médica de las Escuelas Primarias*) to review the health of students and teachers, the quality of infrastructure, and the academic progress of students (DEE-DF, 2010). The inspection teams placed students considered to be intellectually abnormal or mentally retarded (*intelectualmente anormales o retardados*) in segregated schools and institutions.

Many educational professionals, medical doctors, and teachers disagreed with the placement of students with disabilities into separate schools. Prominent advocates in the field such as Justo Sierra, a well-known Mexican educator, demanded that students placed in special schools receive the necessary support to ultimately reach grade-level skills and integrate back into the general education setting (García-Cedillo et al., 2014). Enrique Rébsamen, a Mexican-

Swiss educator, stated that Mexican society was quick to judge those who learn differently as inferior and that educational reform was needed to establish equality for students with disabilities (García-Cedillo et al., 2014). Rebsamen believed that all students had unique skills and that their academic success would not necessarily determine their success as adults (DEE-DF, 2010).

### **Special Education from a Medical-Rehabilitation Model**

The idea that students with disabilities could be educated with the provision of specialized instruction fueled the medical-rehabilitation model of instruction and eventually led to the opening of several specialized institutions such as the Medical Pedagogy Institute (*El Instituto Médico Pedagógico*), established in June of 1935. The institute was focused on investigating and providing treatments to students with intellectual and physical disabilities. Teachers and physicians employed through the institute implemented a variety of educational resources such as physical therapy, language programs, instructional courses on hygiene, and training in social and adaptive skills (DEE-DF, 2010). In addition to basic science, math, and Spanish classes, students at the institute attended workshops such as shoemaking, carpentry, embroidery, weaving, and toy-making (DEE-DF, 2010).

Two years later, Dr. Francisco Elizarras founded the Behavior Clinic (*Clinica de la Conducta*), a clinic in Mexico City for students with significant behavioral needs. Staff at the clinic were trained to assess conduct concerns, examine personality characteristics, and work with students with emotional needs. In 1976, SEP expanded service personnel to include psychiatrists, pediatricians, social workers, and neurologists. As of 2019, the Behavior Clinic continues to serve as a model for other behavioral institutions.

Fifteen years later in 1952, Maria Christina Bienvenu, a Mexican language teacher, founded the Ortolalia Clinic (*Clinica Ortolalia*) to support students with speech and language

disabilities. The clinic was equipped with speech and language pathologists, psychologists, and social workers (García-Cedillo et al., 2014). In 1958, the school expanded to include music therapy. Today, the clinic has over 13 speech therapists, as well as medical doctors and neuropsychologists (DEE-DF, 2010). The medical-rehabilitation model during the 1930s through the 1960s marked a great increase in clinical interventions and assessment measures; however, much of these practices occurred in large, urban settings. Few, if any, services were offered in more rural areas of Mexico.

### **Special Education from a Psychoeducational Model**

The psychoeducational movement during the late 20<sup>th</sup> century was focused on the development of research-validated interventions that would eventually allow students with disabilities to live relatively independent lives and re-enter general education settings. In order to organize, direct, and monitor the Federal System's special education policies, the Secretariat of Public Education (*Secretaria de Educación Publica* [SEP]) created the General Direction of Special Education (*la Dirección General de Educación Especial* [DGEE]) on December 18, 1970. To oversee the program, Odalmira Mayagoitia de Toulet was appointed as head of the DGEE (Padilla, 2010). Today, Mayagoitia is known as one of the most influential advocates for students with disabilities in Mexico. In addition to serving as the director of the DGEE, she was a teacher at the Medical Pedagogy Institute (*el Instituto Medico Pedagogico*) and the special education coordinator for the Secretariat of Education (*Secretaria de Educación* [SEP]). Under the supervision of Mayagoitia, the DGEE was tasked with organizing, developing, and overseeing special education teachers and special education programs. Upon its creation, the DGEE had several distinct goals: 1) supporting the community in respecting persons with disabilities; 2) establishing educational opportunities for individuals with disabilities; 3)

promoting preventative practices to reduce the rates of students entering special education; and 4) working within multi-disciplinary teams to coordinate with national and international organizations (García-Cedillo et al., 2014).

During Mayagoitia's time as the head of the General Direction of Special Education, special education services expanded at an accelerated rate. In just seven years, the DGEE created 256 special education schools and established various new programs for students with mental deficits (*deficiencia mentales*), auditory and language impairments (*trastornos de audición y lenguaje*), and motor and visual needs (*impedimentos motores y trastornos visuales*). During this period, the federal government primarily regulated special education (DEE-DF, 2010) and in 1973, the president of Mexico, Luis Echeverría Álvarez, signed the Federal Law of Public Education (*la Ley Federal de Educación Pública*), which incorporated special education into the national education system for the first time. Focused on the education of all students, the DGEE recognized the importance of early identification and diagnosis, as well as disseminating knowledge and curriculum materials to teachers working with students with disabilities (DEE-DF, 2010).

To increase educational opportunities for students with disabilities, the DGEE established a partnership with the National System for Integral Family Development (*Sistema Nacional para el Desarrollo Integral de la Familia* [DIF]), one of Mexico's first public institutions to provide social assistance focused on supporting low socioeconomic status (SES) families, the elderly, and individuals with disabilities. Today, DIF centers are located throughout Mexico (DEE-DF, 2010). Much like the *Americans with Disabilities Act* in the U.S., DIF aims to socially integrate Mexicans with disabilities into the community by mandating equal educational opportunities and



access to health services, employment, government benefits, and recreational activities (Prieto-Armendáriz, & Saladin, 2012).

### **Centers for Rehabilitation and Special Education**

As a combined effort of SEP and DIF, Mexico created Centers for Rehabilitation and Special Education (*Centros de Rehabilitación y Educación Especial [CREE]*) to address the concern that many preschool and primary students suspected of having disabilities were not meeting grade-level standards in reading, writing, or arithmetic (SEP, 2009). These centers used various medical, psychoeducational, and physical interventions to facilitate the learning of students with hearing and vision impairments, intellectual disabilities, and neurological impairments. Services in these centers included specialized medical consultation, physical rehabilitation, language therapy, counseling, computer training for the blind, braille workshops, sign language instruction, and nursing support. Technical Units (*Unidades Técnicas*) provided these services and were comprised of groups of teachers, psychologists, doctors, sociologists, and social workers. These centers marked one of the early steps in inclusive practices as students began receiving services within the same buildings as their non-disabled peers in integrated groups (*grupos integrados*) (García-Cedillo, Romero-Rubio, Flores-Barrera, Martínez-Ramírez, & Rubio-Rodríguez, 2015).

### **Centro Psicopedagógicos**

For students able to spend the majority of their school days in general education classes, the DGEE created Psychopedagogical Centers (*Centros Psicopedagógicos*). These centers offered evaluations and therapeutic services to students with language and learning impairments in second through sixth grade. Psychoeducational centers provided services to students two to three times per week both before and after school. By 1976, 23,000 children with disabilities

were receiving special education services. By the end of 1981, 50,535 students were receiving services from roughly 2,599 integrated groups.

### **CECADEE 1980**

In 1980, the DGEE established Training Centers for Work and Protected Industries (*Centros de Capacitación para el Trabajo e Industrias Protegidas* [CECADEE]) to provide services to adolescents with cognitive disabilities between the ages of 15 and 22. CECADDEE programs offered vocational and occupational training to promote students' adaptive and social skills so that they could eventually live independently, obtain jobs, and become productive members of society. Through CECADDEE, students received weekly vocational training. Male students were typically trained in gardening, manual labor, carpentry, auto mechanics, shoemaking, and photography (DEE-DF, 2010) and female students were trained in sewing, domestic work, toy-making, and dress design. In addition to vocational training, students received basic instruction in reading, writing, and math. CECADDEE is now most commonly referred to as CAM Labor Training (*CAM Laboral*).

### **The Reorganization of Special Education, 1993**

On July 13, 1993, Mexico enacted the General Law of Special Education (*la Ley General de Educación Especial*) in hopes of establishing special education as a modality of basic education. The law promoted gradual stages of integration, outlined educational reform policies, called for the reorganization of the national educational system, and marked an irreversible advance in the way Mexican schools supported students with disabilities.

First, the law mandated an end to separate, parallel education systems (DEE-DF, 2010). As a result of this change, the government disbanded integrated groups (*grupos integrados*) and students with disabilities attending general education schools were placed into classrooms with

their nondisabled peers. Then, to create more inclusive environments, the Department of Special Education created three new service models: Units of Support Services for General Education (USAER), Multiple Attention Centers (CAM), and Public Orientation Units (UOP). Finally, as part of the General Law of Special Education in 1993, Article 41 was created, which established the first official mandate for special education at a federal level (DEE-DF, 2010). Moreover, Article 41 outlined educational procedures and parental rights at a national level. Article 41 defined special education in the following terms:

Special education is designed for individuals with transitory and permanent disabilities, as well as students with outstanding aptitudes. Special education will seek to attend to students in a manner appropriate to their conditions with social equality. As related to minors with disabilities, this education will promote their integration into general education classrooms. For those who do not reach integration, this education will promote the satisfaction of basic learning needs for autonomous social and productive coexistence. This education includes guidance to parents or guardians, as well as teachers and staff of regular basic education schools that integrate students with special education needs.

*(La educación especial está destinada a individuos con discapacidades transitorias o definitivas, así como a aquéllos con aptitudes sobresalientes. Procurará atender a los educandos de manera adecuada a sus propias condiciones, con equidad social.*

*Tratándose de menores de edad con discapacidades, esta educación propiciará su integración a los planteles de educación básica regular. Para quienes no logren esa integración, esta educación procurará la satisfacción de necesidades básicas de aprendizaje para la autónoma convivencia social y productiva. Esta educación incluye*

*orientación a los padres o tutores, así como también a los maestros y personal de escuelas de educación básica regular que integren a alumnos con necesidades especiales de educación).*

Prior to 1993, students with disabilities were assumed to be included under Article III of the Mexican Constitution, which explained that all Mexicans had the right to a free public education (Ramos & Fletcher, 1998). Article 41, however, made clear that no student could be excluded from basic education. In addition, the law changed terminology by using people-first-language and justified including more comprehensive services for parents and family members of children with disabilities (Ramos & Fletcher, 1998). Thus, the law not only mandated special education services, but also placed the responsibility on schools to counsel families, provide training, and work as a team to meet the needs of students with disabilities (Ramos & Fletcher, 1998).

### **Units of Support Services for General Education**

When the program was first implemented in 1994, 90 Unidades de Servicios de Apoyo a La Educación Regular (USAER) were formed to serve 383 elementary schools to address students' learning concerns within the context of the general education classroom. Today, USAER provides the majority of services to students with special education needs. Through USAER students receive small group interventions in resource classrooms (*aulas de apoyo*) overseen by special education support teams, consisting of school psychologists, resource teachers, social workers, principals, and communication specialists. In theory, USAER teams should be assigned to five schools; however, due to a lack of resources, many USAER teams work with eight to ten schools (Rhodes, 2000). The primary responsibilities of USAER include conducting initial evaluations, facilitating intervention, and evaluating student progress. Currently, there are 4,453 USAER teams in Mexico working with roughly 28,600 schools (SEP,

2017), serving more than half of all students in special education. Although USAER services have dramatically expanded, it is estimated that only 44% of students with disabilities in general education receive USAER support (SEP, 2017) and as few as ten percent of schools in Mexico have USAER teams, which are mainly located in large, urban cities (SEP, 2012). For example, in rural areas such as the outskirts of San Luis Potosi, there is one USAER program for more than fifty schools (García-Cedillo et al., 2014).

### **Centers for Students with Multiple Disabilities**

The second modality of special education services currently provided in Mexico is through Centers for Students with Multiple Disabilities (*Centros de Atención Múltiple [CAM]*). SEP established these centers to support students whose needs could not be met within the general education setting. At CAM, students are grouped by age and ability and provided with instructional support from teachers trained in special education. In addition, there are many parent volunteers at CAM who assist in meal preparation and school activities. CAMs usually have one to two school psychologists, a nurse, and a speech therapist. Class sizes range from three to eighteen students; however, SEP recommends six to eight students per class. Students can attend CAM from age three until age 22. Within CAM classrooms, students are taught basic core curriculum with significant modifications and adaptations (García-Cedillo et al., 2014). There are no federal standards for the organization of CAM and each center maintains autonomy and flexibility in its service delivery model (Rhodes, 2000). In addition, CAMs may offer intervention services several times per week for students enrolled in general education schools without USAER. Based on a recent census, there are 1,657 CAMs in Mexico, which serve roughly 15% of general education schools (SEP, 2017).

### **Information Centers**

The third current modality of special education provided in Mexico is Public Orientation Units (*Las Unidades de Orientación al Público* [UOP]) and Resource and Information Centers for Educational Integration (*Centros de Recursos, de Información y Orientación* [CRIO]). UOP is focused on orienting parents, teachers, and school personnel on strategies for student integration. UOP processes referrals and provides teachers with videos and educational materials. CRIO works in tandem with UOP to provide resources and information about inclusive education and training for school staff, families, and communities related to educational options and teaching strategies to support students with disabilities and/or outstanding aptitudes. These services primarily offer guidance on the use of various assessments and academic materials to increase students' educational access. Although both CRIO and UOP continue to operate, SEP (2012) estimates that only 25 UOPs and 188 CRIOs in Mexico remain.

### **Preschool Services**

For students too young to receive USAER services in elementary schools, roughly 130 Psychopedagogical Attention Centers for Preschool Education (*los Centros de Atención Psicopedagógica de Educación Preescolar* [CAPEP]) exist. These centers, established in 1965, were the first special education schools for preschoolers. In their initial creation, the centers targeted preschoolers who presented difficulties learning (DEE-DF, 2010). Preschoolers and kindergarten students with more substantial needs received their education at the centers while students with fewer needs attended public schools but returned to CAPEP once or twice a year for assessments and services. Today, CAPEP has expanded to include multidisciplinary support teams, interdisciplinary evaluations, diagnostic services, speech therapy, and psychopedagogical interventions (SEP, 2012). Although CAPEP continues to provide services to preschoolers, services greatly differ depending on state regulations.

## Current Special Education Trends in Mexico

Currently, educational policies in Mexico are based on three fundamental ideas: humanism, equity, and change through inclusive practices (Flores-Barrera, García-Cedillo, & Romero-Contreras, 2017; García, 2018; Regalado, 2004). With these ideals in mind, President Vicente Fox established the General Law for People with Disabilities (*la Ley General para las Personas con Discapacidades*) in 2005 to promote the development of more special education programs (Armendáriz & Saladin, 2012). Following the presidency of Fox, in May of 2011, President Felipe Calderon signed into law the General Law for the Inclusion of Persons with Disabilities (*Ley General para la Inclusión de las Personas con Discapacidad*), which mandated states to promote, protect, and guarantee human rights and liberties for all people with disabilities (García-Cedillo et al., 2015). Within this law, Article 12 established that it was the responsibility of the Secretariat of Education to provide students with disabilities both materials and technological supports in schools. Such materials and supports included texts in Braille, Mexican Sign Language interpreters, computer equipment, and adaptive technology (DEE-DF, 2010). Article 12 also clarified that it would be the responsibility of SEP to train and educate teachers and that the Secretariat of Health would be responsible for providing orthopedic devices, prostheses, and medication for students with limited resources (García-Cedillo et al., 2014; SEP 2002).

According to the 2017 National Institute of Statistics and Geography (*Instituto Nacional de Estadística y Geografía*), there are over 26 million students from preschool to middle school (ages three to 15) enrolled in the Mexican educational system, 86% of whom attend public schools. Moreover, results from the current Mexico Population and Housing Census (Instituto Nacional para la Evaluación de la Educación [INEE], 2015) indicated that in 2015, 77% of

children between the ages of three and five, 97.7% of children between the ages of six and 11; 93.3%, of children between the ages of 12 and 14, and 73.2% of children between the ages of 15 and 17 attended school. Unfortunately, for students with disabilities, attendance rates were much lower (INEE, 2015). The report estimated that 88% of students with disabilities ages six to 11, 72% ages 12 to 14, and only 55% ages 15 to 17 attended school (INEE, 2015).

Since 2012, the number of students with special education needs in Mexico has grown by 214,000, demonstrating the necessity to support these children. To further prompt integration, SEP has implemented various educational reforms. For example, during the 2015-201 school year, USAER in Mexico City was transformed into a new special education service called the Special Education and Inclusive Education Units [*Unidades de Educación Especial y Educación Inclusiva* (UDEEI)], eliminating resource classrooms. While much has been done to pave the way for students with disabilities to receive individualized educational services, many educational barriers continue to exist (Rama, 2011; Ruiz-Cuéllar, 2012).

### **Prevalence**

As of 2017, over 612,039 Mexican students, roughly two percent, are receiving special education support (SEP, 2017). It is only within the last several decades, however, that researchers have gathered reliable statistical data on the prevalence of children with disabilities in Mexico. Before 1998, the government did not classify students with emotional needs, learning disabilities, language impairments, Autism, and early childhood delays as students with special education needs, which has made it difficult to compare data across time (SEP, 2012).

Furthermore, it has been difficult to gather data in rural areas because students with special education needs outside of major cities are more likely to attend public schools without USAER support and drop out of school at younger ages (García-Cedillo et al., 2014). On average,



students with disabilities living in rural communities attend public school for half the amount of time as students with disabilities living in urban communities (García-Cedillo et al., 2014). Of the students who have known disabilities, 70% of them attend CAM (Prieto-Armendáriz & Saladin, 2012).

Of all students with disabilities, 60% receive support through USAER in public schools. Within USAER settings, 49%, of students who receive special education services fall within the eligibility category of “Other” (SEP, 2017). This high percentage of students without an official eligibility category exists because attention deficit hyperactivity disorder (*trastorno por déficit de atención con hiperactividad*), learning disabilities (*discapacidades de aprendizaje*), behavioral problems (*problemas de conducta*), and language impairments (*discapacidades de habla y lenguaje*) are all categorized together (García-Cedillo et al., 2014). Following the eligibility category of “Other”, SEP estimates that of students receiving special education support, 22% are Gifted (*Sobresalientes*) and 20.4% have Intellectually Disabilities (*Discapacidades Intellectuales*). The five categories combined: Blind (*Ceguera*), Visually Impaired (*Baja Visión*), Deaf (*Sordera*), Hard of Hearing (*Hipoacusia*), and Physically Disabled (*Deficiencia Motriz*) comprise the remaining 9% of students receiving USAER services (García-Cedillo et al., 2014). The remaining students, roughly 37%, receive special education services in Centros de Atención Múltiple (CAM). Within CAM placements, 58.1% of students have intellectual disabilities, Autism, or Down’s syndrome (SEP, 2012). Most students receiving services at CAM have received medical diagnoses from neuropsychologists and medical doctors. Far fewer CAM students (23.4%) are classified as “Other” for their eligibility category (SEP, 2012).

### **Teaching Special Education**

In 1942, Mexico passed the Law of Public Education (*la Ley Orgánica de la Educación Pública*), requiring that all teachers obtain a minimum of two years of training to work in schools. As a result of the Law of Public Education, Mexico established the first teacher training school (*la Escuela Normal de Especialización [ENE]*) in Mexico City in 1943 (DEE-DF, 2010). For nearly 30 years, the Normal School of Specialization in Mexico City was the only public training program for special education teachers. It was not until 1969 that Mexico established a second training school, which opened in Nuevo Leon (DEE-DF, 2010). By 1980, however, Mexico had developed 13 programs for special education teachers (García-Cedillo et al., 2014). Over the past several decades, the amount of teacher training programs has exponentially increased (Forlin, García-Cedillo, Romero-Contreras, Fletcher, & Rodríguez-Hernández, 2010). According to the Direction of Higher Education (*Dirección General de Educación Superior para Profesionales de la Educación*), there are now more than 450 public Normal Schools in Mexico.

Today, these programs remain the main path for Mexican college students to become certified teachers. During the first three years of the teacher training program, students complete their coursework and several practicum experiences. During the fourth and final year of the program, students complete yearlong internships in schools. To receive a certificate in special education, students must demonstrate their ability to identify students with special education needs, conduct psychoeducational assessments, adapt curriculum, design interventions, and progress monitor student growth. On average, 7.89% of students at Normal Schools graduate with a degree in special education, known as a License in Inclusive Education (*Licenciatura en Inclusión Educativa*) (SEP, 2017).

## **School Psychology**

It is only in the last couple of decades that school psychology has become a clearly defined field in Mexico. Gustavo Fernandez, a Mexican national and graduate from the University of Texas, was the first Mexican psychologist to coin the term in 1974. The core aspects of school psychology outlined by Fernandez included therapeutic services, individual assessments, behavior modification, and investigative inquiries (Rhodes, 2000). Unlike the U.S. which offers graduate degrees in school psychology, Mexican students interested in the profession study in related fields such as educational psychology or counseling (Guzmán, 2004). Core curriculum courses in educational psychology include instructional design, special education, consultation, educational evaluations, school psychology training, psychopedagogical theories, and psychoeducational research methods (SEP, 2004). According to Guzmán (2004), Mexico offers psychology courses at over 175 institutions distributed across 234 campuses with over 238 programs. Of 89 psychology programs reviewed by Guzmán (2004), 39 had specialty programs in educational psychology that offered bachelor's (*licenciatura*) or master's (*maestria*) degrees.

