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Doctor of Education in Organizational Leadership

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Integrating Interprofessional Education Into Teacher Preparation Curriculum:
Reimagining Partnerships From the Inside Out

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

by
Jennifer Lauren Rogers

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Abstract

This mixed-methods program evaluation sought to identify elements of collaboration within interprofessional education experiences and provide suggestions regarding the future implementation of interprofessional education experiences into the identified teacher preparation program. Program suggestions were informed by the perspectives of current teacher preparation faculty, recent teacher preparation graduates, and other professional stakeholders. Other professional stakeholders are those who have a vested interest in a program. Quantitative data, in the form of descriptive statistics, was collected through a needs assessment tool completed by teacher preparation faculty participants and the Texas Education Agency Principal Survey completed by administrators overseeing first-year teachers who were prepared by the identifying teacher preparation program. Qualitative data was collected from semistructured interviews with recent graduates from the identified teacher preparation program who participated in a preliminary interprofessional education experience and have been teaching for one to four semesters. Overall, the findings show a further need for interprofessional education experiences in the current teacher preparation curriculum identified in this study. Teacher preparation faculty and recent graduates desired more robust interprofessional education experiences and identified courses with a field experience component as a natural integration point.

Keywords: program evaluation, interprofessional education, teacher preparation, other professional stakeholders, collaboration, communication

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Chapter 1: Introduction

In response to a common desire from health and human service professionals for purposeful interdisciplinary training, licensure programs are progressively integrating interprofessional education (IPE) into preprofessional curricula (Witt Sherman et al., 2017). Interprofessional education initiatives are commonly utilized in healthcare training programs with set initiatives, frameworks, and competencies (Dobbs-Oates & Wachter Morris, 2016; Zorek & Raehl, 2013). However, IPE is underutilized in other professional curricula such as teacher preparation, child and family studies, communication disorders, and social work (Dobbs-Oates & Wachter Morris, 2016). Interprofessional education is gaining traction as a recommended feature for all higher education professional curricula (Halupa, 2015). Interprofessional education experiences are designed by stakeholders and facilitators to provide students in preprofessional training programs with active learning experiences to transfer into future professional settings (Abrandt Dahlgren et al., 2016; Dobbs-Oates & Wachter Morris, 2016).

Background Information

Interprofessional education is designed for students from two or more professions to learn alongside one another as they demonstrate effective collaboration to improve social determinants of health and educational outcomes (Dobbs-Oates & Wachter Morris, 2016; World Health Organization [WHO], 2010). Interprofessional education consists of faculty, practicing professionals, and students from various professions learning together as a team. Interprofessional education experiences implemented in other preprofessional programs give students a relevant context in which to solidify their professional identity and practice interprofessional respect (Witt Sherman et al., 2017). Interprofessional respect includes clear

communication, kind and ethical behavior toward colleagues, active listening, motivation, encouragement, and constructive feedback (Dobbs-Oates & Wachter Morris, 2016). These interprofessional skills are important as teachers, administrators, and other professional stakeholders interact and advocate for the students these professionals will serve in public schools.

As student populations in kindergarten through 12th-grade (K–12) public schools are progressively diverse, there are also a growing number of specialists or other professional stakeholders working within schools who are expected to collaborate with teachers (Rosenfield et al., 2018). Student diversity and the need for more specialists accentuate the need for interprofessional experiences before entering the teaching profession. Educators in K–12 public schools are expected to have the appropriate skills needed to collaborate effectively with other professionals, but IPE is rarely part of educator preparation programs (Dobbs-Oates & Wachter Morris, 2016). Educators should feel adequately prepared to collaborate with other professional stakeholders, such as social workers or mental health professionals, in order to provide holistic care for the students they serve (Rosenfield et al., 2018).

The lack of interprofessional preparedness is a problem that affects teacher preparation students at a private liberal arts university in West Central Texas. The identified teacher preparation program is departmentalized within a private liberal arts university located in a medium-sized city in West Central Texas. In response to changes among university and national teacher preparation accreditation standards, specifically, the Association for Advancing Quality in Educator Preparation (AAQEP), faculty in the identified teacher preparation program recognized a need for IPE throughout the current curriculum. There is a common desire among faculty to provide facilitated interprofessional experiences that will supply teacher candidates

opportunities to interact with other professional stakeholders before entering the teaching profession.

With the desire for change, I, a full-time faculty member of the teacher preparation program, joined the College of Education and Human Services (CEHS) IPE task force in search of clarification and collaboration from internal stakeholders associated with other preprofessional training programs at the university. At that time, the IPE task force was made up of two social work faculty members, one teacher preparation faculty member, two communication disorders faculty members, two exercise science and nutrition faculty members, two nursing faculty members, one occupational therapy faculty member, the associate dean of CEHS, and the dean of CEHS. The CEHS formed the IPE task force to further research IPE, assess the readiness to implement IPE throughout the college, and to identify courses where implementation is most naturally integrated.

The task force also worked to propose competencies and establish an ideal vision of IPE that would be relevant to all departments within the CEHS. The IPE competencies adapted from Dobbs-Oates and Wachter Morris's (2016) work addressed the "values and ethics of interprofessional practice, roles and responsibilities, interprofessional communication, and teams and teamwork" (p. 57). The ideal vision of IPE is to provide preservice students in professional training programs with applicable, realistic, and active learning experiences that include valuable feedback from facilitators in order to practice meeting the various needs of future students and clients (Abrandt Dahlgren et al., 2016; Dobbs-Oates & Wachter Morris, 2016). An IPE experience brings stakeholders together to clarify professional roles and responsibilities, address professional misperceptions, and collaborate to solve real-world problems in a clinical environment conducive to inquiry and reflection.

Statement of the Problem

Students in kindergarten through 12th-grade (K–12) public school settings increasingly need more than just academic instruction from teachers. They also face possible learning disabilities, emotional and behavioral disorders, health impairments, family issues, malnutrition, poverty, abuse, and trauma (Dobbs-Oates & Wachter Morris, 2016). Many students, especially those who face adversities such as poverty or disabilities, need additional support from other licensed professionals such as social workers, occupational therapists (OT), physical therapists (PT), child life specialists, and family advocates for both academic and nonacademic growth and development (Miller et al., 2019). In response to the diverse academic and social-emotional needs of students in K–12 public school settings, interdisciplinary teams may convene to create measurable annual and benchmark goals as part of individualized education programs (IEP) and Section 504 plans for identified students (Hartmann, 2016). An individualized education program is a plan created by the instructional and related services team members. The team members write measurable goals set to meet the individual needs of students with disabilities, and a section 504 plan is the result of a civil rights law set to protect students with disabilities while ensuring they receive accommodations or modifications in their least restrictive environment (Spiel et al., 2014; Vaughn et al., 2018). Multidisciplinary teams are made up of administrators, teachers, and professional stakeholders that provide related services for students (Hartmann, 2016; Rosenfield et al., 2018). Each of these team members should work together to be responsive to the students' needs and the environments in which they will receive academic and related services (Hartmann, 2016).

Despite the increasing need for other professional stakeholders currently working within the kindergarten through twelfth-grade (K–12) public school setting, preparing both professional

stakeholders and educators on how to collaborate is a critical skill that is mostly untaught in educator preparation programs (Gherardi & Whittlesey-Jerome, 2018). Other professional stakeholders that may provide expertise and consultation within a school setting would consist of social workers, OTs, PTs, child life specialists, and family advocates. When educators and other professional stakeholders utilize a more integrated approach to understand each team member's corresponding roles and responsibilities, greater student success and improved schools often result (Dobbs-Oates & Wachter Morris, 2016; Trust et al., 2016). Therefore, training preprofessional educators and other professionals about the holistic care of K–12 students within an isolated and discipline-specific context can prove problematic when collaboration is required later in their professional roles (Rosenfield et al., 2018).

There are a number of issues that undermine collaboration and teamwork among educators and other professional stakeholders once they are working in schools, such as lack of preprofessional training, insufficient time for consultation, and lack of communication skills (Rosenfield et al., 2018). Educators report feeling underprepared to collaborate with interdisciplinary teams and request more training in interprofessional skills (Dobbs-Oates & Wachter Morris, 2016). When educators feel undertrained or underprepared, they carry negative attitudes and beliefs about the effectiveness of multidisciplinary teams and exhibit disengagement or resistance during the process of collaboration (Rosenfield et al., 2018). Interprofessional education is designed to be used within preprofessional programs providing collaboration training that is transferable into professional careers, with goals to decrease feelings of frustration and lack of preparedness (Dobbs-Oates & Wachter Morris, 2016).