One of the primary roles of school psychologists, with the assistance of special education teachers, social workers, and general education teachers, is to complete psychoeducational assessments. When students are suspected of having disabilities, school psychologists will conduct assessments that include student information about the reason for referral, behavioral observations, developmental history, current abilities, assessment results, conclusions, and recommendations. In Mexico, there is far less emphasis placed on the eligibility determination process because students suspected of having disabilities may receive special education services without a specified eligibility category. For example, if a school psychologist suspects that a student has a learning disability and the student is falling behind in core academic content areas,

USAER may provide that student special education support without administering any standardized cognitive or academic assessments. When it is determined that an individual requires more specialized support than what USAER can provide, the team discusses CAM placements. Currently, Holtzman (1989) and Rhodes (2000) provide two of the only analyses of school psychology in Mexico published in English.

### **Special Education in the United States**

Initially, only students with severe disabilities such as hearing and vision impairments received special education support in the U.S.; however, due to important educational laws enacted during the 20<sup>th</sup> century, services expanded to include students with more diverse needs (Gándara & Contreras, 2009). Arguably the most important legislation in establishing special education services for students with disabilities was the federal special education law of 1975 signed by President Gerald Ford. The law was first known as Public Law 94-142, *Education for All Handicapped Children Act*, which was later renamed as the *Individuals with Disabilities Education Act* (IDEA) in 1990 to incorporate more inclusive language (Morales, 2015). With the implementation of Public Law 94-142, it became a requirement for schools to meet the educational needs of all students with disabilities.

#### **Education for All Handicapped Children Act (1975)**

To this date, Public Law 94-142 continues to govern special education procedures and policy in the U.S. based on six guiding principles:

- 1) Zero rejection. This principle mandated that all students between the ages of three and 21 are entitled to public education regardless of the severity or nature of their disabilities.

Child Find, a legal requirement, mandates that all school districts search and locate

students with disabilities who require educational accommodations, modifications, and supports.

- 2) Nondiscriminatory identification and evaluation. To promote nondiscriminatory practices, a qualified team must determine the needs of students with disabilities using research-validated assessments and unbiased practices.
- 3) Free and Appropriate Public Education (FAPE). Schools must provide all students FAPE at no cost to the families.
- 4) Least Restrictive Environment (LRE). Students must be educated with non-disabled peers to the maximum extent appropriate.
- 5) Procedural Rights. Schools must provide students and families with safeguards to protect their rights under IDEA. Examples of safeguards include obtaining parental consent for evaluations, eligibility determinations, and academic placements; maintaining confidentiality; and allowing parents to challenge school-based educational decisions through due process.
- 6) Family involvement. Parents must be involved in their children's education. While parental involvement is mandatory, IDEA does not require students to attend their educational meetings until the age of 16; however, IDEA recommends that students take an active role in their educational plans when developmentally appropriate (Morales, 2015).

### **Special Education Eligibility Categories**

In addition to outlining educational procedures, IDEA provides 13 special education eligibility categories: auditory impairments, Autism, deaf-blindness, emotional disturbances, intellectual disabilities, multiple disabilities, early childhood delay, orthopedic impairments,

other health impairments, specific learning disabilities, speech or language impairments, traumatic brain injuries, and visual impairments (IDEA, 2004; P.L. 108-446). Except for a few states, gifted students are not eligible for special education services unless they have a disability that is adversely impacting their educational performance (Kauffman, Hirsch, Badar, Wiley, & Barber, 2014). As outlined by IDEA, gifted students with disabilities are referred to as twice-exceptional learners.

Roughly 6,555,000 (13%) of all students in the U.S. are receiving special education services. Of these students, 34% have learning disabilities, 20% have speech and language impairments, 13% have other health impairments, 8.5% have Autism, and 8.5% have developmental delays (Kauffman et. al., 2014). The remaining 16% of students are receiving services for visual impairments, multiple disabilities, hearing impairments, traumatic brain injuries, deaf-blindness, orthopedic impairments, severe preschool delays, and emotional disturbances (Snyder, de Brey, & Dillow, 2016).

### **Current Special Education Trends in the U.S.**

In tandem with Mexico, the U.S. has moved in the general direction of inclusive education, with local public schools educating over 95% of students with disabilities. Of these students, over half spend 80% or more of their school days in general education settings (McLeskey, Landers, Williamson, & Hoppey, 2012). As part of the inclusive model, schools in the U.S. have shifted their focus toward Multitiered Systems of Support (MTSS). Through MTSS, systematic screenings detect students at-risk for academic and social-emotional concerns. Schools then provide these students with research-validated supports and interventions (Kauffman et. al., 2014). Students who do not respond to general education instruction (Tier I) or small group interventions (Tier II) receive individualized, tailored supports (Tier III). Students

receiving Tier III are most at-risk for having difficulties in school and are often evaluated for suspected disabilities. According to IDEA, educating students in special education classes should only occur when the nature or severity of their disabilities is such that teachers cannot reasonably teach them in a general education setting, even with the use of supplementary aids and services (Kauffman et al., 2014).

For students suspected of having disabilities, multidisciplinary teams conduct assessments for special education services. These teams are made up of district representatives, school psychologists, special education teachers, general education teachers, parents, and individuals to interpret assessment results (usually school psychologists). Depending on a student's suspected disability, a speech pathologist, occupational therapist, school counselor, and/or physical therapist may complete additional testing (Kauffman et al., 2014). Based on classroom observations; teacher, parent, and student interviews; research-validated assessments; and a comprehensive review of the child's academic and developmental history, the team determines if a student has a disability and if they will qualify for special education services.

Students determined to qualify for special education services receive Individualized Education Programs (IEPs). As part of the IEP, the students' special education teams develop annual goals and determine special education services, accommodations, and current levels of performance (Morales, 2015). In addition to creating academic goals, students with behavioral concerns often receive Behavioral Intervention Plans (BIPs) focused on rewarding positive target behaviors and eliminating disruptive, problematic behaviors. BIPs have shown to be effective for students from diverse demographic backgrounds and academic placements (Kauffman et al., 2014).

### **The Latinx Experience in the U.S. Educational System**

Historically, the U.S. and Mexico have shared a unique and complex relationship dating back centuries. Originally, Mexico owned much of the current U.S. territory. Under President James K. Polk, the U.S. offered Mexico 40 million dollars in exchange for Alta California. When Mexican officials refused to accept the offer, Congress declared war on Mexico on May 12, 1846. Two years later in 1848, Mexico signed the Treaty of Guadalupe Hidalgo, ending the Mexican-American war. By signing the Treaty, Mexico ceded what is now present-day Texas, New Mexico, Arizona, California, Nevada, Utah, and parts of Colorado and Wyoming to the U.S. Under the terms of the Treaty, Mexican landowners were to retain their property and receive protection as U.S. citizens. Unfortunately, due to the Treaty's unenforceability, thousands of Mexican Americans had their land seized and were forced to relocate, thus signaling the start to decades of persistent discrimination against Mexican Americans in the Southwest (San Miguel & Valencia, 1998).

During the late nineteenth century, public schools in the Southwest assumed the goal of educating students within an "Anglo-American" system. To "Americanize" the Latinx community, the U.S. enacted federal and state English-language policies requiring that instruction be provided in English only. From 1870 until the early 1890s, Southwest schools prohibited Spanish and emphasized the economic and political interests of the dominant White, Protestant culture, much to the detriment of Mexican Americans. During this time, many Mexican American children did not attend school because of poverty, high mobility rates, and active exclusionary practices perpetrated by school personnel. Due to fewer educational opportunities for Latinx students, by 1928 public schools enrolled only 49% of Mexican American students compared to 83% of White school-age children (Manuel, 1930).



Although Mexican American students started to gain greater access to the public education system after the 1930s, federal and state law forced them to attend segregated schools with fewer resources, trained staff, and amenities (San Miguel & Valencia, 1998). By the 1930s, 90% of schools in Texas and 85% of schools in California were racially segregated (Manuel, 1930). Based on a 1934 report from the League of United Latin American Citizens (LULAC), segregated schools with majority Latinx and Black students were inferior to majority White schools (San Miguel & Valencia, 1998), having higher student-teacher ratios, significantly less per-pupil expenditure, minimal (if any) elective courses, and crumbling infrastructures.

Over the next several decades, culminating in the Civil Rights Movement during the 1960s, Mexican Americans campaigned and fought for educational equality. From landmark legislation to advocacy organizations, activists pushed civil rights concerns to the forefront of educational reform. In several hallmark cases (*Mendez v Westminster* [1947]; *Keyes v. School District Number One* [1973], *Guadalupe v. Tempe Elementary School District* [1972], and *Plyer v. Doe* [1982]), the courts ruled in favor of Mexican American plaintiffs. In addition, advocacy groups such as the Mexican American Legal Defense and Educational Fund (MALDEF), gained political power (Valencia, 2004). As a result of the Civil Rights Movement, more Mexican Americans gained access to higher education, many schools established bilingual education programs, and retention rates for Mexican American students increased (Valencia, 2004).

### **Landscape for Mexican Immigrants in Arizona**

Although roughly 31% of Arizona's population is Latinx, many of the state's legal policies, educational initiatives, and regulations have adversely impacted this population (Brown & Lopez, 2013). Therefore, this study examined the experiences of Mexican immigrant students and families in an unsupportive and hostile educational environment. The severity to which

policies have created and maintained White privilege can be seen even before Arizona achieved statehood in 1912. Starting with the Naturalization Act of 1790, which declared that only “free White persons” were naturalized citizens. This racial qualification for citizenship was not repealed until 1952 (Hunnicuttt & Castro, 2005). Moreover, the Arizona constitution has declared English to be the State language declaring that all legislatures must have the ability to read, write, speak, and understand the English language sufficiently well to conduct the duties of the office (Art. 20, § 8, 2004).

With regard to education, in 2000 bilingual instruction was banned as a result of Proposition 203, which mandated that all public school educators conduct academic instruction using a specific method for English-only language instruction, Structured English Immersion (SEI), and banned bilingual education. As a result of SEI in Arizona, English learners have experienced clear psychological effects including anxiety and depression symptomatology, anger, school phobia, and eating and sleeping difficulties (Parra, Combs, Fletcher, & Evans, 2014). Then in 2006, Arizona enacted an English only law even though a similar law was enacted years earlier and was still in effect (Brown & Lopez, 2013). To make matters worse, a 2010 law banned the teaching of ethnic studies (classes focused primarily on the Latinx experience), and this ban was not removed until several years later when it was decreed unconstitutional. Even within the last several years, the sheriff of the most populated county in Arizona has admitted to conducting crime suppression sweeps and raids designed to round up undocumented immigrants (Hensley, 2012). As a result of these legislative policies, Jiménez (2004) found that students forced into all-English instruction classes in Arizona showed signs of trauma such as depression, fear of school, crying, and acting out behaviors (Jiménez, 2004). The impact of Arizona’s controversial English-only laws is evidenced by the lowest English

Language Learner (ELL) graduation rate in the nation. In the 2015-216 school year, only 32.2% of ELL students in Arizona graduated from high school, significantly below the national average of 67% (Sugarman & Geary, 2018; U.S. Department of Education, 2016).

### **Barriers for Latinx Students**

The Latinxs population faces an educational crisis of unprecedented magnitude. When compared to their White peers, they are more likely to start school later, drop out earlier, and face adversity associated with living in lower SES households such as inadequate parental and community resources, lack of highly trained teachers, and lower societal expectations (Gándara & Contreras, 2009; Ream & Stanton-Salazar, 2007; Roska, 2011). As of 2014, just 15% of Latinxs between the ages of 25 and 29 had bachelor's degrees, compared to 41% of Caucasians and 22% of Blacks (US Census Bureau, 2016). As a result of various environmental and socioeconomic factors, Latinx students continue to lag behind their White and Black peers in overall educational attainment.

### ***Lack of Early Education***

Only 43% of Latinx students participate in early education compared to the national average of 57% (Gándara & Contreras, 2009), marking the lowest preschool attendance rate of any ethnic or racial group. The majority of Latinx and Mexican immigrant parents believe that early education programs are beneficial for their children (Gándara & Contreras, 2009); however, Latinx face many barriers to these services (LaRocque, 2013). First, 5.8 million Latinx families live in poverty and paying for early education may not be feasible (Paik & Walberg, 2007). Second, Latinx parents may feel disconnected from early education programs, which they view as lacking shared cultural backgrounds or values. Third, the population of Latinx students is outpacing the number of preschools available in majority Latinx communities (Valencia, 2004).

Fourth, Latinx families may be of mixed immigration status so parents may be hesitant to enroll their children in preschool for fear that official agencies will become aware of their undocumented immigration status (Medina, Guzmán, & Wong-Ratcliff, 2015; Olivos & Mendoza, 2010). Parents without proper documentation may also fear driving their children to school because they are not able to become licensed in most states and worry about using public transportation because police could stop them and ask for identification (Medina et al., 2015). Skipping preschool can have serious consequences for young children, as early educational experiences are vital to social-emotional and intellectual development (Kleeck, 2008). In addition, research has shown that students who attend preschool are 20% more likely to graduate from high school (Kleeck, 2008) and 23% of students who attend preschool graduate from four-year universities compared to only 6% of students who do not attend preschool (Gándara & Contreras, 2009).

### ***High Rates of Mobility***

When disaggregated by ethnicity, Latinx students have the highest transient rate of any racial group and are nearly twice as likely to change schools compared to their White peers (Paik & Walberg, 2007). The impact of mobility on student success can be detrimental. For instance, high mobility and graduation rates are inversely related (Paik & Walberg, 2007). Even when controlling for third variables such as family SES and occupational employment, mobility during high school significantly reduces students' probability of graduating (Haveman & Wolfe, 1994). One explanation for higher dropout rates for transient students is the psychological challenges that they must undergo when adjusting to new schools. Changing schools can upset students' sense of routine and normalcy, especially for Latinx students who frequently must relocate due

to parental employment, short-term housing contracts, and other situational factors (Paik & Walberg, 2007).

### ***Disconnect Between Students and School Personnel***

Due to cultural and language differences, social class distinctions, and racialized identities, Latinx students face barriers to creating meaningful and trusting relationships with school personnel, greatly impacting their academic success (Gándara & Contreras, 2009; LaRocque, 2013; Stanton-Salazar, 1997). Aside from language barriers and perceived cultural differences, Latinx students may be hesitant to seek support from school personnel given the fact that they have faced decades of racism and exclusion practices within academic institutions (Slavin & Calderon, 2001).

In one of the most frequently cited studies to date, the U.S. Commission on Civil Rights (1973) examined teacher and Latinx student interactions in over 400 classrooms in New Mexico, California, and Texas. The commission's staff published a comprehensive report depicting that, based on observations of student-teacher interactions, Mexican American students received significantly less praise and encouragement, were criticized more frequently, and were asked significantly fewer questions by their White teachers in relation to their non-Latinx peers (U.S. Commissions on Civil Rights, 1973). This study was and is especially concerning because while schools within the U.S. are culturally and linguistically diverse, the field of education is largely homogenous with approximately 87% of school psychologists and 82% of teachers identifying as White. In addition, only 14% of school personnel state having "some proficiency" in a language other than English (Curtis, Castillo, & Gelley, 2012; Walcott & Hyson, 2016). As the Latinx student population continues to grow concurrent with a continued shortage of bilingual school personnel in the U.S., there is a rising demand to prepare all special education teachers and

school psychologists to deliver culturally competent psychological services to Latinx students (García-Joslin et al., 2015).

### **Needs of Latinx Students**

During the last several decades, the disparities between Latinx youth and their White peers have not dissipated. Latinx students continue to lag behind their White peers in reading, writing, and math (Gándara & Contreras, 2009). Fortunately, these students can succeed despite many environmental hardships (Vega, Lasser, & Fernandez, 2017). With social support, inclusive curriculum, increased educational funding, and economic and political reform, we can begin to close the achievement gap that separates minority students from their White non-Latinx peers (Martin & Suárez-Orozco, 2018; Ream & Stanton-Salazar, 2007).

### ***Sense of School Belonging***

Research has shown that a sense of belonging improves academic and motivational outcomes for Latinx and immigrant youth at risk of dropping out of school (Kuperminc, Darnell, & Alvarez-Jiménez, 2007; Ream & Stanton-Salazar, 2007). Goodenow and Grady (1993) define school belonging as the degree to which students feel personally accepted, respected, and included within their educational settings. When students perceive their peers and teachers are supportive and willing to help, they have reason to believe that they will be able to find the necessary resources when needed. Latinx students who feel that they belong are more likely to 1) engage in collaborative activities in their classrooms, 2) believe that their teachers incorporate culturally relevant curriculum, 3) think that their teachers have high expectations for them, 4) actively participate in classroom curriculum, and 5) engage in extracurricular activities (Gándara & Contreras, 2009; Goodenow & Grady, 1993; Slavin & Calderon, 2001).

### ***Parental Involvement***

Parental involvement within schools contributes to the academic socialization of Latinx students by strengthening their sense of belonging and expectations for educational attainment (Christenson, 2003; Gándara & Contreras, 2009). To build collaborative relationships with parents, school personnel must reach out to Latinx communities and make effective partnership a priority (Howard, 2010; Vega et al., 2017). Latinx parents may often feel self-conscious about their ability to discuss schooling with teachers and excluded due to language barriers (Smith, Stern, & Shatrova, 2008). Despite wanting their children to academically achieve, Latinx parents may not know the precise steps to take to align their goals with the goals of their children's school (Chrispeels & Rivero, 2001). To bridge cultural barriers, educators and school administration need to understand cultural differences, provide information to parents in their native language, take into consideration family work schedules when arranging meetings and events, and hire cultural liaisons who can assist in the effort to include parents in school-based decisions (Chrispeels & Rivero, 2001; Vega et al., 2017). Latinx families are more likely to play an active role within the school environment when school personnel value their opinions and include them in educational decisions (Smith et al., 2008).

### ***Promoting Diversity***

Although the classroom curriculum varies depending on district and state policies, national reports suggest that there is an overall lack of cultural diversity within public school curriculum (Close & Solberg, 2008). Teachers can make curriculum more culturally relevant by incorporating lessons about holidays and traditions from various ethnicities, selecting reading assignments that include protagonists and historical figures from other countries, and selectively grouping students to foster diversity. To increase cultural diversity at a systems level (Christenson, 2003; Maki, Zong, & Batalova, 2018), schools must incorporate professional

development and educators must recognize their own privilege and openly acknowledge it. Furthermore, teachers must create space for the voices of marginalized individuals by bringing in guest speakers, allowing for open classroom discourse, and showing multiple perspectives that contradict dominant Eurocentric views. Teachers who are aware of the marginalization that minority students face can better understand when a student is underachieving due to a disability vs. when a student is underachieving due to a lack of appropriate instruction, educational disadvantages, or limited English language proficiency.



## CHAPTER 3: METHODOLOGY

Special education procedures have existed in Mexican schools for decades, yet it seems that U.S. school psychologists and special education teachers who work with Mexican immigrant students have little to no understanding of how Mexican schools provide services to students with disabilities (Rhodes, 2000). The purpose of this qualitative, phenomenological study was to increase U.S. school psychologists' and special education teachers' understanding of Mexican immigrant students' educational needs by exploring the experiences of school psychologists and special education teachers in both Mexico and the U.S. As outlined by Moustakas (1994), phenomenological research should focus on the wholeness of experience in which the researcher is involved. The researcher concluded that a phenomenological approach was the most appropriate means of collecting data to expose individual's perspectives and specific experiences related to the phenomena by giving voice to their knowledge (Moustakas, 1994). Shared communication about this phenomenon can assist school psychologists and special education teachers in the U.S. to provide more appropriate services to Mexican immigrant children with disabilities. In seeking to understand the phenomena, the study addressed three questions:

1. What experiences have special education teachers and school psychologists in Guanajuato, Mexico had working with Mexican students with disabilities and their families?
2. What experiences have special education teachers and school psychologists in Arizona, U.S. had working with Mexican immigrant students with disabilities and their families?
3. What are the similarities and differences between special education practices and policies in the U.S. and Mexico?

### **Rationale for a Qualitative Research Design**

The researcher used a qualitative approach for this study because people's experiences are bound within their sociocultural world and are somewhat subjective regarding context and time (Bloomberg & Volpe, 2018). By conducting in-depth interviews and residing in Guanajuato, Mexico and Arizona, U.S., the researcher attempted to enter the lives of others to achieve a holistic understanding of their experiences. Qualitative research is distinctly different from quantitative research because it focuses on rich descriptions and discovery to understand and interpret the meaning of life events (Marshall & Rossman, 2016), whereas, quantitative research focuses on establishing and testing hypotheses to examine objective variables (Bloomberg & Volpe, 2018).

The researcher posited that quantitative methods would not have elicited the comprehensive data that the researcher planned to collect through qualitative methods. The benefits of conducting a qualitative study included understanding the specific contextual and regional experiences of school psychologists and special education teachers in the U.S. and Mexico, facilitating and maintaining ongoing interactions between the researcher and participants, and allowing for flexibility in data collection. In addition, the researcher was able to spend over two months in Guanajuato volunteering in schools to further understand the context of her research participants (Bloomberg & Volpe, 2018). Through qualitative methods, the researcher was able to interpret participants' emotional responses to dig below superficial interactions and understand their decisions and experiences.

### **Rationale for Case Study Methodology**

After reviewing several qualitative approaches, the researcher selected a case study design. The researcher selected this methodology to allow for a detailed analysis of the

phenomenon at hand (Bloomberg & Volpe, 2018). Baxter and Jack (2008) indicate that case study is an ideal approach for qualitative research,

Qualitative case study is an approach to research that facilitates the exploration of a phenomenon within its context using a variety of data sources. This ensures that the issue is not explored through one lens, but rather a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood (p. 544).

This definition explained the current investigation. The researcher used multiple sources and cases to collect data so that she could use the obtained information to influence current practice within the field of school psychology and future research into the topic.

### **The Research Sample**

The researcher used a purposeful sampling procedure (Palinkas et al., 2015) to select participants who could yield a significant amount of information relevant to the research topic. Patton (2002) defines purposeful sampling as a sampling method in which the researcher selects information-rich cases from which one can learn a great deal about issues of central importance to the purpose of the inquiry. The researcher selected participants in Mexico and Arizona based on their experiences working with Mexican students with disabilities and their current employment within school districts. The researcher collected demographic information to ensure that all participants met the study criteria.

The researcher maintained a sample size small with the goal of staying true to the in-depth analysis of cases fundamental to qualitative research, which is focused on the depth of understanding rather than the breadth; thus, even a single example can be highly instructive in qualitative research (Boddy, 2016; Creswell, 2007; Marshall, Cardon, Poddar, & Fontenot, 2013). With the goal of furthering knowledge, the researcher's sample included five participants

from Mexico and five participants from Arizona. Due to the depth of information that the researcher gathered from each participant, she determined that she achieved data saturation. As outlined by Strauss and Corbin (1990), data saturation is the point at which the researcher can obtain no new insights, codes, or themes and no issues arise regarding data categorization. Saturation is considered by many researchers as the ‘gold standard’ in qualitative inquiry and was thus used to justify the researcher’s selected sample size (Bloomberg & Volpe, 2018; Fusch & Ness, 2015). Moreover, the researcher did not collect additional participants because redundancy in data collection occurred (Creswell, 2007).

### **Informed Consent**

Although there were no suspected risks for participating, the researcher employed various safeguards to protect participants. The researcher provided potential participants with written information and orally asked for both written and verbal consent. She also gave participants her university’s and her personal contact information. Appendix D contains the Spanish consent form for participants from Mexico. Appendix E contains the consent form for U.S. participants. Due to the nature of the study, the researcher obtained IRB approval to conduct interviews in Mexico and the U.S. during the summer of 2018. Appendix G includes a copy of the IRB approval.

### **Confidentiality**

The researcher stored demographic information and transcribed interviews from Mexico digitally using Box, a cloud content management and file sharing service for businesses and universities. The account is accessible only to the primary researcher; all participant information has been deidentified to protect their identities. The researcher will keep the information on file

for three years, after which time she will remove it. She will store all hard copies of interview materials in a locked file cabinet until the three-year time period elapses.

## **Methods for Data Collection**

### **Settings**

Data collection occurred in two phases: the first phase of data collection occurred in Guanajuato, Mexico during the summer of 2018, and the second phase of data collection occurred in Arizona, U.S. during the spring of 2019.

#### ***Guanajuato, Mexico***

Guanajuato is a historic municipality located in central Mexico with a population of roughly 5.85 million people. The researcher selected Guanajuato as a site for data collection due to its unique special education system, which includes both USAER and CAM placements. Additionally, several schools in Guanajuato City previously accepted volunteers and were open to allowing the researcher to both interview school personnel and volunteer on site. The researcher participated in a study abroad program, which also permitted her the convenience for data collection in this unique setting.

The researcher collected data for this investigation in the state capitol, also named Guanajuato. Guanajuato City is world-renowned for its numerous plazas, brightly painted buildings, narrow allies (*callejones*), museums, and underground roads (Thompson, 1990). During the mid-1600s, Spaniards discovered silver, leading to the city's rapid expansion and mining industry. At the height of its silver production, one mine (la Valenciana), accounted for two-thirds of the global silver production. With the highest silver production in the world for more than 250 years, Guanajuato was the richest city in Mexico during the 16<sup>th</sup> and 17<sup>th</sup> centuries (Blanco, Parra, & Medrano, 2000). Currently in Guanajuato, there are over 22,500 foreigners

registered and the state ranks 6<sup>th</sup> in the country for tourism. In addition to tourism, Guanajuato City is famous for its university, mummy museum, and festivals. The population is majority young adults with a median age of 26 years. Although Guanajuato City continues to experience economic growth, Guanajuato has the 18th-highest poverty rate among Mexico's 31 states, with 44.5% of the population living in poverty.

Regarding education, the average level of schooling in Guanajuato is 8.4 years, which would be roughly equivalent to late junior high school in the U.S. (SEP, 2014). As of 2017, there are over 10,000 public schools in Guanajuato. Of these schools, there are 3,599 preschools, 4,026 elementary schools, 1,584 high schools, and 989 advanced programs (SEP, 2017). When examining special education services, there are 184 special education programs (128 public schools with USAER and 56 CAM placements). Of the roughly 1,300,000 students enrolled in public schools, 2.4% (31,290 students) are receiving special education services (SEP, 2017). As part of the *Educational Integration Act*, the Secretariat of Education in Guanajuato has worked to create more accessible schools. Currently in Guanajuato, 32.3% of campuses have ramps and 9.2% of schools have wheelchair-accessible restrooms (SEP, 2017).

To gather information from a diverse array of practitioners, the researcher collected data from two different schools in Guanajuato. The first school was a large public elementary school located in the city center. The campus was two stories and contained a large open recreational area in the middle. The students used this recreational area for lunch, the morning pledge of allegiance, recess, and physical education. There was one USAER classroom on each floor. Each grade level had two to three general education classrooms with an average of 38 students per class. Of the roughly 700 students enrolled in the school, 60 students were receiving special education services. The two study participants selected from this school both worked as special

education teachers and provided pull-out and push-in services to students with disabilities. The first participant worked with students in grades 1<sup>st</sup> through 3<sup>rd</sup> and the second participant worked with students in grades 4<sup>th</sup> through 6<sup>th</sup>.

The second school was a Multiple Attention Center (*Centro de Atención Múltiple* [CAM]) located within the outskirts of the city. The center had a preschool, grade school, and a CECADEE high school program. Each special education teacher had an assigned classroom with anywhere from two to 18 students per day. The researcher was unable to obtain an accurate count of student enrollment due to the high rate of student transience. The school had wheelchair-accessible ramps and bathrooms. According to study participants, this CAM center was slightly less staffed when compared to other centers in the country. The center did not have teacher assistants, nurses, or speech pathologists. Moreover, there was only one school psychologist, one school psychology intern, and one social worker. To compensate for fewer staff members, the school established several partnerships with local organizations, such as the University of Guanajuato (Universidad de Guanajuato) and DIF. Representatives from these organizations came to campus several times per month to lead workshops for the students and their parents.

### ***Arizona, U.S.***

In addition to conducting interviews in Mexico, the researcher conducted five interviews with school psychologists and special education teachers working in Arizona, U.S. during the spring of 2019. The researcher selected this region due to its proximity to the Mexican-American border and the large Latinx student population who comprise one-third of Arizona's population. Of the five participants, three of them, Alfredo, Chelo, and Gloria worked for the second-largest public school district in Southern Arizona. This district served more than 16,300 students and

families and was located in a culturally diverse community. During the 2018-19 school year, 80% of students in the district qualified to receive free and reduced-price meals, 17% of students were classified as English Language Learners, and 13% received special education services. Within the district, 84% of students identified as Hispanic/Latino. According to AzMerit state testing, 25% of students were proficient in reading and 27% were proficient in math.

One participant, Marcelo, worked in a public school located six miles from the Mexican-American border. This district contained nine schools with nearly 100% of the student population identifying as Latinx/Hispanic. Of the student population, 48% identified as ELL students and 99% came from low-income households. According to 2017 AzMerit state assessments, 24% of students were proficient in reading and 28% were proficient in math. Roughly 14,200 students were enrolled within the district. The last participant, Dalia, worked within the largest school district in Southern Arizona, which contained more than 47,000 students. Within this district, 63.8% of the students identified as Hispanic/Latinx. According to AzMerit state testing, 31% of students were proficient in reading and 30% of students were proficient in math.

## **Participants**

### ***Guanajuato, Mexico***

The researcher used a purposeful sampling method to select participants who were knowledgeable about the research topic (Palinkas et al., 2015). All participants had to be employed by schools, have experience working as school psychologists or special education teachers, and be over the age of 18. The five participants selected satisfied the study criteria. Participants represented diversity in age, education level, and years working as special education teachers or school psychologists. Of the six school personnel contacted to complete an interview,



one declined due to a scheduling conflict. Table 1 provides the participants' demographic information. To maintain participant confidentiality, the researcher removed all identifying information and used participant pseudonyms. Participants were selected who were willing to complete an interview and worked at one of the researcher's two volunteer school placements.

Table 1

*Participant Demographic Information from Guanajuato*

Pseudonyms	Occupation	Program	Gender	Years of Experience	Age
Dani	School Psychologist	CAM	Male	1	23
Angela	School Psychologist	CAM	Female	17	40
Maria	Special Education Teacher	CAM	Female	2	23
Sofia	Special Education Teacher	USAER	Female	6	26
Gabi	Special Education Teacher	USAER	Female	8	30

Of the Mexican participants, three were practicing special education teachers (Maria, Sofia, and Gabi) and two were practicing school psychologists (Dani and Angela). Mexican study participants' years of experience ranged from one to 17 years. Two participants worked one to five years in the field of special education, two participants worked six to ten years, and one participant worked 11-20 years. All participants were monolingual Spanish speakers. Three of the participants had experience working in both USAER and CAM. Two participants had worked at CAM only. Participants were between the ages of 23 and 40 years old. All participants had college degrees. Four participants received their degrees from normal schools. Sofia and Maria majored in special education, Gabi majored in primary education, and Angela majored in Pedagogy. At the time of interviews, Dani had just completed his undergraduate degree in

psychology. All five participants from Mexico stated that they were considering applying to master’s programs.

***Arizona, U.S.***

Similar to the data collection process in Mexico, the researcher used a purposeful sampling method to select participants who were knowledgeable about the research topic (Palinkas et al., 2015). The participants satisfied study criteria because they all were employed in schools, current or former school psychologists or special education teachers, and over the age of 18. Furthermore, all participants were employed in schools within 100 miles of the Mexican-American border and had experience working with Mexican immigrant students with disabilities. The five Arizona participants selected represented diversity in age, education level, and years working as special education teachers or school psychologists. The researcher intentionally selected participants due to their extensive experience in the field of special education. The researcher sent individual e-mails to her current and past bilingual supervisors describing the purpose of the study. In addition, the researcher utilized a snowball sampling method (Yin, 2011) in which she encouraged participants to refer their colleagues to participate in the study. Alfonso recruited Marcelo and one of the researcher’s dissertation committee members recommended that Gloria be invited to participate in the study. The researcher interviewed three current school psychologists and two current or former special education teachers from this region using a purposeful criterion-sampling method. Information about Arizona participants is included below in Table 2.

Table 2

*Participant Demographic Information from Arizona*

Pseudonyms	Occupation	Highest Degree	Gender	Years of Experience	Age
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Chelo	Special Education Teacher	M.A. in Special Education	Female	21	46
Alfonso	School Psychologist	M.A. in Clinical Psychology	Male	39	65
Gloria	Former Special Education Teacher	Ph.D. in Education	Female	40	67
Marcelo	Lead School Psychologist	Ed.S in School Psychology	Male	28	49
Dalia	Former Special Education Teacher	M.A. in Special Education	Female	21	61

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Of the Arizona participants, three were practicing or former special education teachers (Chelo, Dalia, and Gloria). Dalia, who received her master’s degree in special education, stated that she was currently working primarily as a reading interventionist but that she had worked as a special education teacher for over ten years. The researcher selected Dalia because she worked primarily with students with disabilities and had experience working in education in both Mexico and the U.S. Gloria, who had also started as a special education teacher and received her Ph.D. in education, reported that she was currently an Assistant Superintendent of Student Services. The researcher selected Gloria to participate in this study because she had over 40 years of experience working in special education. The third special education teacher, Chelo, received her master’s in special education and was at the time working as a middle school special education resource teacher.

The final two participants were practicing school psychologists. Alfonso obtained his master’s degree in clinical psychology from Mexico before moving to the U.S. to work as a school psychologist. Marcelo, who was serving as a lead school psychologist, obtained his Educational Specialist Degree (Ed.S.) in school psychology and worked in education for nearly three decades. Marcelo was selected because he worked directly on the Mexican-American border in a school district with nearly 100% of students identifying as Latinx.

Arizona study participants' years of experience in schools ranged from 21 to 40 years. Three participants worked 21-30 years in the field of special education and two participants worked 31-40 years. All participants were bilingual English and Spanish speakers. Three participants identified Mexico as their country of origin. Chelo identified her country of origin as both Mexico and the U.S. Gloria stated that she was born in the U.S. All participants identified as Latinx or Hispanic. Dalia and Alfonso both grew up in Mexico and did not immigrate to the U.S. until their mid-20s. Marcelo, Chelo, and Gloria all grew up living within ten miles of the Mexican-American border. Participants were between the ages of 46 and 67 years old.

### **Data Collection**

#### **Guanajuato, Mexico**

##### ***Individual Interviews***

During the process of data collection, the researcher used multiple methods (e.g., interviews, classroom observations, and field notes) to gain a deeper understanding of school psychology and special education in Mexico. The investigator received IRB approval to conduct research in Mexico in the spring of 2018. The researcher's minor and dissertation advisors approved the study, both of whom served as bilingual scientific, scholarly reviewers. Upon arriving in Mexico, the researcher and her minor advisor met with the Secretariat of Public Education (SEP) in Guanajuato to obtain written approval to collect data. In addition, two school principals in Guanajuato gave verbal permission for the researcher to collect data.

After obtaining informed consent from each participant, the researcher conducted and audio-recorded individual face-to-face interviews with five Mexican participants in their classrooms. Interviews took place after school and during the teacher's prep periods. The researcher selected interviews as the primary data collection methods as they yield a significant

amount of rich information (Warren, 2002). In addition, interviews allowed the researcher to probe for more detail, seek clarification, and understand special education from the point-of-view of the participants (Bloomberg & Volpe, 2018). Interviews were semi-structured and included open-ended questions, which generated additional interview inquiries asked by the researcher (Warren, 2002). The researcher chose to conduct semi-structured interviews because, as described by Borg and Gall (1983), semi-structured interviews have the advantage of being reasonably objective while still eliciting a detailed understanding of participants' opinions and the reasons behind them. Through semi-structured interviews, the researcher asked follow-up questions to dig deeper into the experiences of participants. Participants also completed a demographic questionnaire that was translated from English to Spanish (Appendix F). Appendix H and I contain the Spanish interview protocol and its English translation. Before conducting interviews, the researcher asked participants to read and sign a consent form outlining the purpose of the study, confidentiality, voluntary participation, and risk and benefits (Appendix D). The researcher audio-recorded and transcribed all interviews verbatim. Sample interview questions (Appendix H) included:

1. How did you decide to become a school psychologist or special education teacher?  
*¿Cómo decidió ser psicóloga/o o maestra/o de educación especial?*
2. Describe your preparation experience? What titles have you received? *Describe su experiencia de preparación. ¿Qué títulos ha recibido?*
3. Have you worked in other CAM or USAER special education settings? *¿Ha trabajado en otros Centros de Atención Múltiple o escuelas con USAER?*

Responses to these questions shed light on the perceived experiences of special education teachers and school psychologists in Guanajuato, Mexico. With a greater understanding of

special education in Mexico, the researcher inferred that school psychologists in the U.S. will be better able to further develop and tailor services to meet the needs of Mexican immigrant students.

Although interviews have many strengths, there were several limitations noted during the interview process (Bloomberg & Volpe, 2018). First, some participants were less willing to share and gave very succinct, brief responses, while other participants were eager to discuss their experiences. Due to these differences, interviews ranged from 23 minutes to 120 minutes. Second, because the researcher was conducting interviews in her second language, there were several missed opportunities during which the researcher could have asked for an explanation from participants or moments in which the researcher misunderstood a participant's response and had to ask for clarification. Additionally, there were a couple of instances in which the researcher struggled with pronunciation or had trouble translating her thoughts in Spanish. Third, the presence of the audio recorder may have influenced some of the participants' responses.

To gather additional knowledge, the researcher spent four weeks volunteering in both CAM and USAER during the summer of 2018. The researcher split her time evenly between the two schools in Guanajuato. During observations, the researcher completed journal entries in which she recorded her observations, descriptions of the classrooms, and general perceptions. The researcher completed four formal hour-long observations in CAM to gather additional information about participants' daily work experiences. The researcher conducted two CAM observations in a classroom with students ages 13 to 17 and two observations in a CAM classroom with students ages 12 to 13, with the exception of one 22-year-old female student with multiple disabilities. Eight students were present during both observations in the first classroom. In the second CAM classroom, roughly 14 students were present during the first observation and

only six students were present during the second observation, which the researcher conducted roughly one week before summer break. In addition, the researcher conducted four hour-long observations in two USAER classrooms. The researcher conducted two observations in the 1<sup>st</sup>- through 3<sup>rd</sup>-grade USAER classroom and two more observations in the 4<sup>th</sup>- through 6<sup>th</sup>-grade USAER classroom. Student group sizes ranged from two to six. Observational data were reviewed by the research team and compared to participants' interview responses to further establish the reliability of the research findings.

## **Arizona, U.S.**

### ***Individual Interviews***

Similar to the data collection process in Mexico, the researcher used interviews as the primary method to gather information from Arizona participants. The researcher arranged in-person interviews at public locations convenient for participants (e.g., libraries, schools, work offices, etc.). Interviews took place between March and April of 2019. Before conducting interviews, the researcher asked participants to read and sign a consent form outlining the purpose of the study, confidentiality, voluntary participation, and risk and benefits (Appendix E). Participants also completed a demographic questionnaire (Appendix F). All interviews were audio-recorded and transcribed verbatim. The researcher developed the following research questions with support from her advisor to guide semi-structured interviews. Appendix J contains the interview protocol. Sample interview questions included:

1. Describe your preparation experience. What degrees have you received?
2. Have you worked as a special education teacher or school psychologist at other schools?
3. Can you discuss your experiences working with Mexican immigrant families?

In addition to semi-structured interviews, the researcher volunteered for several weeks in Chelo's resource classroom, during which time she completed four structured classroom observations. The researcher selected Chelo's classroom for observation because she provided special education pullout services comparable to USAER in Guanajuato. Unlike the classrooms observed in Mexico, however, Chelo had a paraprofessional working with small student groups, an office, and three computers available for student use. Moreover, each student had an individual district-provided laptop. During the first two observations, students completed state assessments. During additional observations, students completed late or missing general education classroom assignments. The researcher recorded detailed descriptions of the students, the classroom, and her perceptions in her journal. Observational data were reviewed by the researcher and compared to participants' interview responses to further establish reliability of the research findings.

### **Data Analysis**

The formal process of data analysis began with the researcher recruiting two graduate students to assist in coding. To identify assistants, the researcher sent a recruitment email to several graduate students in the Department of Disability and Psychoeducational Studies. She selected candidates who had at least three semesters of experience working with qualitative data and who were willing to assist with coding. The two graduate students selected were in the researcher's doctoral cohort and research lab. Although neither of them had background knowledge about special education in Mexico, both team members had knowledge about bilingual training programs and the training needs of bilingual school psychologists. Both assistants were 27-year-old White females. The researcher and her two assistants worked collaboratively to code transcripts to establish inter-rater reliability (Lincoln & Guba, 1985).



According to Saldaña (2009), qualitative data coding allows research teams to develop categories, concepts, and themes to answer research questions and further understand the lived experiences of participants. The research team worked strategically to analyze study data. First, the principal researcher transcribed all interviews. She transcribed English interviews verbatim and transcribed Spanish interviews in English. A native Spanish speaker from Guanajuato reviewed Mexican participants' audio recordings and transcribed interviews to verify accurate interpretation. The principal investigator deidentified all information such as names of students, schools, and school personnel before research team members reviewed the transcriptions. In accordance with Moustakas' (1994) qualitative data analysis method, the researcher and her team members read and reviewed all transcribed interviews and each team member developed a list of significant statements from participants (Moustakas, 1994).

The second step of Moustakas' (1994) method was a data reduction process known as horizontalization (Moustakas, 1994). During this phase, the researcher grouped and reduced significant participant statements into clusters that were essential to the phenomenon. The principal researcher separated significant statements collected by the research team based on the ten interview questions for both samples of participants. The researcher separated statements as they related to different categories (e.g., information relevant to special education procedures, perceptions of students with disabilities, experiences in classification and assessment, etc.).

The final step of Moustakas (1994) analytic process was to determine overarching themes by clustering and thematizing revealed categories. During this process of coding, classifying, and theme development, the research team interpreted themes to gather a deeper understanding of the data (Creswell, 2007). In accordance with Moustakas' (1994) method, the research team reviewed grouped information and removed nonessential elements not pertinent to the

phenomenon. Examples of nonessential elements included stories from participants unrelated to their work and information focused on general education students. The team then compared categories to each other and prior research. The primary researcher compiled a list of themes and the research team reached consensus when all three members agreed about each conclusion. Based on the analysis of data, the researcher and her colleagues worked together to summarize the conclusions, determine implications, and formulate research-related recommendations (Lodico, Spaulding, & Voegtler, 2010). Eight major themes emerged from the data analysis to answer the research questions.