Interprofessional education experiences provide a context for students from two or more professions to learn alongside each other to demonstrate effective collaboration and improve

social determinants of health or educational outcomes (Dobbs-Oates & Wachter Morris, 2016; WHO, 2010). Interprofessional education experiences are underutilized in educator preparation curricula but are suggested for developing interdisciplinary skills such as communication, collaboration, interpersonal skills, and flexibility (Hartmann, 2016). The ideal vision of IPE is to provide preservice students with applicable, realistic, and active learning experiences that include valuable feedback from facilitators in order to practice meeting the various needs of future students and clients (Abrandt Dahlgren et al., 2016; Dobbs-Oates & Wachter Morris, 2016). Dobbs-Oates and Wachter Morris (2016) reported that although educators are expected to collaborate with other professional stakeholders in a manner similar to healthcare teams, IPE experiences are not often a part of educator preparation programs.

Purpose of the Study

The purpose of this program evaluation was to identify elements of collaboration within IPE experiences and provide suggestions regarding the future implementation of IPE experiences into the identified teacher preparation program. Program suggestions were informed by the perspectives of current teacher preparation faculty, recent teacher preparation graduates, and other professional stakeholders. Other professional stakeholders were those who had a vested interest in a program (Chen, 2015). After reviewing new developments in the AAQEP (2020a) expectations framework and standards, the teacher preparation faculty identified a program need. The changes specifically pertain to quality program practices and systems improvements. The faculty of the identified teacher preparation program desired natural integration of innovative IPE experiences to supply teacher candidates with opportunities to interact with other professional stakeholders before entering the teaching profession.

Research Questions

In order to examine the need for implementation of IPE into the existing teacher preparation curriculum, three questions to consider during this research are as follows:

RQ1. What elements of collaboration exist within an IPE experience in a teacher preparation program?

RQ2. In what ways, if any, does the nature of collaboration in an IPE experience used in a clinical setting assist preprofessional teachers to better serve kindergarten through 12th-grade (K–12) students in public schools?

RQ3. How does participation in IPE equip preprofessional teachers with imperative communication, problem-solving, and leadership skills needed in the modern kindergarten through 12th-grade (K–12) public school setting?

Definition of Key Terms

Clinical setting. The setting in which students apply knowledge of learned facts, skills, pedagogy, and attitudes.

Individualized education program. The Individuals with Disabilities Education Improvement Act (IDEIA) requires that students who receive special education in kindergarten through 12th-grade (K–12) public schools must have an IEP. Individualized education programs are drafted in an Admission, Review, and Dismissal (ARD) meeting that includes representatives from the school, other professional stakeholders, parents, and students (Vaughn et al., 2018).

Interprofessional collaboration. In the kindergarten through 12th-grade (K–12) public school setting, interprofessional collaboration includes parents, students, educators, and other professional stakeholders working together to create the best educational plan for optimal student success (Ogletree et al., 2017).

Interprofessional education (IPE). Interprofessional education experiences provide a context for students from two or more professions to learn alongside each other to demonstrate effective collaboration and improve social determinants of health or educational outcomes (Dobbs-Oates & Wachter Morris, 2016; WHO, 2010).

Multidisciplinary team. A team set up within the kindergarten through 12th-grade (K–12) public school settings consisting of administrators, teachers, and professional stakeholders that provide related services for students (Hartmann, 2016; Rosenfield et al., 2018).

Preprofessional teacher. In the present study, preprofessional teacher refers to students in a higher education institution who are completing required coursework and clinical hours as part of the teacher education degree requirements and Texas Education Agency (TEA) requirements for teacher certification.

Professional stakeholder. A professional stakeholder is a person who has a vested interest in a program (Chen, 2015).

Section 504 plan. A Section 504 plan is the result of a civil rights law set to protect students with disabilities while ensuring they receive accommodations or modifications in their least restrictive environment (Spiel et al., 2014; Vaughn et al., 2018).