### **Researcher Positionality and Considerations**

Although the researcher attempted to establish trustworthiness, there were several limitations of this study related to qualitative research methodology (Bloomberg & Volpe, 2018), to which the researcher gave great thought into ways to account for these limitations and reduce their impact. For example, when using qualitative methods in general, it is important to note that these studies will include some aspects of the researcher's subjectivity (Marshall & Rossman, 2016). One key limitation of this study was the researcher's participation as both a former special education teacher and a current graduate school psychology student, which could have impacted study findings due to the influence of the researcher's prior experiences within the field of education. A second key limitation was potential language and cultural barriers. As a White female, the researcher was continually learning aspects of Latinx culture. In addition, the researcher was not a native Spanish speaker and was conducting and analyzing interviews in her second language. As a foreigner, it is possible that Mexican participants were more guarded with their answers because they viewed the researcher as an outsider. In contrast, some of the Arizona participants knew the researcher personally, which may have influenced their behaviors. For

example, participants may have overestimated the number of their past experiences working with Mexican immigrant students or provided examples of “best practices” instead of examples of their practices. Finally, the researcher limited the study to six special education teachers and four school psychologists. Although there are many benefits to smaller sample sizes in qualitative research (Creswell, 2007), the small group of participants may not have reflected varied perceptions.

Recognizing these limitations, the researcher made several attempts to reduce bias. First, the researcher acknowledged her role in data collection and concerns that could arise during this process. Second, the research team reviewed all transcriptions, coding schemes, and data categories together. Third, the researcher reflected on how she could influence participants and considered her verbal and nonverbal communication when attempting to create open and safe environments conducive to dialogue. (Bloomberg & Volpe, 2018).

### ***Trustworthiness***

To strengthen the integrity of this study’s findings, the researcher utilized standards of trustworthiness from Lincoln and Guba’s (1985) five established principles: 1) credibility, 2) dependability, 3) confirmability, 4) transferability, and 5) authenticity. According to Lincoln and Guba (1985), trustworthiness is the degree of confidence in data, procedures, and interpretation based on established protocols and research methods. Through the inclusion of strategies to establish trustworthiness, the researcher intended to control for potential biases that could have arisen during study design, implementation, and analysis (Bloomberg & Volpe, 2018).

**Credibility.** Lincoln and Guba (1985) describe the first principle, credibility, as the confidence in the findings of the study. If a study has obtained credible results, the researcher, reader, and participants assume that the findings are accurate and valid (Bloomberg & Volpe,

2018). For this study, the researcher established credibility through various techniques outlined by Lincoln and Guba (1985). First, the researcher spent four weeks volunteering with study participants in Mexico to directly observe special education practices and build relationships with potential participants before conducting interviews. Before conducting interviews with participants from Arizona, the researcher learned about each district, completed school tours, and conducted several on-site observations in participants' classrooms.

Second, the researcher worked collaboratively with her research team to review transcribed interviews and code salient participant quotes (Spall, 1998). Discussing the findings with her team ensured findings adequately reflected the participants' realities. In addition, a cultural mediator from Mexico examined the transcriptions to assess for culturally accurate interpretations. The cultural mediator selected from Guanajuato was a 30-year-old native Spanish speaker who had experience volunteering in special education classrooms. Third, the researcher kept a journal to clarify her assumptions, record daily observations, complete reflections, review data, and chart her steps taken when interpreting and analyzing.

**Dependability.** Lincoln and Guba (1985) describe the second principle, dependability, as the stability of the data over time. As discussed by Lincoln and Guba (1985), qualitative research must focus on whether the findings are consistent with the data. Because this study consisted of ten participants, the researcher ensured dependability by documenting her procedures and keeping a daily journal to ensure consistency in her coding and data analysis. Moreover, she established dependability through peer debriefing, during which her team members reviewed the findings and offered interpretations about the study (Lincoln & Guba, 1985). If differences arose during the coding process, the researcher and her colleagues met to discuss these discrepancies. In addition, the researcher maintained an audit trail, which is a qualitative research strategy used

to confirm that findings reflect the participants' responses instead of researcher biases. As part of the audit trail, the researcher provided detailed rationale to support her team's decisions in creating various themes from participant responses (Anastas, 2004).

**Confirmability.** Lincoln and Guba (1985) define the third principle, confirmability, as the degree to which findings can be repeated as they relate to objectivity in qualitative research. To reach confirmability, the researcher attempted to draw results from the data, rather than biases or subjectivity. The researcher established confirmability through her detailed notes about her decisions, exact transcriptions of participants' responses, and detailed descriptions of participant clarification when responses were unclear. The researcher took these steps to assist the reader in tracing the data back to the original participant responses.

**Transferability.** Lincoln and Guba (1985) define the fourth principle, transferability, as the extent to which findings are useful for other researchers. When conducting qualitative research, it is not the goal of the researcher to generalize results; rather the goal is to determine how the results can be applied in different settings and contexts. To establish transferability, the researcher provided rich descriptions of the context, the location, and the participants involved in the study. Deep, rich descriptions provided the base for applying the research findings to a broader context (Bloomberg & Volpe, 2018).

**Authenticity.** The final aspect of trustworthiness outlined by Lincoln and Guba (1985) is authenticity. Authenticity relates to the extent to which the researcher realistically depicts participants' experiences. To establish authenticity, the researcher included participants from diverse backgrounds and settings (Lincoln & Guba, 1985). For example, while collecting interviews in Mexico, the researcher made sure to interview both school psychologists and special education teachers from CAM and USAER settings. In addition, during both data

collection in Arizona and Mexico, the researcher interviewed females and males and included a broad age range of participants. Furthermore, the researcher frequently checked in with participants to make sure her understanding of their responses reflected participants' experiences and personal understanding.

### **Summary**

Chapter 3 provided an overview of the study methodology. The researcher collected qualitative data and analyzed it using a case study methodological research design. She deemed this approach appropriate for the current study over a quantitative design to obtain in-depth information about the perceptions of school psychologists and special education teachers in both Guanajuato and Arizona. The participant sample consisted of ten purposefully selected individuals who had extensive experience working with either Mexican students with disabilities or Mexican immigrant students with disabilities residing in Arizona. Thus, the study aimed to provide practitioners with the opportunity to share their experiences and have a voice in shaping future practices for educators working with Mexican immigrant students with disabilities. The research team reviewed the data against current literature and analyzed it to draw salient themes. The researcher accounted for credibility and dependability through Lincoln and Guba's (1985) five established aspects of trustworthiness.

## CHAPTER 4: RESULTS

The purpose of this qualitative, phenomenological study was to improve how U.S. special education teachers and school psychologists provide services to Mexican immigrant students with disabilities and their families. The researcher collected data from Guanajuato, Mexico and Arizona, U.S. to compare special education services and answer the following three research questions: 1) What experiences have special education teachers and school psychologists had in Guanajuato, Mexico working with Mexican students with disabilities and their families? 2) What experiences have special education teachers and school psychologists had in Arizona, U.S. working with Mexican immigrant students with disabilities and their families? and 3) What are the similarities and differences between special education practices and policies in the U.S. and Mexico? In this chapter, the researcher provides an overview of the research questions, the data analysis process, and the study findings.

### **Findings**

Eight major themes emerged from data analysis. The first three themes emerged from data collected in Mexico and relates to practitioners' experiences working with Mexican students with disabilities and their families. These findings were 1) lack of understanding surrounding special education, 2) limited educational resources, and 3) economic factors impacting Mexican students and their families. Next, the researcher identified three critical findings from data collected in Arizona: 1) perceived immigrant generational differences, 2) limited understanding of special education in Mexico and 3) emphasis on establishing rapport with immigrant families. The final two major findings emerged when comparing special education in Mexico and the U.S. These findings included 1) differences and similarities in special education eligibility categories, and 2) variance in annual requirements and availability of services.

## **Findings from Guanajuato, Mexico**

Interviews and observational data collected from Mexico revealed the experiences and perceptions of school psychologists and special education teachers in Guanajuato. The data collected and analyzed gave rise to three themes used to draw conclusions about Mexican practitioners' experiences working with students with disabilities in both USAER and CAM.

### ***Finding 1: Lack of Understanding Surrounding Special Education in Mexico***

All five participants from Mexico discussed how they believed that parents, general education teachers, and individuals from the community did not fully understand special education procedures. With regard to working with families, the three participants who worked at CAM discussed feeling disconnected from parents. Angela, a school psychologist at CAM, stated, "There are many parents who have had bad experiences with psychologists, and they will say bad things about school psychologists. They may say, 'This report is not important. I will not return it or go to the school.'" Similarly, Maria, a special education teacher at CAM, discussed how even with the upcoming end of the year conferences, she did not expect many parents to attend, which she perceived was due to parents feeling disconnected from the school. She stated, "I believe it is relatively difficult to include parents here. There is a lot of work that can be done in this area."

Dani, a school psychologist at CAM, expressed his concerns that parents were not being educated about their children's needs. He explained how only a few of the students at CAM had ever reentered general education settings, a phenomenon which he believed was largely due to parents perceiving their children's developmental abilities, such as intelligence, as fixed traits. Dani expressed frustration because he believed that many of his students had the potential to make significant academic growth and learn in less restrictive settings. He shared,



There are about ten students, the best here, who could go to high school, but only three will leave and this is the case. The parents do not think that the kids can do anything else, so they bring them to school from 8:00 a.m. until 2:30 p.m. Some parents think of this place as a daycare.

According to participants, parents also chose to keep their children at CAM because they were afraid of sending them to larger schools, which they perceived as dangerous places for students with disabilities. Angela stated that few students leave CAM largely due to parents wanting their children to remain in a familiar and safe environment. She explained,

The parents prefer that their children stay here in the labor classroom because they believe that this is preparing them. Sometimes, even though the students have the skills to go to high school, the parents say no because high school is very difficult, or unsafe, or because there are drugs.

Dani reported similar ideas to Angela. Dani stated, “Parents fear that their children will be hit and bullied. Parents let the students repeat years here to keep them safe. It is the fear of the parents. The few students who leave CAM can be counted.” In another case, Maria, a special education teacher at CAM, discussed how parents do not always understand the benefits of educating students with nondisabled peers. Maria shared a case in which the parents placed a student with minimal behavioral concerns at CAM out of convenience, even though it was not his least restrictive environment. Maria shared,

He is here because his brother has a motor disability and the parents wanted to have both of their children in the same school. In my opinion, he should be in a general education setting, but this is a question for the parents. He does not attend CAM consistently.

Angela shared another example regarding a student who she worked with the prior academic year. She stated, “The parents have many misconceptions. For example, I had a parent say to me, ‘I talk all the time to my child, and he does not respond because he is deaf,’ but this was not true. The child had Autism.”

In addition to participants perceiving their work to be misunderstood by parents, all participants from CAM discussed cases in which they perceived public school personnel as hesitant to enroll students with disabilities in fear of being unable to meet their needs. For instance, Angela discussed a case involving a school principal who placed a female kindergarten student with average intellectual and academic abilities at CAM because she was in a wheelchair. Angela explained, “Normally when students enter schools, the parents look for schools with USAER support, such as the girl here who has a wheelchair. She should not be placed here. We have to fight the school to support her.” Gabi, a special education teacher at USAER, further discussed how school personnel and school infrastructure do not always accommodate students with disabilities. She stated,

We give the teachers recommendations and trust that they apply them. Some teachers do not apply them, and some teachers do. Some teachers say, “I can’t” or “I am choosing to place the majority of my time on further advancing my highest-performing students.”

This is frustrating.

With regard to community perspectives, five participants recognized that current special education procedures have only existed for a couple of decades, and thus many individuals have not yet come to fully understand special education or the unique needs of children with disabilities in diverse educational settings. Several participants provided their perceptions of how their community viewed special education. Maria shared,

People with disabilities are not respected and this is a huge issue partially due to ignorance and people not recognizing the importance of this area. This is also a question of the culture. People say, “If I park in the handicapped spot, no one will say anything.” Likewise, Sofia, a special education teacher at USAER, stated, “Nevertheless, it is about the concept of inclusive classrooms, which is still not recognized in many parts of Mexico by the schools or the society. As a society, we focus more on the disability than we do the student.”

Despite participants discussing their frustrations in working with individuals with limited knowledge of special education, all participants explicitly discussed their beliefs that students with disabilities advance in school when provided the appropriate support. Dani stated,

My goal for these students is that they will be self-sufficient and independent by not relying on their fathers or mothers. This is a goal in common for teachers, parents, and psychologists. If we all do this, I believe the students can move forward with their goals.

Maria also expressed this notion. She explained, “We make plans for each student. For my students, I focus on what they can do, not what they can’t. I look to see where they can go and what type of supports they will need to get there.” Similarly, Sofia reported, “If the student feels that they are cared about and supported, that is very important. That the children are given importance, they will progress.”

### ***Finding 2: Limited Educational Resources in Mexico***

All five participants discussed their concerns about limited special education resources related to both a lack of materials and unfilled staff positions. In regard to limited materials, participants discussed a lack of classroom space, assessments, technology, and school supplies. Angela explained her concerns about materials. She stated,

Here at CAM, there are few testing materials. Here our evaluations include the *Human Figure Drawing*, the *HTP Test* (House-Tree-Person), and the *Bender-Gestalt Test*. We can also apply the WISC-III, but we do not have it. So, these are the only three tests here.

Dani expressed his frustrations when comparing resources in Mexico to other countries. He commented,

In other countries, such as Spain, the development of projects and information in the case of special education is very grand. For example, I watched a video from Spain that integrated students with hearing disabilities and students without disabilities. Here in Mexico, our groups are not integrated. There is not an economy here to sustain this. Here in Mexico, the students need to adapt to the schools. The schools do not adapt to the students.

Special education teachers at USAER addressed concerns related to the materials provided by SEP. Sofia stated,

We have to fix the budget system. Look at Gabi's special education classroom, it is basically a storage room, and, in my room, I complete all my work on my own laptop. The materials I have, I buy and the materials USAER gives me are over ten years old. The school where I was working last year did not have a printer. We are missing a lot.

Furthermore, participants provided details about limited staff, which related to incomplete USAER teams, few to no electives course teachers, and an overall lack of support staff on campus. Both USAER and CAM participants expressed these sentiments. Moreover, participants discussed working with limited staff in both their current settings and former placements.

Angela, who had experience working in both USAER and CAM as a school psychologist, shared,

When I arrived at this CAM last year, there was a complete team but this cycle we lost team members and the support has not come. Here at CAM, we would benefit from a physical education teacher, an art teacher, and classroom support staff. This would help a lot.

Gabi stated, “Before, we used to have two psychologists but one retired and she was never replaced. So, we have one school psychologist for all the schools.” While discussing her experiences as a school psychologist at USAER, Angela reported, “SEP recommends that USAER work with five schools, but I have had as many as 13 or 18 schools. Sometimes at USAER there are school psychologists and speech and language therapists, but no social workers.”

SEP recommends that each USAER team contain a school psychologist, speech and language therapist, special education teacher, and a social worker. The researcher observed a complete USAER team; however, three participants in the study discussed prior experiences in which a USAER team member left at the end of a school cycle and was not replaced the following year. The USAER team observed by the researcher met twice a month, contained all the required team members, and worked with eight schools. In addition to observing a USAER team meeting, the researcher observed small group interventions led by special education teachers in both CAM and USAER settings and intervention services for a group of students who traveled to CAM twice a week because their homeschool did not have USAER.

### ***Finding 3: Economic Factors Impacting Mexican Students and their Families***

All participants discussed how economic factors influenced Mexican students’ social-emotional wellbeing and academic attainment. For example, four participants addressed socioeconomic concerns as a significant barrier to student success. Gabi stated,

The most common needs of students are related to their socioeconomic status and their emotional needs. When the parents are constantly working, there is a lack of emotional support and students are frequently absent from school. The students who lack routine are performing below what is expected of them.

Likewise, Sofia, who also works with Gabi at USAER, explained,

I get paid every 15 days, but this is not the case for many families. For example, when it poured rain last week, families could not make money because some people could not leave their homes. The rain has very serious implications for some families.

In discussing socioeconomic concerns, four participants discussed how low socioeconomic status (SES) directly related to low parental participation. Due to short school days and long work hours, participants reported that parents were often unable to attend school meetings. Gabi explained,

Here I have many students who are students of working parents and these parents work in business and they say that they cannot close their businesses to come to the school because they will lose their clients. Many parents work for the government, and because of their work, they do not come.

Additionally, participants discussed the economic hardships faced by parents who choose to seek support from outside agencies and medical doctors for their children with disabilities. Sofia explained,

I have one student who was diagnosed this year with ADHD (attention deficit hyperactivity disorder) and his mother helped a lot. We told her that her child had indicators of ADHD and she asked, “Where should I take him?” She took him to a doctor and the medications were very expensive and she is from a low SES family. But she is

still paying for the medication and his behavior has significantly improved. Not all parents, however, can afford to do this.

### **Findings from Arizona, U.S.**

Data collected from Arizona revealed several findings directly related to the second research question, “What experiences have special education teachers and school psychologists had in Arizona, U.S. working with Mexican immigrant students with disabilities and their families?” The three findings were 1) perceived immigrant generational differences, 2) limited understanding of special education in Mexico and 3) emphasis on establishing rapport with immigrant families.

#### ***Finding 1: Perceived Immigrant Generational Differences***

All five participants discussed how perceived generational differences between first, second, and third-generation Mexican families influenced parental involvement in special education. Specifically, all participants reported that first-generation families (born in Mexico and relocated to the U.S.) were more involved in their children’s education. In describing first-generation Mexican immigrants, four participants discussed immigrants’ cultural belief of self-improvement through hard work and education. Chelo, a special education teacher, explained,

It's the story of the American dream. These parents want to come, and they want to better themselves for their kids. The small group of first-generation elderly parents that are still here say to their kids, “Get your education. It will give you your life!”

Similar to Chelo, Alfonso, a school psychologist, reported, “First-generation families are tight, and have had to overcome real obstacles in Mexico. They look at the United States as an opportunity to become better and better and better. They worry about education.” Echoing the responses of other participants, Gloria, formerly a special education teacher, stated, “Mexican

immigrant students who do not relate to former generations and their nanas and tatas, don't do as well. These students do not have those connections with the language or the culture.”

Marcelo, who works in a school roughly seven miles from the Mexican-American border as a lead school psychologist, described his school district as one of the top-performing school districts in the country. A ranking he equated largely to the strong community and first-generational values of Mexican immigrants. Marcelo discussed, “Here in this community, it is primarily first-generation families and first-generation Mexican families have a high focus on education. You'll find that there's high respect for teachers and academics.” Dalia, a first-generation Mexican immigrant herself and former special education teacher, felt very connected to the culture. She discussed the importance of education in Mexico and her experiences working with first-generation students. She shared,

When students come to the states and hold onto their culture and do not internalize negative U.S. stereotypes of Mexican immigrants and negativity from the media, these students remain proud of what they are, and they have their identity. Our culture in Mexico is very respectful. Mexican culture is based on respect.

Dalia attended private Catholic school growing up in Mexico; however, during her interview, she discussed her experience working in a public school in Mexico City for an undergraduate internship. She reflected on her first experience within the school. Dalia shared,

When I was in Mexico, I went into a public school in the city center. The teacher was not in the classroom. I looked up at the whiteboard and saw that it said, “Read from page 76 to 85.” There were about 40 students in the class. And I asked, “Where is your teacher?” and the student said, “She's in a meeting with the principal.” This could not happen here in the United States; the students would not behave.



All participants discussed perceived positive values of first-generation Mexican immigrant families; however, when asked about second-generation (individuals born in the U.S. with parents from Mexico) and third-generation immigrants (individuals born in the U.S. with at least one grandparent born in Mexico), all participants perceived later generations as less involved in their children's education and academic performance when compared to first-generation families. On this point, Chelo discussed her experience moving from a city a few miles from the border with majority first-generation families, to a city in more central Arizona with majority second- and third-generation families. She said, "The second, somewhat bilingual-generation parents don't push the education as much. There's a change. Many of these parents live off the government. They don't push educational values on their kids because they get government support." The remaining participants gave similar responses to Chelo when asked about generational differences among Mexican families. Alfonso reported,

We can work with second-generation, but not as much. Third-generation families are very hard to work with. We have so many special education meetings where the parents don't show up. First time, they don't show up. Second time, they don't show up. Third time, they don't show up. They don't seem to be interested in their kids' education.

In comparison, Gloria, who worked as a special education teacher for decades on the Mexican-American border, noted similar perceived generational differences. She illustrated,

Unfortunately, I have to say I don't know if it's negative culture in the US. I don't know what happens. These students come so nice and with time they become disrespectful and rebellious. Our culture in Mexico is very respectful and then suddenly you see the second-generation students and they are the opposite. They're in your face. They are defiant.

In addition to perceived generational differences, Gloria discussed how she often observed negative interactions between first-generation and later generation students. When asked to further explain, she mentioned,

What I observed was some tension between recent immigrants and Mexican Americans.

The Mexican immigrant students would call the Mexican Americans “guachos” and sneer at them. They would call them “gringos” and make fun of them for not speaking Spanish.

You would have Mexican American students sneering back calling the first-generation students “chilangos.”