Theoretical Framework

Two theoretical frameworks, the theory of change and distributed leadership, guided the present qualitative program evaluation research. Program evaluation is the “process of systematically gathering empirical data and contextual information about an intervention program—specifically answers to what, who, how, whether, and why questions that will assist in assessing a program’s planning, implementation, and/or effectiveness” (Chen, 2015, p. 6). Program evaluation grounded in the theory of change is used to make data-informed decisions

about effectiveness to improve programs and organizations (Dhillon & Vaca, 2018; Kaufman & Guerra-Lopez, 2013; Patton, 2015). Program evaluation was an appropriate process to address the identified lack of IPE experiences available to students in the teacher preparation program at a private liberal arts university.

Theory of Change

The theory of change is an ongoing process that explores change and how it happens (Armitage et al., 2019; Weiss, 1995, 1997). According to Armitage et al. (2019), “the theory of change process has gained increased traction among a wide range of research and development agencies seeking to better influence program directions and outcomes” (p. 51). During the process, reflection among participants should depict the unique roles and responsibilities necessary to fill in the missing gaps identified for a specific context (Armitage et al., 2019; Dhillon & Vaca, 2018). The theory of change is an overall description of how and why the desired change is anticipated to happen in a particular context (Armitage et al., 2019). In this case, the context was a teacher preparation program.

Distributed Leadership

An additional influence was distributed leadership theory. Distributed leadership is a conceptual approach focused on the act of shared leadership rather than specific leadership roles and responsibilities within the IPE experiences (McMaster, 2014). Applied models of distributed leadership maintain the importance of collaborative roles and responsibilities and inherent leadership ability among all team members (Wieczorek & Lear, 2018). The focus of distributed leadership is an inclusive outlook among teams within organizations in which to improve teaching and learning practices (McMaster, 2014).

Chapter Summary

Quality teacher preparation programs should include meaningful internal and external partnership opportunities to provide preprofessional students with integrated experiences that mirror what they will encounter in schools as professional educators (Stein & Stein, 2016). Local schools are a critical context for these partnerships, but developing internal partnerships and collaborative learning opportunities within the university setting is also important (Stein & Stein, 2016). As teacher preparation program faculty begin to address shifts in accreditation standards and program needs, understanding student diversity, defining teachers' roles and responsibilities, employing leadership ability, and identifying other professional stakeholders will be essential (Dhillon & Vaca, 2018; Parris et al., 2018). Organizing IPE experiences within preprofessional training that address the developing standards can allow for teacher preparation students to pursue leadership opportunities, collaborate with other educational professionals, and communicate with stakeholders before they enter the teaching profession (Teacher Administrative Code, 2014).

Chapter 2: Literature Review

The literature review outlines the Texas Administrative Code and corresponding Association for Advancing Quality Educator Preparation (AAQEP) standards and expectations. I have provided contextual information surrounding current students and student diversity in kindergarten through 12th (K–12) public school settings. I defined the roles and responsibilities of each professional stakeholder identified within this study. The professional stakeholders identified in this study were teachers, social workers, occupational therapists (OTs), physical therapists (PTs), child life specialists, and family advocates. Following descriptions of students, teachers, and other professional stakeholders, I share information and corresponding literature surrounding professional collaboration and move toward literature that supports the identified need for IPE in teacher preparation programs.

TEA Standards

Quality teacher preparation in higher education requires meaningful partnerships to provide preservice students with integrated experiences that mirror what they encounter in schools as professional educators (Stein & Stein, 2016). Teachers “cultivate their craft” through authentic experiences, much like other adults in professional fields (Camburn & Han, 2015, p. 512). Local schools are a critical context for stakeholder partnerships, but teacher preparation programs should also seek opportunities for internal partnerships within the university (Stein & Stein, 2016). The Texas Administrative Code (2014) contains the detailed performance standards set as guidelines for preprofessional training, appraisal, and professional development of teachers. See Appendix A for a detailed list of the most current Texas Administrative Code Teacher Standards. The professional practices and responsibilities of educators are specifically addressed in standard six of the Texas Administrative Code. The Texas Education Agency

(TEA) expects that “teachers consistently hold themselves to a high standard for individual development, pursue leadership opportunities, collaborate with other educational professionals, communicate regularly with stakeholders, maintain professional relationships, comply with all campus and school district policies, and conduct themselves ethically and with integrity” (Teacher Administrative Code, 2014, p. 2).