A *guacho* is a small animal that has lost its mother and used as a slang word in Spanish, a *chilango* is an individual from Mexico City, and a *gringo* is a foreigner and most commonly used when talking about individuals from the U.S.

***Finding 2: Limited Understanding of Special Education in Mexico***

Despite three of five participants discussing receiving paperwork from Mexican immigrant students related to their special education services in Mexico, Arizona participants had very minimal knowledge about special education in Mexico. For example, no participants were familiar with the terms USAER or CAM. Of the five Arizona participants, Gloria and Alfonso had the most general knowledge of special education in Mexico, although some of their knowledge was outdated and did not reflect many of the current inclusive practices of special education in Mexico. Knowledge shared by these two participants primarily related to special education prior to the widespread creation of USAER and CAM. For example, Gloria discussed visiting a Psychopedagogical Center (*Centro Psicopedagógico*) during the late 1980s. She shared,

What I saw in Mexico, although I am not sure if they still do it this way, was that there were the centers with the resource classes, the Centros Psicopedagógicos. The students would attend the general education school during the day and then attend resource classes at the centros. That is what I saw in Mexico for students with disabilities. There were also self-contained schools. These services were more intensive for students with more severe impairments. All these students had serious disabilities.

Alfonso was most knowledgeable, as he discussed not only what special education looked like during the 1980s, but also the progressive steps Mexico has taken over the last several decades to create more inclusive schools. Although he worked as a clinical psychologist in Mexico and provided services only to students attending private schools, he discussed his perceptions of special education during the 1980s. Alfonso stated,

If you didn't have enough money, you would have to stay with your disability. You would not make the same progress, when I was working, this was in the 1980s.

Eventually, the government changed and started to help students with disabilities in the larger, urban states. Before these students were receiving no help or minimal help.

Even though Alfonso now lives in the states, he reported that he tries to stay up-to-date with news about education from Mexico. He stated,

Since 2006, president Felipe Calderon started to pull out all students with learning problems, Autism, Down syndrome, and all these other disabilities from their homes and he called to the schools because sometimes parents hide their children. They do not bring them to school. But President Calderon said, "No, get out of the house. Now the students will receive help in all the schools." Right now, the new President, Lopez Obrador, has said, "Now we need one psychologist in every school."

In addition to discussing the changes in special education, Alfonso shared his experiences working with Mexican immigrant students coming to the U.S. with special education documentation. He explained, “When I receive first-generation students, they bring a letter with them from their schools in Mexico that will say, ‘Juan is receiving special education services in reading, writing, math, and speech.’” For higher SES families, he discussed how these students often bring pertinent information with them from private evaluations from neuropsychologists. Alfonso shared,

I went to one meeting for an interview for a very, very, wealthy Mexican family. They came from Mexico to the United States and they brought lots of documentation about assessments for their child, evaluations from a neuropsychologist. The child had a traumatic brain injury. It was seven pages of information. I translated all the information. There was a lot of detailed information in the report. We brought it to the student study team. I said, “Here's the information. This is all the information from Mexico. I don't know if you all want to do your study.” I did another psychoeducational evaluation. The reports were very similar.

The three remaining participants, who had minimal knowledge of special education in Mexico, believed that special education in Mexico was insufficient and not comparable to services offered in the U.S. Chelo discussed her experiences working with individuals with disabilities during the 1980s through her church in Mexico. She stated,

My mom's sister was a teacher in Mexico. I remember asking her because I would never see students in wheelchairs or students with Down syndrome when I was in Mexico. She would tell me that there were schools for them... Little-by-little the church began to say, “No, they (children with disabilities) are gifts from God.” I'm not sure where the

movement is today, but I don't see these students with disabilities in the general public school settings.

When asked about education in Mexico, Marcelo stated that there is great variation between states and cities and that the system, in general, lacks clearly outlined special education procedures for eligibility and placement. He commented,

We have different standards when it comes to the school curriculum. Teachers provide goals and standards based on objectives. There are lesson plans. Mexico does not have these same standards or approaches. One of the things that stands out is that not all schools are equal in Mexico. Students who come from more rural areas, they have a lot of missing information.

Dalia, who attended private catholic school as a student in Mexico, stated that she was not even aware of resource special education services for students with disabilities in Mexico. She reported,

In Mexico, what I remember and what I saw was that there were no such papers similar to IEPs. Mexican immigrant students receive better services here than they would if they stayed in Mexico. In my experience living in Mexico, the only students I saw in special education were students who were clearly physically disabled. Students with disabilities that you could see such as Down syndrome and motor disorders. For students with hearing disabilities, visual disabilities, and intellectual disabilities there were special schools for them where they received more focused services. But for students with disabilities in general education schools, they did not receive the same support. Maybe things have changed? I don't know.

***Finding 3: Emphasis on Establishing Rapport with Immigrant Families***

Four participants from Arizona stated that relating to Mexican immigrant parents through casual conversations and cultural connections was imperative to increasing parental involvement and open communication in the area of special education. In establishing rapport with parents, three participants discussed how being Mexican or Mexican American and speaking Spanish made immigrant parents feel more comfortable being involved in their children's education. For example, Chelo discussed how parents often turn to her for advice because they assume she is Latinx and speaks Spanish. She stated,

The families want to know where I come from. They want to know everything. Knowing me makes them feel safer. When I was on the border, they knew my father and my last name. It was a small community and they felt comfortable talking to me. It is very important that parents feel comfortable. The parents will open up with me. If everyone is White or if they don't speak Spanish, the parents close down, and they'll agree with everything. They will say, "Sí, sí, sí (*Yes, yes, yes*). Now, where do I sign? And it better be good for my kid."

Chelo went on to discuss how the parents that she works with want to know that there is someone at their children's school who speaks Spanish and identifies with the Latinx culture. She commented,

You have to think about the principals and staff. The parents see them first, the secretaries in the front window. Parents ask, "Puedes ayudarme (*Can you help me*)?" "Hold on. Let me get someone who speaks Spanish." It discourages the parents.

Alfonso explained how he connects with parents from Mexico using not only the language, but also his experiences living and traveling in Mexico. He stated that he has a much easier time

connecting with immigrant parents in comparison to other school personnel because of his vast knowledge of Mexico. He explained,

I was a tour guide in Mexico. I know Mexico. Easy for me to relate to immigrant families. The first time I meet them, I'll ask them, "Where do you come from? ...I talk to them about why they left Mexico. Why they came to the United States. They tell me that they have relatives here. That they heard that working in the United States was better because of more money and opportunities, a better life. The parents have no trouble talking with me. They have no problem telling me stories of how they came to the United States and where they came from.

Alfonso described a personal connection to both immigrant parents and the culture. In comparison, Dalia shared how parents would often divulge important information to her because they spoke the same language. She mentioned one incident in which a young child fell into a pool and experienced a traumatic brain injury. Dalia explained,

Because I spoke Spanish, the grandmother felt comfortable talking with me. The grandma told me that the student had a traumatic brain injury. The mom was hiding this information because she felt guilty. It was the grandmother who told me.

Her experience resonates with the experiences of other participants who also discussed how their Latinx identities made it easier to relate to and work with immigrant parents.

In addition to discussing their identities, three out of five participants discussed ways in which White educators could engage with Mexican immigrant families. As Dalia stated, "Speaking the same language helps, but ultimately you must make parents feel respected and valued." In regard to respecting parents, Gloria stated,

I try to relate to them (immigrant parents). They tell me, “I can't help my kid. I don't have that much schooling” and I tell them, “It's okay. My mother only went to third grade and she was the wisest woman I knew. There are a lot of things that you can teach your child and it does not have to be academic.”

Alfonso reiterated the idea of relating to parents as he discussed the importance of attempting to learn about the language and culture of immigrant families. He explained,

The advice I would give is to say something in Spanish. Even just, “Como se llama (*What is your name*)?” It's the little things that allow you to gain the confidence of the Mexican people. Even reading a map from Mexico. Knowing where the cities are. The Spaniards dominated Mexico from 1519 until 1810, 300 years. We feel anthropologically dominated. When someone else from another country comes, we are hesitant. We still feel it.

### **Cross-Cultural Comparison of Special Education in Mexico and the U.S.**

In this section, the researcher examined differences between special education in Mexico and the U.S related to services, procedures, and participant perspectives. The two major cross-cultural findings emerged when comparing special education in Mexico and the U.S. These findings included 1) differences and similarities in special education eligibility categories, and 2) variance in annual requirements and availability of services. The researcher also examined similarities in special education between the two countries in regard to inclusive education, resource classes, specialized schools, and self-contained placements for students with high need disabilities.

#### ***Finding 1: Differences and Similarities in Special Education Processes***



After working with special education teachers, conducting interviews, and collecting observational data, the researcher found that the majority of students receiving USAER services in a local school in Guanajuato did not have specified disabilities outlined by SEP. This finding mirrored national statistics collected by SEP (2012), which indicated that 53% of USAER students in Guanajuato and 60% of USAER students in Mexico were receiving special education services through the unspecified special education category of “Other,” with the majority of these students suspected of having learning disabilities, emotional needs, or ADHD (SEP, 2012).

Across both classrooms, USAER teachers reported that the majority of their students had suspected learning disabilities, meaning that they were receiving special education support through the unspecified special education category of “Other.” Sofia described,

Here is a list of my 34 students and the disabilities they have. Almost all students have learning disabilities. Here is one student on the list with ADHD. Besides this case, I only have three more. The first one I already told you about regarding the student with Down syndrome who has an intellectual disability and there are two students with emotional needs.

Likewise, Gabi believed that over two-thirds of her students had learning disabilities.

To receive special education services in Mexico as a student with a suspected learning disability, the criteria are minimal. As outlined by SEP, the child must perform significantly below grade level in a core subject area and their low performance must not be the result of an intellectual disability. Gabi explained her experiences conducting initial evaluations for students with suspected learning disabilities. She stated,

There is a ton of paperwork... We complete initial evaluations based on student observations. Then we apply the test of specific learning styles. Then we interview the

teacher. Then we interview the parents. We focus on detecting the students' present levels in math, reading fluency, reading comprehension, and writing. We apply all our exams and assessment to write a final report.

As observed by the researcher and discussed by participants, the information collected for USAER student reports came from curriculum-based measures (CBM), interviews, and observations, while students with more significant disabilities who required support through CAM, usually entered the program with medical diagnoses (e.g., Autism, intellectual disability, Down syndrome) from a neurologist or a general practitioner. Dani, a school psychologist at CAM, explained,

Most of the time students receive their diagnostic results in their homes because they need a diagnosis from a doctor, specialist, or neurologist. The parents bring their children and they meet with the school director. The parents say, "My child has this diagnosis and I want them to attend this school."

Similarly, Angela described,

Well, some of the students will come with referrals from schools that have USAER or from institutions. Most students have already been evaluated. Others come with medical diagnoses and indications with recommendations for special education teams.

As observed by the researcher and discussed by participants, Mexican special education teachers and school psychologists, when compared to practitioners in the U.S., viewed students' eligibility categories as far less imperative in guiding student services. For example, Gabi discussed a case in which a student was receiving special education services because his educational team determined that he needed extra support, even though he did not have a known disability. She explained,

We have not determined what his disability is yet. I work with him because he needs support; however, we do not know what is going on exactly. Medically, he has not been diagnosed. What is very good in my opinion is that we are working with him and we have seen him advance.

In comparison to Mexico, the U.S. has very rigorous standards for determining students' eligibility in special education. In order to be eligible to receive special education services in the U.S., a student must have a verified disability that falls within the 13 school eligibility categories outlined by IDEA. Additionally, the student must require special education services as a result of such disability (IDEA, 2004; P.L. 108-446). Thus, a student in the U.S. with a verified disability may not be eligible to receive special education services if the disability is not adversely impacting the student's educational performance (IDEA, 2004). Moreover, before a student can be evaluated for special education services, educational teams must rule-out environmental factors as the cause of a student's academic needs and examine the student's response to evidence-based interventions (IDEA, 2004).

For each evaluation, educational teams must conduct comprehensive psychoeducational evaluations, which require school psychologists and special education teachers to administer standardized assessments across developmental areas (e.g., cognitive, academic, adaptive, social-emotional, etc.). According to IDEA (2004), psychoeducational evaluations must include a variety of different technically sound, valid, and reliable assessments, procedures, tools, and strategies to gather relevant functional, developmental, and academic information (including information provided by the parent). In addition, the student must be re-evaluated every three years to determine their continued eligibility in special education. Furthermore, school psychologists must evaluate every student in all suspected areas of disability (IDEA, 2004; P.L.

108-446). As a result, many different school personnel are often involved in the assessment process. For example, a multidisciplinary evaluation team (MET) containing members such as the school psychologist, special education teacher, speech therapist, physical therapist, occupational therapist, and audiologist may all evaluate a student with multiple disabilities. Once the multidisciplinary evaluation team has gathered data, the team (including the parents and the child when appropriate) will meet to determine if the student is eligible to receive special education services. While there are many benefits to the rigorous procedure in the U.S. for entering special education such as comprehensive assessments using valid and reliable tools, these lengthy evaluations can result in delayed initiation of services and prevent some students from receiving special education support altogether (Kauffman et. al., 2014).

As explained by participants from Arizona, special education terminology and assessment procedures can be difficult to understand. Dalia reflected on her initial experience as a special education teacher in the U.S. She explained, “Although English is my second language, I discovered that special education is another language because they use so many acronyms.” In addition to discussing educational jargon, she reflected on the rigorous standards required of special education teachers. She explained, “That is something else I do not like in education. Everything the teachers do must follow procedures. I am very natural in my ways.” In another example, Gloria discussed her first attempt in explaining special education procedures to Mexican immigrant parents. She stated,

Once I was explaining to a parent why their child qualified for special education services. I explained the tests and showed her graphs. I explained this information to the parent in a way that I thought was comprehensible. When I finished the parent said, “No lo entendí nada (*I did not understand anything*).”

Although special education procedures differ between the U.S. and Mexico, participants reported various similarities regarding daily work experiences including wishing they could spend more time with students, as opposed to completing paperwork, and recognizing the importance of parental involvement. For example, four participants from Mexico and all five participants from Arizona acknowledged limited participation from parents despite the importance of parental involvement. Sofia discussed her experience working with parents. She acknowledged, “Here at this USAER we can send requests to the parents work so that they can attend meetings to justify this time in which they are not at work, but in truth, the parents in this USAER do not participate.” Similarly, Gloria brainstormed ideas for including parents. She stated,

I think with parents we have to do more. We have to continue to do more to connect them. Some have had very bad experiences with schools. We have to ask them, “What do you think? Give us some ideas about what you think would work for your child?” We cannot just tell the parents what their children are doing.

Participants also shared similarities related to inclusive education. All five participants from Mexico and three of the five participants from Arizona discussed the importance of educating students in their least restrictive environments. For example, both Gloria and Maria mentioned inclusive practices as one of the most important factors for student success. Gloria explained, “I worked with the general education teachers and students so that the students with learning disabilities could see their potential. The students were integrated with everyone else. If you teach them in a different way with encouragement, they retain things.” Likewise, Maria stated, “I think the most important thing is inclusion...Special education teachers or entire

USAER teams can help the general education teachers understand the needs of students with disabilities and how to support them.”

***Finding 2: Variance in Annual Requirements***

In the U.S., IDEA (2004) addresses special education procedures and requirements. As mandated by IDEA, students receiving special education services must have individualized education plans (IEPs) that the education team reviews and revises annually. These plans must include information related to the child’s present level of functioning, strengths, weaknesses, abilities, educational needs, area(s) of eligibility (based on the 13 categories outlined in IDEA), annual goals, objectives, supplemental services, common core standards, program placement, accommodations, and transition plans for students 16 years of age and older (Hallahan, Kauffman, & Pullen, 2012; IDEA, 2004). As part of the annual IEP review, IDEA (2004) requires that each student in special education have an educational team that includes school support personnel, a school administrator, general and special education teachers, the child’s parents or legal guardian, and the student (when appropriate).

In Mexico, special education procedures and general information are outlined by SEP and included within several publications such as the General Guidelines for the Operation of Special Education Services (*Orientaciones Generales para el Funcionamiento de los Servicios de Educación Especial*) published in 2006 and most recently, the Rules of Operation of the Program for Inclusion and Educational Equity (*Reglas de Operación del Programa para la Inclusión y la Equidad Educativa*) published in 2019. As outlined by SEP (2006), schools should include parents in decisions regarding their children’s education, but unlike the U.S., SEP does not mandate it. As reported by research participants, schools invite parents to attend student-teacher

conferences at the end of each quarter where special education teachers present quarterly reports about students' present levels and educational plans. As explained by Maria,

We have programmed meetings each quarter. This Wednesday will be the second-semester meeting, the closing of the year cycle. We will show the progress of the students and parents can ask questions. "What have the students learned? How have they advanced? Are there particular questions or concerns?"

While these meetings are an excellent opportunity for parents to learn more about their children's school performance, not all parents attend.

In addition to fewer parental involvement requirements, Mexico does not mandate that each student have a plan that is as explicit and comprehensive as an IEP. When asked about individual education plans, Dani, a school psychologist at CAM, responded, "Plans like you just described with the students' goals, progress, and ability? No, we do not have those here." While discussing educational plans with Sofia, a special education teacher in USAER, she explained,

We have an evaluation form that the teachers will complete if they suspect that one of their students has a disability. We receive the referral form from the teachers and assess the students' current levels. This front page was the initial evaluation, and this is the final evaluation at the end of the year. We use these to compare differences and find their current levels.

One possible explanation for the lack of strict evaluation procedures in Mexico is likely because, in general, there are far fewer assessments available to Mexican school psychologists when compared to U.S. school psychologists. For instance, when asked about what type of evaluations school psychologists conduct at CAM, Dani responded,

Re-evaluations happen every two years and we use the same battery of assessments. We do this to see how the students have grown, their improvements. The assessments we have here are projective and visual-motor. We have the HTP (House-Tree-Person), the *Human Figure Drawing*, the *Tree Test*, and the assessment of the family, occasionally. Not in all cases, but we use the *Bender-Gestalt Test* and, although we don't have them, there is the WPPSI, the Battelle, and the WISC-III. There are cases where the neurologist or a psychologist will look for information using these assessments.

Angela's experiences were very similar to Dani's. When asked about the types of assessments she completes at CAM, she said,

In reality here, I am limited by the number of assessments...I complete basic rubrics or papers about the students' developmental age based on their performance. We are also able to get a reference to the child's abilities from teacher reports. We try to assess the students at their levels.

As described by Angela and Dani, the assessments available in their specific CAM location were almost all projective measures, excluding the *Bender-Gestalt Test*, which they used to assess visual-motor functioning.



## CHAPTER 5: DISCUSSION

The purpose of this study was threefold: 1) to understand special education in Mexico from the perspectives of special education teachers and school psychologists in Guanajuato, 2) to identify Arizona school special education staff's experiences working with Mexican immigrant students with disabilities, and 3) to compare and contrast special education procedures in Mexico and the U.S. The researcher anticipated that a better understanding of the perceptions of special education teachers and school psychologists in both Mexico and the U.S. would provide knowledge and understanding into working with and supporting Mexican immigrant students with disabilities and their families, thus improving current service provision. This chapter provides interpretive insight into the findings and meaningful recommendations for school psychologists and special education teachers working with Mexican and Mexican immigrant students with disabilities and their families. Elements that framed the discussion included 1) overlapping experiences among participants, 2) participants' perspectives of their experiences, 3) consistencies within current literature, and 4) ways in which the data presented novel findings. The researcher organized this chapter by the following categories:

1. The need to increase awareness and knowledge of special education in Mexico to expand services despite economic difficulties (e.g., educating parents, working with public schools, disseminating information and resources, establishing special education in all states).
2. Incongruity between U.S. school personnel's goal to connect with Mexican immigrant families and deficit perspectives.
3. Improving the transition process for Mexican immigrant students' through shared knowledge between Mexico and the U.S.

The researcher established and aligned each analytic category with one of the three research questions related to the findings presented in the previous chapter. While the previous chapter separated the findings into chunks of data, this chapter aimed to reconstruct a holistic interpretation of the findings.

### **The Need to Increase Awareness of Special Education in Mexico**

The first research question sought to understand the experiences of special education teachers and school psychologists in Mexico. Overall, participants expressed their dedication to their work and the importance of equitable, inclusive education while simultaneously recognizing that the field of special education has not yet gained national support or established itself in more rural areas of Mexico. This finding is exemplified by the fact that many schools in the state of Guanajuato lack sufficient resources and special education school personnel as discussed by participants. García-Cedillo et al. (2014) give credence to this perspective in their book chapter titled, *Special Education Today in Mexico*. In the chapter they explain,

Statistics on the number of children and youth with special education needs (SEN) are scarce and not very reliable. Ignoring the magnitude and characteristics of the problem limits the possibilities for good planning and timely and adequate intervention... Many students with SEN do not attend school, and the few who have attain low educational levels (p. 82).

In discussing the importance of expanding special education services, all participants discussed economic factors adversely impacting special education funding such as limited staff members, technology, and academic materials for students with disabilities. In concordance with participant information, the Organization for Economic Cooperation and Development (OECD, 2016) ranked Mexico as the second most financially unequal country, as measured by the ratio

between the income received by people in the highest quintile to that received by those in the lowest. Moreover, six out of every ten infants live in poverty and three of those six live in extreme poverty (Núñez, Salinas, & Castro, 2010). Of individuals with disabilities, 60% live in poverty (Lakhani, 2017). As discussed by participants, few educational and employment opportunities exist for students after they graduate from CAM and, unlike the U.S., students do not participate in transition meetings after the age of 16 in Mexico.

In regard to education, the OECD (2016) ranked Mexico last among the 35 largest developed countries. Moreover, Mexico is the sole country where individuals between the ages of 15 and 29 are expected to spend more time in employment than in education (Cadena, 2014). Additionally, Mexican children are well below the average OECD scores in literacy, math, and science, with around half of all Mexican students failing to meet basic standards. Furthermore, 6.3% of the population aged 15 and over are illiterate, a condition that is three times (19.2%) more likely in indigenous populations and almost four times more likely for students with disabilities between the ages of six and 14. Without the ability to read or write and fewer equitable educational opportunities, Mexican students with disabilities are especially vulnerable to discrimination and exclusion (National Institute of Statistics and Geography, 2017).

In the face of economic hardship, both former Mexican President Peña Nieto and current President Lopez Obrador have emphasized the importance of special education by providing more scholarships for students, resources for infrastructure, and teacher trainings (Núñez et al., 2010). For example, the Federal Official Gazette published the Special Education and Educational Integration Strengthening Plan in 2013, which aimed to establish special-education services in every state. Funding under this plan was provided for academic activities, teacher training programs, support for educators, social participation, and operational costs (Russo &

Lozano, 2015). With an increase in federal and local governmental support, the field of special education in Mexico continues to expand and move toward a more inclusive model. In 2014, Mexico launched the Program for Educational Inclusion and Equity [PIEE, *Programa para la Inclusión y la Equidad Educativa*], which merged seven different budget programs to ensure greater coverage through standards and support for public educational services, as well as the improvement of infrastructure and equipment within public institutions that served students with disabilities.

In general, there has been a shift toward positive attitudes surrounding educational integration, and many schools are accepting students with disabilities even without support from USAER (García-Cedillo et al., 2014; Romero-Contreras, García-Cedillo, Forlin, & Lomelí-Hernández, 2013; Romero-Contreras, García-Cedillo, Rubio, Martínez, & Flores, 2018). To further understand Mexican teachers' perceptions about inclusive education, Mezquita-Hoyos, Sanchez-Monroy, Morales-Martinez, Lopez-Ramirez, and Reyna-Gonzalez (2018) studied the attitudes of 119 regular education teachers and 88 special education teachers toward inclusive education. Results obtained using the Opinions Relative to Integration of Students with Disabilities Scale suggested that all participants held positive attitudes toward the inclusion of students with disabilities in general education settings. This finding was congruent with the results yielded in the current study. Participants from Mexico discussed the importance of educating students in their least restrictive environments and providing information to both parents and general education teacher about working with students with disabilities.

### **U.S. School Personnel's Immigrant Generational Deficit Perspectives**

The second research question sought to understand the experiences of current and former special education teachers and school psychologists who have worked with Mexican immigrant

students with disabilities and their families in Arizona. Overall, participants had minimal knowledge about special education procedures in Mexico; however, all participants had experience working with Mexican immigrant students with disabilities. Although all participants discussed strategies used to gain parents' respect and incorporate them into their children's education, U.S. participants held several oversimplifications and misconceptions about Mexican immigrant families.

Unanimously, all five Arizona participants viewed first-generation Mexican immigrant families and students as more involved and successful in school when compared to their second- and third-generation counterparts. This finding supports current research that has shed light on what is known as the *immigrant paradox*, the well-researched phenomenon that newly arrived immigrants are more successful at navigating life in the U.S. than assimilated immigrants (Aretakis, Ceballo, Suarez, & Camacho, 2015; Burnam, Hough, Karno, Escobar, & Telles, 1987; Crosnoe, 2012; Guendelman & Abrams, 1995; Palacios, Guttmannova, & Chase-Lansdale, 2008). According to Aretakis et al. (2015), first-generation Mexican American adolescents have more positive attitudes towards academics, are more involved in high school STEM coursework, have higher GPAs, and skip school less than subsequent generations and non-Latino U.S.-born Whites. Moreover, first- and second-generation immigrant children have higher reading achievement scores by third grade when compared to their third-generation counterparts (Palacios et al., 2008), and first-generation Latinos have greater overall educational attainment and are less likely to drop out of high school when compared to subsequent generations of each community (Perreira, Harris, & Lee, 2006).

Conversely, research has also shown that there are many inconsistent aspects of the immigrant paradox when accounting for variables such as language proficiency, age at the time

of immigration, and socioeconomic circumstances. When accounting for additional factors, Cresnoe (2012) found the immigrant paradox is most likely to be found in high school (as opposed to earlier stages), when looking at social behaviors (as opposed to test performance), and when family SES is held constant. Additionally, Plunkett and Bámaca-Gómez (2003) did not find any relationship between academic outcomes and generation status when examining self-reported survey data from 273 female Mexican first- and second-generation adolescents in California. Instead, Plunkett and Bámaca-Gómez (2003) found the contributing factors to Mexican immigrant students' academic success included positive parental relationships (ability to help, monitoring, and support), parents' educational levels, and students' educational aspirations.

Despite varying research findings regarding the reasons for Mexican immigrant generational differences, all study participants held the belief that first-generation families were easier to work with and cared more about education than second- and third-generation families. When coding for positive attributes shared by participants about Mexican immigrants, nearly all statements were about first-generation families. In describing second- and third-generation Mexican students, participants reported underachievement primarily focused on internal rather than external causes. In education, the idea that students are defined by their own internal weaknesses rather than their strengths, without considering potential environmental factors, is known as the student deficit perspective (Collins, 1988). Arizona participants made several comments inferring that second- and third-generation families were less involved in their children's education due to their inability to recognize the importance of school and other personal deficiencies. In contrast to deficit perspectives, what research has shown is that

Mexican American immigrants face significant economic and educational disadvantages when compared to Whites (Ortiz & Telles, 2017).

To fully understand why second- and third-generation Mexican immigrants may demonstrate less academic involvement, one must consider the unsupportive climate towards Mexican immigrants in Arizona and nationally, as well as economic and educational disadvantages. From the Treaty of Guadalupe in 1848 to continuous anti-immigrant legislation, Mexican immigrants have faced hostility for over a century in the state of Arizona. With regard to education, Mexican Americans disproportionately attend underfunded and poorly resourced schools with fewer qualified teachers and support staff (Ortiz & Telles, 2017). Moreover, Mexican Americans face racialized expectations by teachers and counselors that stigmatize them as unmotivated or undereducated (Valenzuela, 1999). For instance, Moosmann, Roosa, and Knight (2014), found that Mexican American students' who perceived discrimination in 5th grade had lower academic performance with some residual effects lasting through 10<sup>th</sup> grade. As a result of low levels of schooling and racialized deficit perspectives, Mexican Americans are disproportionately represented in the working class, indicative of the mobility barriers faced by this group (Ortiz & Telles, 2017). Thus, there is a continuous cycle of persistent educational disadvantage leading to poor economic outcomes topped with anti-immigration policy that actively blocks Mexican Americans from the social, economic, and political progress for future generations (Bean, Brown, & Bachmeier, 2015; Ortiz & Telles, 2017). Participants in this study failed to consider all these variables in understanding why second- and third-generation families may be less involved in their children's education.

### **Improving the Transition Process for Mexican Immigrant Students**

The final research question examined the similarities and differences in special education procedures between Mexico and the U.S. Though there are many differences between the two countries concerning the availability of services, eligibility determinations, and annual requirements, both countries are moving toward more inclusive practices in an attempt to move students with disabilities into general education settings. Nonetheless, it is critical to recognize the overall importance of creating greater communication between countries to improve the transition process for Mexican immigrant students with suspected or known disabilities entering the U.S. educational system. None of the Arizona participants were familiar with current special education practices in Mexico and they assumed the quality of services in Mexico was poor or nonexistent. If Arizona school psychologists and special education teachers were to have more knowledge about special education in Mexico they would be more adept at using special education terminology outlined by SEP with Mexican immigrant families, have a greater understanding of how to read reports from Mexico, and be able to tailor questions to parents about specific Mexican educational services to better understand immigrant students' prior academic experiences. Although Mexico's educational system has far fewer resources available when compared to the U.S., special education in Mexico continues to expand and gain national acknowledgment.

The researcher determined the following information to be salient when comparing the two educational systems. First, practitioners in Arizona should be aware that U.S. schools provide far more reliable and valid psychoeducational assessment tools for school psychologists when compared to Mexico. Flanagan, Ortiz, and Alfonso (2013) cite over 100 school-based assessments and rating scales normed within the U.S. for special education teachers and school psychologists. These assessments cover a broad range of areas including developmental,



academic, intellectual, motor, verbal, adaptive, and social-emotional performance and are usually readily available for school psychologists and special education teachers working within public school districts (Turner, 2012). As discussed by Mexican study participants, assessments available at the Guanajuato CAM included the *House-Tree-Person*, the *Human Figure Drawing*, and the *Bender-Gestalt Test*. Participants also discussed using the *Wechsler Preschool and Primary Scale of Intelligence – Third Edition* (WPPSI-III), the *Battelle Developmental Inventory - Second Edition* (BDI-2), and the *Wechsler Intelligence Scale for Children - Third Edition* (WISC-III); however, these assessments were not available on-site and were not current editions. In USAER, participants discussed using the *Raven's Progressive Matrices*, to measure cognitive abilities, which provides a good measure of students' visual-spatial intelligence, but does not assess other areas of cognitive functioning.

In general, Mexican participants discussed collecting far more observational and qualitative information from teacher performance reviews, team meetings, and classroom observations when compared to U.S. practitioners. The use of non-standardized test data can be considered a strength within the Mexican educational system because academic decisions are based on comprehensive data collected over time in both the resource classroom and the general education setting, a practice that is more in line with IDEA mandate to use multiple criteria in making eligibility determinations as part of the comprehensive assessment process. In contrast, the U.S. educational system is extremely rigid and special education decisions are often based on data collected from a single criterion such as a cognitive and academic assessment (Fletcher & Miciak, 2017). Over the last several decades, researchers and practitioners have raised psychometric and conceptual concerns regarding assessment procedures used in the U.S.

for determining students' special education eligibility, especially when evaluating for specific learning disabilities, ADHD, and Autism (Fletcher & Miciak, 2017).

Second, U.S. school psychologists and special education teachers should know that there is great variability in the quality and availability of services provided across geographical areas in Mexico (Aguayo Téllez, 2004). For example, Nuevo Leon, the state with the lowest poverty rate, has special education in 2,239 of their 5,204 public schools (43%), while in Michoacán, a state with roughly 59.2% of the population living in poverty, there is special education in only 86 of 10,038 schools (roughly 1%; SEP, 2012). When averaging across all states, 27,988 of 195,639 public schools in Mexico (14%) offer USAER special education support (SEP, 2012) and in Guanajuato, the number drops to 746 of 9,481 public schools (7.86%).

In contrast, there is far less variability in special education services in the U.S., illustrated by the fact that IDEA (2004) requires that all public schools provide special education support as part of the Free and Appropriate Public Education (FAPE) right. Schools, however, have not always interpreted the term "appropriate" in the same manner. One of the most well-known court cases to directly address this term was the *Board of Education of the Hendrick Hudson Central School District v. Rowley* in 1982. In this case, the court defined "appropriate" education as a reasonably calculated educational plan that would enable a student to receive *some* educational benefits. Although there continues to be different interpretations of the law and the quality of special education services varies depending on geographical locations, special education services in the U.S. must be available to all public school students who require them (Merrell, Ervin, & Peacock, 2011).

### **Revisiting Researcher Assumptions**

It is useful to revisit the three research assumptions provided in Chapter 1, as they underlie this study. These assumptions were based on the researcher's background and professional experiences and are discussed considering the analytical results of this study. The first assumption was that participants accurately and honestly shared information during their interviews. Results from this study indicated that this assumption likely held true. While some participants were eager to discuss their experiences, others were less willing to share and gave very succinct, brief responses. This may have been because the researcher was conducting interviews in her second language and she was not from Mexico or of Latinx heritage, causing participants to view her as an outsider. Despite this disadvantage, information shared by participants corroborated current literature and the researcher's direct observations and field notes during her time participating in classrooms. Moreover, to strengthen the integrity of this study's findings, the researcher utilized standards of trustworthiness from Lincoln and Guba's (1985) five established principles: 1) credibility, 2) dependability, 3) confirmability, 4) transferability, and 5) authenticity.

The second assumption was that if special education teachers and school psychologists in the U.S. were to have a better understanding of special education procedures in Mexico, they would be able to more accurately tailor interventions and educational plans to meet the needs of Mexican immigrant students with disabilities. This assumption turned out to be accurate. The more U.S. participants knew about special education in Mexico, the more likely they were to find information from prior evaluations and reports from Mexico useful. For example, Alfonso was the only participant who had experience working as a psychologist in Mexico and as a result, he reported being far more familiar with the format and information contained in students' school and medical evaluations from Mexico.

The third assumption was that the researcher would be able to conduct her investigation without the assistance of an interpreter. This assumption held to be mainly true. Although the researcher conducted all her interviews in Mexico in Spanish, she sought assistance from a native Spanish speaker from Mexico to seek clarification and review transcriptions when necessary. Due to the researcher's semi-structured interview method, each participant was asked variations of the same ten questions.

### **Recommendations**

Recommendations for (a) school psychologists and special education teachers working with Mexican and Mexican immigrant students with disabilities and (b) future research are provided based on study findings. Given that multiple factors will influence Mexican immigrant families' experiences entering the U.S. educational system, the following recommendations should be considered for their appropriateness on a case-by-case basis.

#### ***Recommendations for School Psychologists and Special Education Teachers in Mexico***

1. All study participants from Mexico reported feeling disconnected and frustrated with parents who they perceived as often intentionally missing meetings and failing to recognize the importance of inclusive education. Based on this finding, it would be beneficial for Mexican school psychologists and special education teachers to hold more workshops on inclusive practices, growth mindset, and academic interventions to educate parents and the community about special education (Al-Hassan & Gardner, 2002; Byrd, 2011; LaRocque, 2013; Smith et al., 2008). Additionally, school personnel need to recognize that they ultimately have the same goal as parents, helping students succeed (Chrispeels & Rivero, 2001).

2. Participants discussed the impact of limited parental involvement due to low SES and long work hours. To increase parental involvement, it is recommended that teachers not only continue to be flexible when scheduling meetings, but also conduct home visits or call parents who are unable to attend meetings in person (Spann, Kohler, & Soenksen, 2003).
3. Due to the lack of technology and resources in classrooms, school personal should continue to advocate at a national level for more educational resources as the government controls 67% of the cost of special education in Mexico, demonstrating how much power is maintained at a federal level.

***Recommendations for School Psychologists and Special Education Teachers in the U.S.***

1. Although participants associated many positive characteristics with Mexican immigrant families, they must move away from explaining second- and third-generation Mexican Americans' lack of educational involvement and poverty as a personal deficit by self-reflecting and considering the environmental factors and societal structures that have adversely impacted this specific population for decades (Brown & Lopez, 2013; San Miguel & Valencia, 1998). To increase practitioners understanding of social issues, school districts should include profession development about cultural awareness, the adverse impacts of low SES, and diversity training (Nelson, Prasad, & Hackman, 2015).
2. All school psychology and special education graduate programs should include training about working with immigrant students and special education in other countries to further support immigrant students in the U.S., 25% of who are of Mexican descent (Gándara & Contreras, 2009; Zong & Batalova, 2018). This training

- could be incorporated into diversity courses and consist of, at a minimum, one to three classroom lectures presenting information about special education in other countries collected from international special education journals and government websites. Moreover, instruction could be differentiated based on largest immigrant populations by state.
3. While Arizona participants discussed the importance of establishing rapport with Mexican immigrant families, four of the five participants mentioned that speaking Spanish, being familiar with Mexican culture, and being Mexican American themselves, greatly increased parental participation. These findings demonstrate the importance of continuing bilingual education practices and promoting staff diversity within the field of education (Padilla & Gonzalez, 2001).
  4. For school practitioners who do not identify as Mexican American, participants discussed the importance of establishing trust with Mexican parents through informal processes such as talking with families about their unique experiences and needs, learning some basic Spanish, and using positive, simple language (Morales, 2015).
  5. Participants from Arizona discussed how Mexican immigrant parents frequently were confused by special education procedures and policies in the U.S. To increase parental participation, practitioners should attempt to assess parents' current knowledge by verifying their understanding of the information presented and avoiding the use of educational jargon (Al-Hassan & Gardner, 2002).

***Recommendations for Supporting Mexican Immigrant Students with Disabilities***

1. U.S. special education teachers and school psychologists knew very little about special education practices in Mexico, and some were unsure if they even existed.

U.S.-based school psychologists working with Mexican immigrant students in special education should have some basic knowledge about USAER and CAM systems in Mexico, which they can acquire by visiting SEP's website. For example, instead of asking parents if their children received special education services in Mexico, school psychologists may gather more information when asking parents if their children attended CAM or a school with USAER support. In addition, a student may have been receiving USAER support without being assessed by a school psychologist, so asking a parent if their child has a suspected disability instead of a known disability may prompt parents to provide more information about their child's past educational experiences.

2. Students who attended CAM in Mexico may benefit from comparable self-contained placements in the U.S. and students who were receiving special education support through USAER may benefit from U.S. special education resource services.
3. It is important to consider that Mexican immigrant students who received USAER support may often have unspecified disabilities and need to be reevaluated to determine their eligibility under IDEA (García-Cedillo et al., 2014). Because the U.S. has such rigorous standards for the special education eligibility process at both the state and federal level, students who were receiving support in Mexico may not qualify as students with disabilities in the U.S. These students should continue to receive, at a minimum, Tier II interventions and be closely progress monitored to ensure adequate academic growth (Kauffman et al., 2014).
4. When considering evaluating immigrant students for special education, U.S. special education teachers and school psychologists should inquire about immigrant families'

- home states and cities because services greatly vary depending on the geographical region of Mexico (García-Cedillo et al., 2014; Rhodes, 2000). For instance, students from more rural areas of Mexico may have never received interventions or attended school with USAER support, while students from more urban areas of Mexico may have received services through CRIO, USAER, and other SEP educational programs.
5. During multidisciplinary team meetings with Mexican families, school interpreters should know and use Mexican special education terminology outlined by SEP. For example, the term *discapacidad* should be used instead of the term *incapacidad*.

### **Limitations and Future Research**

The first goal of this study was to examine the experiences of special education teachers and school psychologists in Mexico. Future research should be conducted in this area because there are few studies to date published in English and U.S. academic journals about special education in Mexico and this study only offered a small glimpse of a much larger phenomenon. Moreover, many of the studies are not readily accessible for individuals who do not have free access to online databases. The second goal of the study was to examine the experiences of special education teachers and school psychologists in Arizona who have worked with Mexican immigrant students with disabilities and their families. This is an area that has not been well researched and there are no previous studies that specifically outline a transition process for these students. In light of this, the following should be considered:

1. Due to the qualitative nature of the study, findings are not generalizable and may not be representative of most U.S. and Mexican school psychologists and special education teachers. A national survey of school psychologists and special education



- teachers in both Mexico and the U.S. should be conducted to assess the extent to which the same or similar findings would be uncovered.
2. The current study examined only Arizona, U.S. and Guanajuato City, Mexico. Due to the variability of special education services across Mexico and the U.S., future research should examine the experiences of special education teachers and school psychologists across various states and regions.
  3. Comparison and analysis research should examine the perspectives of Mexican immigrant parents to further understand their experiences working with special education teams in both Mexico and the U.S.
  4. This study examined the transition process of Mexican students with disabilities who come to the U.S.; future research should focus on U.S. students with disabilities who move to Mexico. To gather this information, more data should be collected from Mexican school psychologists and special education teachers. Specifically, they should be asked what educational information and documentation would be usual to receive from the U.S.
  5. While the researcher had the opportunity to observe in both CAM and USAER placements in Mexico, she was only able to observe in a resource classroom in the U.S. because none of the Arizona participants worked in high needs special education self-contained settings. As a result, the researcher could only draw cross-cultural conclusions between USAER and U.S. special education resource classrooms. Future research containing a broader sample of participants from various educational settings is needed to draw additional conclusions between CAM and similar self-contained settings in the U.S.

## **Conclusions**

This study contributed to the limited knowledge base regarding special education practices and school psychology in Mexico. Despite economic inequality and limited resources, school psychologists and special education teachers in Mexico continue to advocate for the expansion and funding of services for students with disabilities, inclusive educational practices, and specialized training (García-Cedillo, Romero-Contreras, & Ramos-Abadie, 2015). Nevertheless, over 60% of students receiving special education services in Mexico continue to have vaguely defined conditions without specifications and the quality of services varies greatly by state. Without a clear understanding of how many students have disabilities at a national level, funds cannot be properly allocated. Information on the number of students with disabilities is also needed for investigative inquiries and the development of innovative and adequate academic programs to increase educational opportunities for these children.

This study also contributed to a professional knowledge base to improve services for Mexican immigrant students with known or suspected disabilities, for which there is a patent lack of knowledge in the U.S. public education system. Although special education procedures and policies differs in Mexico when compared to the U.S, school psychologists and special education teachers working with Mexican immigrant families can gain valuable information about students' previous special education services and placements in Mexico that will lead to smoother transitions for these children. With this information, special education teachers and school psychologists can work toward closing the achievement gap and promoting the success of Mexican immigrant students by recognizing their academic potential, distinct needs, and prior educational experiences to provide them equitable learning opportunities.