In parallel with the Texas Administrative Code Teacher Standards, the AAQEP maintains in standards two, three, and four that quality teacher preparation programs should prepare preprofessional educators to engage with other professionals in professional practice as well as be engaged with system improvement (AAQEP, 2020b). The AAQEP is a national accrediting body for educator preparation programs. See Appendix B for a complete version of the updated AAQEP Standards and Expectations Framework. Additionally, AAQEP (2020a) requires programs with membership and in good standing to be innovative and promote improvement through stakeholder support. The AAQEP (2020b) guide to accreditation outlines the following expectations and improvements for teacher preparation programs in standards two, three, and four:

Standard Two: Completer Professional Competence and Growth

Program completers adapt to working in a variety of contexts and grow as professionals. Program completers engage in professional practice in educational settings and show that they have the skills and abilities to do so in a variety of *additional* settings and community or cultural contexts. For example, candidates must have broad and general knowledge of the impact of culture and language on learning, yet they cannot, within the context of any given program, experience working with the entire diversity of student identities or in all types of school environments. Candidate preparation includes first-

hand professional experience accompanied by reflection that prepares candidates to engage effectively in different contexts they may encounter throughout their careers.

(AAQEP, 2020b)

Evidence shows that completers:

- 2a. Understand and engage local school and cultural communities, and communicate and foster relationships with families, guardians, or caregivers in a variety of communities
- 2b. Engage in culturally responsive educational practices with diverse learners and do so in diverse cultural and socioeconomic community contexts
- 2c. Create productive learning environments and use strategies to develop productive learning environments in a variety of school contexts
- 2d. Support students' growth in international and global perspectives
- 2e. Establish goals for their own professional growth and engage in self-assessment, goal setting, and reflection
- 2f. Collaborate with colleagues to support professional learning. (AAQEP, 202b, pp. 11–12)

Evidence for this standard will show both that program completers have engaged successfully in relevant professional practice and that they are equipped with strategies and reflective habits that will enable them to serve effectively in a variety of school placements and educational settings appropriate to the credential or degree sought.

Standard Three: Quality Program Practices

Preparation programs ensure that candidates, upon completion, are ready to engage in professional practice, to adapt to a variety of professional settings, and to grow

throughout their careers. Effective program practices include consistent offering of coherent curricula; high-quality, diverse clinical experiences; dynamic, mutually beneficial partnerships with stakeholders; and comprehensive and transparent quality assurance processes informed by trustworthy evidence. Each aspect of the program is appropriate to its context and to the credential or degree sought.

Evidence shows the program:

- 3a. Offers coherent curricula with clear expectations that are aligned with state and national standards, as applicable
- 3b. Develops and implements quality clinical experiences, where appropriate, in the context of documented and effective partnerships with P–12 schools and districts
- 3c. Engages multiple stakeholders, including completers, local educators, schools, and districts, in data collection, analysis, planning, improvement, and innovation
- 3d. Enacts admission and monitoring processes linked to candidate success as part of a quality assurance system aligned to state requirements and professional standards
- 3e. Engages in continuous improvement of programs and program components and investigates opportunities for innovation through an effective quality assurance system
- 3f. Maintains capacity for quality reflected in staffing, resources, operational processes, and institutional commitment. (AAQEP, 2020b, pp. 11–12)

Evidence related to this standard will include documentation of program practices and resources as well as the program’s rationale for its structure and operation.

Standard Four: Program Engagement in System Improvement

Program practices strengthen the P–20 education system in light of local needs and in keeping with the program’s mission. The program is committed to and invests in strengthening and improving the education profession and the P–20 education system. Each program’s context (or multiple contexts) provides particular opportunities to engage the field’s shared challenges and to foster and support innovation. Engagement with critical issues is essential and must be contextualized. Sharing results of contextualized engagement and innovation supports the field’s collective effort to address education’s most pressing challenges through improvement and innovation.

The program provides evidence that it:

- 4a. Engages with local partners and stakeholders to support high-need schools and participates in efforts to reduce disparities in educational outcomes
- 4b. Seeks to meet state and local educator workforce needs and to diversify participation in the educator workforce through candidate recruitment and support
- 4c. Supports completers’ entry into and continuation in their professional role, as appropriate to the credential or degree being earned
- 4d. Investigates available and trustworthy evidence regarding completer placement, effectiveness, and retention in the profession and uses that information to improve programs
- 4e. Meets obligations and mandates established by the state, states, or jurisdiction within which it operates

4f. Investigates its own effectiveness relative to its institutional and programmatic mission and commitments.