## REFERENCES

- Al-Hassan, S., & Gardner, R. (2002). Involving immigrant parents of students with disabilities in the education process. *Teaching Exceptional Children, 34*(5), 52-58.
- Alarcón, R. (2017). US Immigration policy and the mobility of Mexicans (1882-2005). *Migraciones Internacionales, 6*(20), 185-218.
- Anastas, J. W. (2004). Quality in qualitative evaluation: Issues and possible answers. *Research on Social Work Practice, 14*(1), 57-65.
- Aretakis, M. T., Ceballo, R., Suarez, G. A., & Camacho, T. C. (2015). Investigating the immigrant paradox and Latino adolescents' academic attitudes. *Journal of Latina/o Psychology, 3*(1), 56-69.
- Bauman, K. (2017). School enrollment of the Hispanic population: Two decades of growth. Report prepared for the United States Census Bureau. Washington, DC.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report, 13*(4), 544-559.
- Bean, F., Brown S., & James, B. (2015). *Parents without papers: The progress and pitfalls of Mexican American integration*. London, UK: Russell Sage.
- Blanco, M., Parra, A., & Medrano, E. R. (2000). *Breve historia de Guanajuato (Sección de obras de historia)*. México, D.F.: Fondo de Cultura Económica.
- Bloomberg, L. D., & Volpe, M. (2018). *Completing your qualitative dissertation: A road map from beginning to end*. Thousand Oaks, CA: Sage.
- Boddy, C. R. (2016). Sample size for qualitative research. *Qualitative Market Research: An International Journal, 19*(4), 426-432. Retrieved from <https://doi.org/10.1108/QMR-06-2016-0053>.

- Borg, W. R. & Gall, M. D. (1983). *Educational research: An introduction*. New York, NY: Pearson Longman Publishing.
- Brown, A. & Lopez, M. H. (2013). Mapping the Latino population, by state, county and city. *Washington, DC: Pew Research Center*. Retrieved from <https://www.pewresearch.org/hispanic/2013/08/29/mapping-the-latino-population-by-state-county-and-city>.
- Byrd, E. S. (2011). Educating and involving parents in the response to intervention process: The school's important role. *Teaching Exceptional Children, 43*(3), 32-39.
- Burnam, M. A., Hough, R. L., Karno, M., Escobar, J. I., & Telles, C. A. (1987). Acculturation and lifetime prevalence of psychiatric disorders among Mexican Americans in Los Angeles. *Journal of Health and Social Behavior, 89-102*.
- Cadena, F. (2014). Solo 58 % de quienes ingresan a preparatoria la terminan: Inegi. Retrieved from <http://www.milenio.com/estados/solo-58-de-quienes-ingresan-a-preparatoria-la-terminan-inegi>.
- Chrispeels, J. H., & Rivero, E. (2001). Engaging Latinx families for student success: How parent education can reshape parents' sense of place in the education of their children. *Peabody Journal of Education, 76*(2), 119-169.
- Christenson, S. (2003). The family-school partnership: An opportunity to promote the learning competence of all students *School Psychology Quarterly, 18*, 454–482. doi:10.1521/scpq.18.4.454.26995.
- Close, W., & Solberg, S. (2008). Predicting achievement, distress, and retention among lower income Latinx youth. *Journal of Vocational Behavior, 72*, 31-42.
- Collins, J. (1988). Language and class in minority education. *Anthropology and Education Quarterly, 19*(4), 299–326.

- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Crosnoe, R. (2012). Studying the immigrant paradox in the Mexican-origin population. In Coll C. G., & Marks, A. K. (Eds.). *The immigrant paradox in children and adolescents: Is becoming American a developmental risk?* (pp. 61–76). Washington, DC: American Psychological Association.
- Cross, T., Bazron, B., Dennis, K., & Isaacs, M. (1989). *Towards a culturally competent system of care* (Vol. I). Washington, DC: Georgetown University Child Development Center, CASSP Technical Assistance Center.
- Curtis, M. J., Castillo, J. M., & Gelley, C. (2012). School psychology 2010: Demographics, employment, and the context for professional practices—Part 1. *Communiqué*, 40(7), 28.
- Dabach, D. B., Suárez-Orozco, C., Hernandez, S. J., & Brooks, M. D. (2018). Future perfect?: teachers' expectations and explanations of their Latino immigrant students' postsecondary futures. *Journal of Latinos and Education*, 17(1), 38-52.  
doi:10.1080/15348431.2017.1281809.
- de Souza, M. (2017). Understanding Mexican immigrant students in American schools: A case study of two Preparatorias in México. *Cogent Education*, 4, 1-18. Retrieved from <https://doi.org/10.1080/2331186X.2017.1387963>.
- Dirección General de Educación Especial. (1985). *La educación especial en México* [Special Education in México]. México City: SEP.
- Dirección General de Educación Especial. (1994). *Bases para una política de educación especial* [Political bases for special education]. Mexico City: SEP.
- Dirección de Educación Especial del Distrito Federal [DEE-DF, Direction of Special Education-

- Federal District]. (2010). Memorias y actualidad en la educación especial en México. Una visión histórica de sus modelos de atención. Integración. [Past and present of special education in Mexico.] México City, México: Secretaría de Educación Pública. Retrieved from <http://pdi.cnotinfor.pt/recursos/Integracion%20Educativa%20en%20Mexico.doc>.
- Figuerola, R. A., & García, E. (1994). Issues in testing students from culturally and linguistically diverse backgrounds. *Multicultural Education*, 2(1), 10-19.
- Flanagan, D. P., Ortiz, S. O., & Alfonso, V. C. (2013). *Essentials of cross-battery assessment* (Vol. 84). New York, NY: John Wiley & Sons.
- Fletcher, T., Dejud, C., Klingler, C., & Mariscal, I. L. (2003). The changing paradigm of special education in Mexico: Voices from the field. *Bilingual Research Journal*, 27(3), 409-430.
- Fletcher, T. V., & Kaufman de Lopez, C. K. (1995). A Mexican perspective on learning disabilities. *Journal of Learning Disabilities*, 28(9), 530-534.
- Flores-Barrera, V. J., García-Cedillo, I., & Romero-Contreras, S. (2017). Prácticas inclusivas en la formación docente en México. *Liberabit*, 23(1), 39-56.
- Forlin, C., García-Cedillo, I., Romero-Contreras, S., Fletcher, V., & Rodríguez-Hernández, H., (2010). Inclusion in Mexico: Ensuring supportive attitudes by newly graduated teachers. *International Journal of Inclusive Education*, 14(7), 723-739. doi: 10.1080/13603111003778569.
- Fusch, P.I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, 20(9), 1408–1416.
- Gándara, P.C., & Contreras, F. (2009). *The Latino education crisis: The consequences of failed social policies*. Cambridge, MA: Harvard University Press.

- García, N. (2018). *Educación inclusive: La atención a la diversidad en el marco de la reforma integral de educación básica* [PowerPoint presentation]. Retrieved from D2L.
- García-Cedillo, I., Romero-Contreras, S., & Fletcher, T. V. (2014). Special education today in Mexico. In *Special education international perspectives: Practices across the globe* (pp. 61-89). Bingley, UK: Emerald Group Publishing Limited.
- Kauffman, J. M., Hirsch, S. E., Badar, J., Wiley, A. L., & Barber, B. R. (2014). Special education today in the United States of American. In *Special education international perspectives: Practices across the globe* (pp. 3-32). Bingley, UK: Emerald Group Publishing Limited.
- García-Cedillo, I., Romero-Contreras, S., & Ramos-Abadie, L. (2015). Where do Mexico and Chile stand on inclusive education? *International Journal of Special Education*, 30(2), 145-156.
- García-Cedillo, I., Romero-Rubio, S., Flores-Barrera, V., Martínez-Ramírez, A., & Rubio-Rodríguez, S. (2015). Comparación de prácticas inclusivas de docentes de servicios de educación especial y regular en México. *Actualidades Investigativas en Educación*, 15(3), 1-17. doi: 10.15517/aie.v15i3.20671.
- García-Joslin, J. J., Carrillo, G. L., Guzmán, V., Vega, D., Plotts, C. A., Lasser, J. (2015). Latino immigration: Preparing school psychologists to meet students' needs. *School Psychology Quarterly*, 31(2), 256–269. Retrieved from <http://dx.doi.org/10.1037/spq0000136>.
- Guendelman, S., & Abrams, B. (1995). Dietary intake among Mexican-American women: Generational differences and a comparison with white non-Hispanic women. *American Journal of Public Health*, 85(1), 20-25.
- Guzmán, J. C. (2004). La formación profesional del psicólogo educativo en México. *Sinéctica*,

25, 3-14.

- Hallahan, D. P., Kauffman, J. M., & Pullen, P. C. (2012). *Exceptional learners: An introduction to special education* (12th ed.). Upper Saddle River, NJ: Pearson Education.
- Harris, B., & Barton, E. E. (2017). Autism services in Mexico: A qualitative survey of education professionals. *International Journal of School & Educational Psychology*, 5(1), 1-13.
- Haveman, R. & Wolfe, B. (1994). *Succeeding Generations: On the effects of investments in children*. New York, NY: Russell Sage Foundation.
- Hensley, J. J. (2012). Illegal immigrants' participation in smuggling drugs uncertain. *The Arizona Republic*. Retrieved from <http://archive.azcentral.com/arizonarepublic/news/articles/2010/07/06/20100706illegal-immigration-drug-trade.html>
- Holtzman, W. H. (1989). School psychology in Mexico. In *International perspectives of psychology in the schools* (pp. 239-246). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Individuals with Disabilities Education Improvement Act of 2004, § (2004).
- Howard, T. C. (2010). *Why race and culture matter in schools: Closing the achievement gap in America's classrooms*. New York, NY: Teachers College Press.
- Hunnicut, K., & Castro, M. (2005). How census 2000 data suggest hostility toward Mexican-origin Arizonians. *Bilingual Research Journal*, 29(1), 109-125.
- Instituto Nacional para la Evaluación de la Educación [INEE] (2015). *Informe de resultados planea 2015. El aprendizaje de los alumnos de sexto de primaria y tercero de secundaria en México*. Retrieved from <https://publicaciones.inee.edu.mx>.
- Jiménez, A. (2004). *Conditions for students with post-Prop. 203 classrooms in a Tucson elementary school: Are schools prepared? Is this right for the children?* Paper presented at the Language Minority Education Research Roundtable of Arizona. Tempe, AZ.



- Kauffman, J. M., Hirsch, S. E., Badar, J., Wiley, A. L., & Barber, B. R. (2014). Special education today in the United States of America. In A. F. Rotatori, J. P. Bakken, F. E. Obiakor, S. Burkhardt, & U. Sharma (Eds.); *Special education international perspectives: Practices across the globe* (pp. 3-82). Bingley, UK: Emerald Group Publishing Limited.
- Kleeck, A. V. (2008). Providing preschool foundations for later reading comprehension: The importance of and ideas for targeting inferencing in storybook sharing interventions. *Psychology in the Schools, 45*(7), 627-643. Retrieved from <https://doi.org/10.1002/pits>.
- Fletcher, J. M., & Miciak, J. (2017). Comprehensive cognitive assessments are not necessary for the identification and treatment of learning disabilities. *Archives of Clinical Neuropsychology, 32*, 2-7.
- Klingner, J. K., Boelé, A., Linan-Thompson, S., & Rodriguez, D. (2014). Essential components of special education for English language learners with learning disabilities: Position statement of the Division for Learning Disabilities of the Council for Exceptional Children. *Learning Disabilities Research & Practice, 29*(3), 93-96.
- Kuperminc, G. P., Darnell, A. J., & Alvarez- Jiménez, A. (2007). Parent involvement in the academic adjustment of Latinx middle and high school youth: Teacher expectations and school belonging as mediators. *Journal of Adolescence, 31*(4), 469-483.
- Lakhani, N. (2017). 'The help never lasts': Why has Mexico's education revolution failed? *The Guardian*. Retrieved from <https://www.theguardian.com/inequality/2017/aug/15/the-help-never-lasts-why-has-mexicos-education-revolution-failed>.
- LaRocque, M. (2013). Addressing cultural and linguistic dissonance between parents and

- schools. *Preventing School Failure: Alternative Education for Children and Youth*, 57(2), 111–117. doi:10.1080/1045988x.2012.677961.
- Lian, J., & Fontanez-Phelan, S. (2001). Perceptions of Latino parents regarding cultural and linguistic issues and advocacy for children with disabilities. *The Journal of the Association for Persons with Severe Handicaps*, 26, 189–94.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.
- Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2010). *Methods in educational research: From theory to practice*. San Francisco, CA: Jossey-Bass.
- Maki, P., & Zong, J., Batalova, J. (2018). *Growing superdiversity among young U.S. dual language learners and its implications*. Washington, DC: Migration Policy Institute.
- Manuel, H. T. (1930). *The education of Spanish-speaking children in Texas*. Austin, TX: University of Texas Press.
- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research?: A review of qualitative interviews in is research. *Journal of Computer Information Systems*, 54(1), 11-22. doi: 10.1080/08874417.2013.11645667.
- Marshall, C., & Rossman, G.B. (2016). *Designing qualitative research (6<sup>th</sup> ed.)*. Thousand Oaks, CA: Sage.
- Martin, M., & Suárez-Orozco, C. (2018) What it takes: Promising practices for immigrant origin adolescent newcomers. *Theory into Practice*, 57(2), 82-90. doi:10.1080/00405841.2018.1425816.
- McLeskey, J., Landers, E., Williamson, P., & Hoppey, D. (2012). Are we moving toward educating student with disabilities in less restrictive settings? *Journal of Special Education*, 46, 131-140.

- Medina, M., Guzmán, N. A., & Wong-Ratcliff, M. (2015). Latino parental involvement: Myths, perceptions and inhibiting factors. *Journal of Case Studies in Education, 7*, 1–15.
- Merrell, K. W., Ervin, R. A., & Peacock, G. G. (2011). *School psychology for the 21st century: Foundations and practices*. New York, NY: Guilford Press.
- Mezquita-Hoyos, Y. N., Sánchez-Monroy, M. H., Morales-Martínez, G. E., López-Ramírez, E. O., & Reyna-González, M. R. (2018). Regular and special education Mexican teachers' attitudes toward school inclusion and disability. *European Journal of Educational Research, 7*(3), 421-430. doi: 10.12973/eu-jer.7.3.421.
- Migration Policy Institute (MPI) tabulation of data from U.S. Census Bureau, 2010 and 2017 American Community Surveys (ACS), and 2000 Decennial Census; data for 1960 to 1990 are from Campbell J. Gibson and Emily Lennon, "Historical Census Statistics on the Foreign-Born Population of the United States: 1850 to 1990" (Working Paper No. 29, U.S. Census Bureau, Washington, DC, 1999).
- Moore, B. A., & Klingner, J. K. (2014). Considering the needs of English language learner populations: An examination of the population validity of reading intervention research. *Journal of Learning Disabilities, 47*(5), 391-408.
- Moosmann, D. A., Roosa, M. W., & Knight, G. P. (2014). Generational patterns in Mexican Americans' academic performance in an unwelcoming political context. *Journal of Applied Developmental Psychology, 35*(2), 102-110.
- Morales, S. (2015). *Nuestras escuelas: A grounded theory study of the barriers to family involvement in special education faced by undocumented Mexican immigrant families* (Doctoral dissertation). New Mexico State University. Retrieved from ProQuest Dissertations Publishing.

- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- National Institute of Statistics and Geography (2010). *Mexico en cifras*. Retrieved from <http://www.inegi.org.mx/>.
- National Institute of Statistics and Geography (2017). *Principales cifras nacionales*. Retrieved from <http://www.inegi.org.mx/temas/educacion/>.
- Nelson, S. C., Prasad, S., & Hackman, H. W. (2015). Training providers on issues of race and racism improve health care equity. *Pediatric Blood & Cancer*, 62(5), 915-917.
- Núñez, J. M., Salinas, C. S., & Castro, G. F. (2010). De la educación especial a la educación. *Argumentos (México, DF)*, 23(62), 41-83.
- Olivos, E. M., & Mendoza, M. (2010). Immigration and educational inequality: Examining Latino immigrant parents' engagement in U.S. public schools. *Journal of Immigrant & Refugee Studies*, 8(3), 339-357.
- Organization for Economic Cooperation and Development (2016). Income inequality remains high in the face of weak recovery. *Centre for Opportunity and Equality*, 24, 1-6.
- Ortiz, V., & Telles, E. (2017). Third generation disadvantage among Mexican Americans. *Sociology of Race and Ethnicity*, 3(4), 441-457.
- Padilla, A. (2010). La educación especial en México a finales del siglo XIX y principios del XX: Ideas, bosquejos y experiencias. [Special education in Mexico at the end of the XIXth century and the beginning of XXth]. *Revista Educación y Pedagogía*, 22(57), 15-29.
- Padilla, A. M., & Gonzalez, R. (2001). Academic performance of immigrant and US-born Mexican heritage students: Effects of schooling in Mexico and bilingual/English language instruction. *American Educational Research Journal*, 38(3), 727-742.

- Paik, S. J., & Walberg, H. J. (2007). *Narrowing the achievement gap: Strategies for educating Latinx, Black, and Asian students*. New York, NY: Springer Science and Business Media, LLC.
- Palacios, N., Guttmannova, K., & Chase-Lansdale, P. L. (2008). Early reading achievement of children in immigrant families: Is there an immigrant paradox? *Developmental Psychology, 44*(5), 1381–1395. doi:10.1037/a0012863.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research, 42*(5), 533-544.
- Parra, E. B., Evans, C. A., Fletcher, T., & Combs, M. C. (2014). The psychological impact of English language immersion on elementary age English language learners. *Journal of Multilingual Education Research, 5*(4), 33-65.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Perreira, K. M., Harris, K. M., & Lee, D. (2006). Making it in America: High school completion by immigrant and native youth. *Demography, 43*(3), 511–536.
- Pew Research Center (2014). *Demographic and economic profiles of Hispanics by state and county*. Retrieved from <http://www.pewhispanic.org/states/>.
- Plata-Potter, S. I., & de Guzmán, M. R. (2012). Mexican immigrant families crossing the education border: A phenomenological study. *Journal of Latinos and Education, 11*, 94-106.

- Plunkett, S. W., & Bamaca-Gomez, M. Y. (2003). The relationship between parenting, acculturation, and adolescent academics in Mexican-origin immigrant families in Los Angeles. *Hispanic Journal of Behavioral Sciences, 25*(2), 222-239.
- Ponce, V. M., Hernández, A. C., López, L. M., & Pérez, V. (2006). *La práctica y los significados educativos de los agentes de los Centros de Atención Múltiple en el Estado de Jalisco*. [Practices and educational meanings of multiple attention centers' agents in the state of Jalisco.] Guadalajara, México: Secretaria de Educación del Gobierno de Jalisco.
- Prieto-Armendáriz, E. S., & Saladin, S. P. (2012). A comparison between the Ley General para la Inclusión de las Personas con Discapacidad and the Americans with Disabilities Act. *Perspectivas Sociales, 14*(2), 31-43.
- Rama, A. (2011). *Factbox: Facts about Mexico's education system*. Retrieved from <https://www.reuters.com/article/2011/04/13/us-mexico-education-factbox-idUSTRE73C4UY20110413!>
- Ramos, E. G., & Fletcher, T. V. (1998). Special education and education reform in Mexico: Providing quality education to a diverse student population. *European Journal of Special Needs Education, 13*(1), 29-42.
- Ream, R. K., & Stanton-Salazar, R. (2007). The mobility/social capital dynamic: Understanding Mexican-American families and students. In *Narrowing the achievement gap: Strategies for educating Latinx, Black, and Asian students* (pp. 67-89). New York, NY: Springer.
- Rhodes, R. L. (2000). School psychology and special education in Mexico: An introduction for practitioners. *School Psychology International, 21*(3), 252-264.
- Romero-Contreras, S., García-Cedillo, I., Forlin, C., & Lomelí-Hernández, K. A. (2013).

- Preparing teachers for inclusion in Mexico: How effective is this process? *Journal of Education for Teaching*, 39(5), 509-522.
- Romero-Contreras, S., García-Cedillo, I., Rubio, S., Martínez, A., & Flores, V. (2018). Influencia del tipo de escuela (especial o regular) sobre el aprovechamiento académico del alumnado con necesidades educativas especiales. *Universitas Psychologica*, 17(1), 1-11. Retrieved from <https://doi.org/10.11144/Javeriana.upsy17-1.itee121-134>.
- Roska, J. (2011). Differentiation and work: Inequality in degree attainment in U.S. higher education. *The International Journal of Higher Education and Educational Planning*, 61(3), 293-308.
- Ruiz-Cuéllar, G. (2012). La Reforma Integral de la Educación Básica en México (RIEB) en la educación primaria: Desafíos para la formación docente. *Revista Electrónica Interuniversitaria de Formación del Profesorado*, 15(1), 51-60.
- Russo, C. J., & Lozano, R. (2015). Special-Education Law in Mexico and the United States. *School Business Affairs*, 81(2), 32-36.
- San Miguel, G., & Valencia, R. (1998). From the Treaty of Guadalupe Hidalgo to Hopwood: The educational plight and struggle of Mexican Americans in the Southwest. *Harvard Educational Review*, 68(3), 353-413.
- Salas, L. (2004). Individualized educational plan (IEP) meetings and Mexican American parents: Let's talk about it. *Journal of Latinos and Education*, 3(3), 181-192.
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage.
- Secretaría de Educación Pública [SEP, Secretariat of Public Education]. (2004). *Plan de estudios 2004. Licenciatura en Educación Especial. [Curriculum 2004. Licentiate in special education.]* México City: SEP.