Evidence for this standard will address identified issues in light of local and institutional context. (AAQEP, 2020b, pp. 11–12)

These standards and criteria should be used as a curriculum framework for teacher preparation program faculty as they advance collaborative experiences between internal and external partners (Dhillon & Vaca, 2018; Parris et al., 2018). It is evident in both the Texas Administrative Code (2014) and the AAQEP Expectations Framework and Standards (2020b) that an ongoing understanding of student diversity, defining teachers' roles and responsibilities, and identifying and collaborating with other professional stakeholders are important curricular components for teacher preparation programs.

Students and Student Diversity

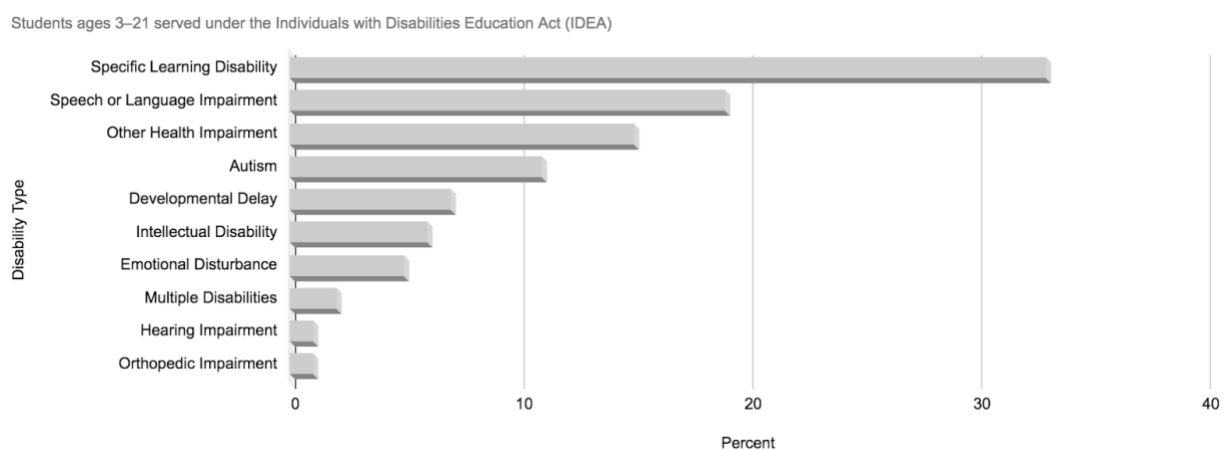
According to statistical data from the National Center for Education Statistics (NCES), there are currently more than 50 million students attending public schools in the United States (as cited in Rathbun & Wang, 2019). The growth and change of diversity in kindergarten through 12th-grade (K–12) public schools in the United States directly impacts the students' overall school experiences (Parris et al., 2018). As public schools become more diverse, so do the needs of the K–12 student (Howard, 2018; Scott & Scott, 2015). Along with academic requirements, students carry an excess of social-emotional obstacles with them to school each day (Dobbs-Oates & Wachter Morris, 2016). For example, in a study examining the prevalence of mental disorders in United States adolescents, the authors found that the average age for onset of anxiety disorders is six years old, for behavioral disorders, it is 11 years old, and for mood disorders, it is 13 years old (Merikangas et al., 2010). With each of these disorders, students are found to need

additional support during the school day for both academic and social-emotional progress (Merikangas et al., 2010).

In addition to social-emotional and behavioral disorders, students might also exhibit learning disabilities, short- and long-term health impairments, home-life issues, malnutrition, poverty, homelessness, abuse, neglect, and trauma (Dobbs-Oates & Wachter Morris, 2016). Students in the K–12 public school setting with academic, physical, and or social-emotional obstacles may receive a variety of services from other professionals in addition to their classroom teacher. See Figure 1 for the 2018–2019 percentages of students, ages three to 21, in American public schools who received services as identified by the Individuals with Disabilities Education Act (IDEA; National Center for Education Statistics [NCES], 2020).