- Secretaría de Educación Pública [SEP, Secretariat of Public Education]. (2002). *Programa nacional de fortalecimiento de la educación especial y de la integración educativa*. [National fortification program of special education and integrated education]. México City: SEP.
- Secretaría de Educación Pública [SEP, Secretariat of Public Education]. (2009). *Modelos de atención educativa de los servicios de la dirección de educación especial en el Distrito Federal*. [Models of educational attention of the services of the direction of special education in the Federal District]. México City: SEP.
- Secretaría de Educación Pública [SEP, Secretariat of Public Education]. (2012). *Datos del Programa Nacional de Fortalecimiento de la Educación Especial y la Integración Educativa (PNFEEIE)*. [Figures from the National Program for the Strengthening of Special Education and Educational Integration]. México City: SEP.
- Secretaría de Educación Pública [SEP, Secretariat of Public Education]. (2012). *Sistema educativo de los Estados Unidos Mexicanos. Principales cifras, ciclo escolar 2011-2012*. [Educational System of the United States of Mexico. Main figures, school year 2011-2012]. México City: SEP.
- Secretaría de Educación Pública [SEP, Secretariat of Public Education]. (2017). *Indicadores y pronósticos educativos. Reporte de indicadores educativos. Educational indicators and prognostics*. [Educational indicators report]. Mexico City: SEP.
- Shepared, T. L., Contreras, D., & Brown, R. (2002). Special education in Mexico: One community's response. *Teaching Exceptional Children*, 35(5), 8-11.
- Smith, J., Stern, K., & Shatrova, Z. (2008). Factors inhibiting Hispanic parents' school involvement. *Rural Educator*, 29(2), 8-13.



- Slavin, R. E., & Calderón, M. (2001). *Effective programs for Latinx students*. Mahwah, NJ: Lawrence Erlbaum.
- Snyder, T. D., de Brey, C., & Dillow, S. A. (2016). Digest of education statistics 2014, NCES 2016-006. *National Center for Education Statistics*.
- Spall, S. (1998). Peer debriefing in qualitative research: Emerging operational models. *Qualitative Inquiry*, 4(2), 280-292.
- Spann, S. J., Kohler, F. W., & Soenksen, D. (2003). Examining parents' involvement in and perceptions of special education services: An interview with families in a parent support group. *Focus on Autism and Other Developmental Disabilities*, 18(4), 228-237.
- Stanton-Salazar, R. (1997). A social capital framework for understanding the socialization of racial minority children and youths. *Harvard Educational Review*, 67, 1–40.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.
- Sugarman, J., & Geary, C. (2018). English Learners in Select States: Demographics, Outcomes, and State Accountability Policies. Fact Sheet. *Migration Policy Institute*.
- Tec, M., Martín, S., & Pérez, M. (2011). *Educación especial en México y América Latino*. Mexico City, MX: Editorial Trillas.
- Thompson, A. T. (1990). *Children in family and society, Guanajuato, Mexico 1780 to 1840* (Unpublished doctoral dissertation). University of Texas at Austin.
- Tienda, M., & Mitchell, F. (2006). *Hispanics and the future of America*. Washington, DC, US: National Academies Press.
- Turner, J. L. (2012). *So, you are a school psychologist: A guide for interns and first year school psychologists*. Palm Springs, CA: IEP Press.

- U.S. Commission on Civil Rights. (1973). *Differences in teacher interaction with Mexican American and Anglo students*. Washington, DC: Government Printing Office.
- U.S. Department of Education (2016). Graduation rates. *Consolidated state performance report, Part II, section 2.11*. Retrieved from <https://eddataexpress.ed.gov/data-elements.cfm>.
- Uttech, M. R. (1999). *Education and migration in rural Mexico: An ethnographic view of local experience* (Unpublished doctoral dissertation). University of Arizona.
- Walcott, C. M., & Hyson, D. (2018). *Results from the NASP 2015 membership survey, part one: Demographics and employment conditions* [Research report]. Bethesda, MD: National Association of School Psychologists.
- Warren, C.A. (2002). Qualitative interviewing. In J.G. Gubrium, & J.A. Holstein (Eds.), *Handbook of interview research: Context and method* (pp. 83–99). Thousand Oaks, CA: Sage.
- Valencia, R. R. (2004). *Chicano school failure and success: Past, present, and future* (2nd ed.). New York, NY: Routledge.
- Valenzuela, A. (1999). *Subtractive schooling: U.S. Mexican youth and the politics of caring*. Albany, NY: State University of New York Press.
- Vega, D., Lasser, J., & Fernandez, S. E. (2017). School psychologists' family-school partnering experiences with Latinos. *Psychology in the Schools, 54*(2), 169-182.
- Yin, R. K. (2011). *Qualitative research from start to finish*. New York, NY: Guilford Press.
- Zong, J., & Batalova, J. (2018). Mexican immigrants in the United States. *Migration Policy Institute*. Retrieved from <http://www.migrationpolicy.org/article/mexican-immigrants-united-states/#HealthCoverages>.

## APPENDIX A

### University of Arizona STUDY APPROVAL FROM SEP



COORDINACIÓN PARA EL DESARROLLO EDUCATIVO

OFICIO NO. CDE-200/2018

Guanajuato, Gto., 01 de junio de 2018.

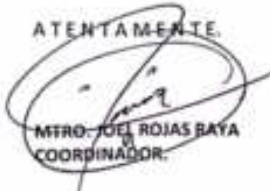
University of Arizona Institutional Review Board  
c/o Office of Human Subjects  
1618 E Helen Street  
Tucson, Arizona, 85721

Hago de su conocimiento que la Sra. Lily Hammer estudiante de posgrado de la Universidad de Arizona presenta ante la Secretaría de Educación de Guanajuato solicitud para realizar entrevistas a maestros de Educación Especial en el Centro de Atención Múltiple "Manuel López Dávila" de esta ciudad.

Les comunicamos que es autorizado el trabajo que realizará la Sra. Hammer y cuya intervención concluirá el 15 de julio del presente año, acordando con ella que la participación de los maestros será de manera voluntaria, fuera del horario de actividades escolares y la información obtenida será confidencial entregando a esta secretaría copia de los resultados obtenidos.

El estudio que realizará Hammer se titula "Educación especial en Guanajuato, México: evaluación, elegibilidad y servicios".

Sin otro particular, envío un cordial saludo.

ATENTAMENTE,  
  
ENTRO: JOEL ROJAS BAYA  
COORDINADOR.



C.c.p.- Lic. Román Cifuentes Negrete, Delegado Regional de Educación Centro Oeste. Para conocimiento.  
Lic. César Rolando Carrizales Rodríguez, Supervisor de la zona 11 de Educación Especial. Mismos efectos.  
**Delegación Regional de Educación Centro Oeste**

Conjunto Pozuelos s/n planta baja, Guanajuato, Gto. Tel. (473) 735 10 05 y 07  
[seg.guanajuato.gob.mx](http://seg.guanajuato.gob.mx)

## **APPENDIX B**

University of Arizona  
**CONSENT SCRIPT (ENGLISH)**  
(Read orally)

First, I want to thank you for agreeing to speak with me. Before beginning, I would like to tell you a little bit about my research and the interview process. My name is Lily Hammer and I have come from the University of Arizona, in the United States, to conduct a study that will become my dissertation for my Ph.D. in education. The purpose of my research is to better understand everyday life of Mexican children and the education they receive. I have been observing how the children work in the school and I would like to get to know more about special education. To do this, I will be asking you, and others, various questions to learn about your opinions and experiences.

Before we start, it is important that you know that everything you tell me will be kept confidential; I will not repeat what you have told me to anyone, in a manner that could identify you to others. When I use the information from these interviews, I will change the names of those interviewed to protect their identity.

During the interview, if there are questions you do not want to answer, don't feel obligated to do so. I will understand, and we can move on to the following question. If at any moment you would like to discontinue the interview, please let me know and we will stop.

If you accept, I would like permission to tape-record this interview. May I? Do you have any questions? The information you will provide will be very important for this study and I will highly value it. Do I have your permission to begin the interview?

## APPENDIX C

University of Arizona  
**CONSENT SCRIPT (SPANISH)**  
(Read orally)

Primero quiero agradecerle el haber aceptado platicar conmigo. Antes de empezar me gustaría platicarle un poquito de mi estudio y de la entrevista. Mi nombre es Lily Hammer y yo vengo de la Universidad de Arizona que se encuentra en los Estados Unidos para hacer un estudio que formara parte de mi tesis de doctorado. El estudio que estoy haciendo es para conocer mejor la educación que los niños reciben. He estado observando como estudian los niños en la escuela y ahora quisiera conocer más de educación especial. Entonces, le voy a hacer a usted, y a otras personas, algunas preguntas para conocer mejor sus opiniones y de sus experiencias.

Antes de comenzar es importante que sepa que todo lo que usted me diga es confidencial y no se lo diré a nadie usando su nombre. Cuando utilice la información de todas las entrevistas, cambiare los nombres de todos los entrevistados para guardar su identidad. También es importante decirle que le voy a preguntar algunas cosas de la escuela primaria.

Si en la entrevista hay algunas preguntas que no quiere contestar, no se sienta con la obligación de hacerlo, yo la entenderé y pasaríamos a la siguiente pregunta. Si usted quisiera terminar la entrevista, en cualquier momento lo podemos hacer.

Si usted acepta, me gustaría grabar la entrevista. ¿Puedo? Tiene usted alguna duda o pregunta antes de empezar la entrevista? La información que usted me dé será muy importante para mi estudio y la valorare mucho. ¿Podemos empezar?

## APPENDIX D

University of Arizona

### CONSENT TO PARTICIPATE IN THE STUDY (SPANISH)

**Título del estudio: Considering the Needs of Mexican Immigrant Students: An Examination of Special Education in Mexico and the United States**

**Investigador Principal: Lily Hammer**

**Le piden que participe en un estudio de investigación.** Su participación en este estudio de investigación es voluntaria así que no tiene que participar si usted no lo desea. Este documento contiene información importante sobre este estudio y sobre que esperar si usted decide participar. Por favor, considere la información cuidadosamente. Siéntase libre de hacer preguntas antes de tomar su decisión de participar o no.

**Propósito:** El propósito de este estudio es examinar las experiencias vividas de maestros de educación especial y psicólogos escolares en la ciudad de Guanajuato, México. Si acepta participar en este estudio, participará en una entrevista individual grabada en audio. La duración estimada del estudio es de 30-45 minutos. Para poder participar en este estudio, debe trabajar directamente con estudiantes con discapacidades.

**Riesgos y beneficios:** no hay riesgos estimados para usted como resultado de participar en este estudio. En dado caso que alguna de las preguntas de la entrevista lo hagan sentir incómodo o molesto, usted tiene el derecho de no responder y terminar su participación en cualquier momento. Usted no recibirá ningún tipo de compensación al participar en este estudio. Su participación es voluntaria. Usted no necesita participar en este estudio. Aún si decide participar, usted puede abandonar el estudio en cualquier momento. Independientemente de la decisión que tome, no habrá ninguna penalización para usted y no perderá ninguno de sus beneficios habituales.

**Confidencialidad:** Su nombre no será utilizado en ningún reporte. Los datos de investigación identificables serán encriptados y protegidos con contraseña. Con su permiso, me gustaría grabar esta entrevista para que pueda hacer una transcripción exacta. Una vez que haya realizado la transcripción, borraré las grabaciones. Su nombre no será utilizado en la transcripción ni en mis notas. La información recopilada sobre usted no será utilizada o compartida para futuros estudios de investigación.

La información que proporcione en el estudio será manejada confidencialmente. Sin embargo, puede haber circunstancias en las que esta información deba divulgarse o compartirse según lo exija la ley. La Junta de Revisión Institucional de la Universidad de Arizona puede revisar los registros de investigación con fines de monitoreo.

Si tiene preguntas, inquietudes o quejas sobre el estudio, puede comunicarse con la investigadora principal, Lily Hammer al 503-752-1950.

Para preguntas sobre sus derechos como participante en este estudio o para discutir otras inquietudes o quejas relacionadas con el estudio con alguien que no sea parte del equipo de investigación, puede comunicarse con el Programa de Protección de Sujetos Humanos al 520-626-6721 o en línea en [http : //rgw.arizona.edu/compliance/human-subjects-protection-program](http://rgw.arizona.edu/compliance/human-subjects-protection-program).

**Firmar el formulario de consentimiento**

He leído (o alguien me ha leído) este formulario, y soy consciente de que me piden que participe en un estudio de investigación. He tenido la oportunidad de hacer preguntas y he recibido las respuestas a mi satisfacción. Estoy de acuerdo de participar en este estudio voluntariamente.

No estoy renunciando a ningún derecho legal al firmar este formulario. Se me dará una copia de este formulario.

---

**Printed name of subject**

---

**Signature of subject**

---

**Date**

## APPENDIX E

University of Arizona  
**CONSENT TO PARTICIPATE IN THE STUDY (ENGLISH)**

**Study Title: Considering the Needs of Mexican Immigrant Students: An Examination of Special Education in Mexico and the United States**

**Principal Investigator: Lily Hammer**

**This is a consent form for research participation.** It contains important information about this study and what to expect if you decide to participate. Please consider the information carefully. Feel free to discuss the study with your friends and family and to ask questions before making your decision whether to participate.

**Why is this study being done?**

The purpose of this study is to examine the lived experiences of special education teachers and school psychologists in Guanajuato City, Mexico.

**What will happen if I take part in this study?**

If you agree to take part in this study, you will participate in an individual face to face audiotaped interview

**How long will I be in the study?**

The expected duration of the study is 30-45 minutes.

**How many people will take part in this study?**

Approximately eight people will participate in the study.

**Can I stop being in the study?**

**Your participation is voluntary.** You may refuse to participate in this study. If you decide to take part in the study, you may leave the study at any time. No matter what decision you make, there will be no penalty to you and you will not lose any of your usual benefits. Your decision will not affect your future relationship with The University of Arizona. If you are a student or employee at the University of Arizona, your decision will not affect your grades or employment status.

**What risks or benefits can I expect from being in the study?**

No foreseeable risks or discomfort is expected as a result of your participation in the research. In the unlikely event that some of the interview questions make you uncomfortable or upset, you are always free to decline to answer or stop your participation at any time.

**Consent Version: 02/18/2019 Page 1 of 2**



**Protocol 1804514383 Approved by Univ. of Arizona IRB (Expires 17-May -2023)**

The information that you provide will be used to enhance training for bilingual school psychologists at both the pre- and in-service levels.

**Will my study-related information be kept confidential?**

Efforts will be made to keep your study-related information confidential. However, there may be circumstances where this information must be released.

Also, your records may be reviewed by the following groups:

- The University of Arizona Institutional Review Board
- Office for Human Research Protections or other federal, state, or international regulatory agencies

Your name will not be used in any written reports or publications which result from this research. Data will be kept for three years (per federal regulations) after the study is completed and then destroyed.

**Who can answer my questions about the study?**

For questions, concerns, or complaints about the study you may contact the Principal Investigator, Lily Hammer @ lilyhammer15@email.arizona.edu

For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact the Human Subjects Protection Program at 520-626-6721 or online at <http://rgw.arizona.edu/compliance/human-subjects-protection-program>.

An Institutional Review Board responsible for human subjects research at The University of Arizona reviewed this research project and found it to be acceptable, according to applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research.

**Signing the consent form**

I have read (or someone has read to me) this form, and I am aware that I am being asked to participate in a research study. I have had the opportunity to ask questions and have had them answered to my satisfaction. I voluntarily agree to participate in this study.

I am not giving up any legal rights by signing this form. I will be given a copy of this form.

---

**Printed name of subject**

---

**Signature of subject**

---

**Date**

**Consent Version: 02/18/2019**

**APPENDIX F**

University of Arizona  
**DEMOGRAPHIC QUESTIONNAIRE**

1. Pseudonym: \_\_\_\_\_
2. Gender: \_\_\_\_\_
3. Race/ethnicity: \_\_\_\_\_
4. Country of origin: \_\_\_\_\_
5. Age: \_\_\_\_\_
6. Highest academic degree attained: \_\_\_\_\_
7. Year of experience working in schools: \_\_\_\_\_
8. Current position: \_\_\_\_\_
9. Languages spoken? \_\_\_\_\_

## APPENDIX G

### University of Arizona IRB APPROVAL



Human Subjects  
Protection Program

1618 E. Helen St.  
P.O. Box 245137  
Tucson, AZ 85724-5137  
Tel: (520) 626-6721  
<http://rgwr.arizona.edu/compliance/home>

Date:	June 06, 2018
Principal Investigator:	Lily Mackenzie Hammer
Protocol Number:	1804514383A001
Protocol Title:	Special Education in Guanajuato, Mexico: Assessment, Eligibility, and Services
Determination:	Approved
Expiration Date:	May 17, 2023
Change Description:	I am adding a study authorization letter from the secretary of education in Guanajuato, Mexico.

#### Documents Reviewed Concurrently:

**HSPP Forms/Correspondence:** *IRB Amendment Hammer.pdf*

**Other Approvals and Authorizations:** *Carta de la secretaria de educación en Guanajuato, Hammer.jpg*

#### Regulatory Determinations/Comments:

This project has been reviewed and approved by an IRB Chair or designee.

- The University of Arizona maintains a Federalwide Assurance with the Office for Human Research Protections (FWA #00004218).
- All research procedures should be conducted according to the approved protocol and the policies and guidance of the IRB.
- The Principal Investigator should notify the IRB immediately of any proposed changes that affect the protocol and report any unanticipated problems involving risks to participants or others. Please refer to Guidance Investigators [Responsibility after IRB Approval](#), [Reporting Local Information](#) and [Minimal Risk or Exempt Research](#).
- All documents referenced in this submission have been reviewed and approved. Documents are filed with the HSPP Office.

## APPENDIX H

### University of Arizona INTERVIEW QUESTIONS MEXICO (SPANISH)

1. *¿Cómo decidió ser psicóloga/o o maestra/o de educación especial?*
2. *Describa su experiencia de preparación. ¿Qué títulos ha recibido?*
3. *¿Ha trabajado en otros Centros de Atención Múltiple o escuelas con USAER?*
4. *¿Cómo identifica a los estudiantes con discapacidades?*
5. *¿En qué área de la psicología escolar/educación especial se siente más competente?*
6. *¿En qué área de la psicología escolar quieres aprender más?*
7. *¿En qué consiste un día típico en su trabajo?*
8. *¿Cómo incluye a los padres en la educación de sus hijos?*
9. *¿Qué apoyo existe para los estudiantes con discapacidades después de graduarse?*
10. *¿Cuáles son las adaptaciones en las escuelas regulares para estudiantes con discapacidades?*
11. *¿Cuáles son los mejores aspectos de su trabajo?*
12. *¿Cómo se puede mejorar la educación especial?*
13. *¿Como mides el progreso de sus estudiantes?*
14. *¿Qué políticas y procedimientos guían su trabajo como psicólogo/a escolar o maestro/a de educación especial?*
15. *¿Cuáles factores ambientales considera cuando trabaja con estudiantes mexicanos con discapacidades?*

## **APPENDIX I**

### **University of Arizona INTERVIEW QUESTIONS MEXICO (ENGLISH)**

1. How did you decide to become a school psychology/special education teacher?
2. Describe your preparation experience. What titles have you received?
3. Have you worked in other special education settings?
4. How do you identify students with disabilities?
5. In which area of school psychology/special education are you most competent?
6. In which area of school psychology/special education would you like to learn more?
7. What does a regular day look like in your work?
8. How do you include parents in the education of their children?
9. What support exists for student with disabilities after they graduate?
10. What adaptations exist in schools for students with disabilities?
11. What are the best aspects of your job?
12. How can special education be improved?
13. How do you measure student progress?
14. What policies and practices guide your work as a school psychologist/special education teacher?
15. What environmental factors do you consider when working with Mexican students with disabilities?

## **APPENDIX J**

### **University of Arizona INTERVIEW QUESTIONS ARIZONA**

1. How did you decide to become a school psychologist/special education teacher?
2. Describe your preparation experience to work with Mexican immigrant students. What degrees have you received?
3. (a) Can you discuss your experiences working with Mexican immigrant families within the special education process?
4. What aspects of culture do you consider when working with Mexican immigrant student and families?
5. What policies does your school have in place for the identification, placement, and referral process for Mexican immigrant students with disabilities or suspected disabilities?
6. What challenges are encountered in serving Mexican immigrant students with disabilities?
7. What information/training do you think would be helpful to receive when a Mexican immigrant student with a disability enrolls at your school?
8. What, if any, do you know about special education in Mexico?
9. What advice could you give to other practitioners working with Mexican immigrant students?
10. What training would be helpful in working with Mexican American immigrants?
11. What factors of language development do you consider when working with Mexican immigrant students?