Figure 1

Students Ages Three–21 Served Under the Individuals With Disabilities Education Act (IDEA) by Disability Type



Note. From “Students With Disabilities,” by National Center for Education Statistics, 2020 (https://nces.ed.gov/programs/coe/pdf/coe_cgg.pdf). Reprinted with permission.

American students enrolled in K–12 public education spend, on average, over six hours per day in school (NCES, n.d.). Students rely on teachers to identify, assess, and advocate for their individual needs to other professionals during the school day (Mendler, 2012; Rotatori et al., 2012). Students desire personal connections and positive relationships from their teachers (Dobbs-Oates & Wachter Morris, 2016). When students experience a positive relationship with teachers and other professionals providing school-based services, they are more willing to take educational risks (Mendler, 2012). Student engagement, motivation, and achievement are positively correlated to their relationships with teachers and other professionals in the K–12 setting regardless of an identified disability (Dweck, 1986; Mendler, 2012, Fisher et al., 2018). To holistically serve K–12 students, teachers and other school-based professionals should desire collaboration and positive student relationships as they create and fulfill individualized education plans (Dobbs-Oates & Wachter Morris, 2016; Fisher et al., 2018).

Teachers

According to Hartmann (2016), teachers are the academic experts or directors of students and facilitators of learning in the classroom. Many teachers take responsibility for meeting the social-emotional needs of their students as well (Dobbs-Oates & Wachter Morris, 2016; Hartmann, 2016). Social-emotional needs include but are not limited to social awareness, self-awareness, self-regulation, decision-making, and relationship development (Dobbs-Oates & Wachter Morris, 2016). In addition to providing instruction and meeting the social-emotional needs of their students, teachers communicate with parents and other professionals on behalf of their students (Jung et al., 2019; Vaughn et al., 2018). Teachers advocate for their students in a variety of contexts. Based on the individual needs of their students, teachers may find themselves interacting with other professional stakeholders such as social workers, occupational therapists

(OT), physical therapists (PT), child life specialists, and family advocates on multidisciplinary teams (Gherardi & Whittlesey-Jerome, 2018).

Teachers also take on the role of the motivator as they create achievement expectations and classroom communities conducive to learning and success (Wong & Wong, 2018). An effective teacher and his or her ability to meet the diverse needs of their students is the most significant contributor to student success (Goodlad, 1994). Students need teachers who express knowledge of content, set high expectations, display confidence, create positive classroom interactions through respect and humor, and maintain organizational skills (Mendler, 2012). Like many other professions, teachers participate in continued professional development to stay connected with educational trends, evidence-based practices, and research surrounding students' academic and social-emotional needs (Hartmann, 2016). Continued teacher learning improves skills and practices that successively improve student learning and outcomes (Camburn & Han, 2015).

As part of their professional role and ever-increasing responsibilities, teachers are expected to collaborate with other teachers, administrators, school counselors, and curriculum specialists on campus. Within the literature surrounding teacher collaboration, researchers identify peer coaching, observations, and participation on multidisciplinary teams as important types of teacher collaboration that impact student success (Banerjee et al., 2017; Ning et al., 2015). To accentuate researchers' recommendations for more robust preprofessional collaboration training in teacher prep programs, professional educators reported feeling underprepared to collaborate with interdisciplinary teams (Anderson, 2013; Dobbs-Oates & Wachter Morris, 2016). Teachers often request additional professional development training for interprofessional skills and more time for collaboration (Dobbs-Oates & Wachter Morris, 2016).

According to the national findings from the American Teaching Panel (ATP), only 31% of teachers felt they had enough time for collaboration (Johnston & Tsai, 2018). In several studies, the authors indicated that school cultures set up to foster collaboration among teachers and other professionals improved teaching practices, job satisfaction, and student achievement (Johnston & Tsai, 2018; Moller et al., 2013; Stearns et al., 2015).

Other Professional Stakeholders

In response to professional trends and the diverse academic, physical, and social-emotional needs of students in K–12 public school settings, multidisciplinary teams convene to create measurable annual and benchmark goals as part of individualized education programs (IEPs) and 504 plans for identified students (Hartmann, 2016). An IEP is “a plan developed to meet the special learning needs of each student with a disability” (Vaughn et al., 2018, p. 7). Individualized education programs also identify specific related services the student will need to be successful. A 504 plan “is a broad civil rights law that protects individuals with disabilities to be allowed the opportunity to fully participate with their peers, to the extent possible, in any institution receiving federal funding” (Spiel et al., 2014, p. 453). The multidisciplinary teams continually monitor student progress to provide learning environments with the least amount of restrictions and conducive to individual learning needs (Hartmann, 2016; Rosenfield et al., 2018; Vaughn et al., 2018).

In addition to administrators, school counselors, and general and special education teachers, multidisciplinary teams may consist of one or a combination of the following: social workers, occupational therapists (OT), physical therapists (PT), child life specialists, and family advocates (Gherardi & Whittlesey-Jerome, 2018). It is important that each team member understands one another’s role and responsibility and exhibits interprofessional respect (Leader-

Janssen et al., 2012). Each of these team members should work together to be responsive to the students' needs and the environments in which they will receive academic and related services (Hartmann, 2016).

School Social Workers

School social workers provide support to both the student and the school community (Gherardi & Whittlesey-Jerome, 2018). The perceived ambiguity of a social worker and lack of interprofessional training in the preprofessional curriculum lends to the notion that it is difficult to accurately and succinctly describe their role and responsibilities in school settings (Callahan Sherman, 2016; Gherardi & Whittlesey-Jerome, 2018). According to the United States Bureau of Labor Statistics (2020b), the largest number of social workers choose to work in schools or specialize in the areas of families and children. School social workers are expected to collaborate with families, students, and educators to address social and emotional needs that arise at home and in the K–12 school setting (Gherardi & Whittlesey-Jerome, 2018). As a vital asset to the school community, social workers also provide behavioral support and positive functioning for students and families (Phillippo & Blosser, 2013). The school social worker seeks to increase the well-being of all students through behavioral support, mental health expertise, and a desire to work with multidisciplinary experts alongside the family (Callahan Sherman, 2016; Gherardi & Whittlesey-Jerome, 2018).

School social workers bring significant knowledge about available community resources for students and families (Gherardi & Whittlesey-Jerome, 2018; Phillippo & Blosser, 2013). Gherardi and Whittlesey-Jerome (2018) recommended in their study, which focused on building partnerships between schools and social workers, that school social workers should seek training in educational or organizational leadership and pursue administrative or leadership roles.

Building partnerships between social workers and other school staff is imperative in the K–12 public school setting as they work together to serve students and their families. In literature surrounding school social workers, researchers often noted building partnerships among school personnel as a needed area of growth (Gherardi & Whittlesey-Jerome, 2018; Phillipppo & Blosser, 2013). Social workers reported feeling misunderstood or undervalued as they pursued partnerships in the school setting (Gherardi & Whittlesey-Jerome, 2018; Phillipppo & Blosser, 2013).

Occupational Therapists

Occupational therapists (OTs) most commonly work in healthcare and nursing care settings but also perform in-school occupational therapy sessions for their clients. Eleven percent of OTs in the United States work in public, local, and private elementary or secondary schools (United States Bureau of Labor Statistics, 2020c). Occupational therapists participate in multidisciplinary teams as they represent the client or student receiving OT services (Frolek Clark et al., 2019). Occupational therapists perform rehabilitation for students in K–12 public school settings who qualify for OT services. Generally, those qualifying for OT services possess one or a combination of the following conditions: chronic or acute illness, mental disability, physical disability, or other health impairment. The occupational therapist supplies developmental insights about the client or student to teachers and other related service providers on multidisciplinary teams (Frolek Clark et al., 2019). The insights they provide emerge from OT evaluations and treatment sessions and assist with in-school treatment plans or to qualify for related services (Frolek Clark et al., 2019). For example, the OT may suggest that a teacher label classroom supplies for visual access or even allow students to perform stretches throughout the day to relieve body aches and pains that make concentration difficult (Frolek Clark et al., 2019).

Occupational therapy interventions are focused on treating the whole person by helping individuals with important daily functions such as dressing, homework, packing a healthy lunch, or self-feeding (Boniface et al., 2019). Occupational therapists in school settings evaluate students' abilities and make appropriate accommodations or suggestions for the student to be successful in his or her classroom (Boniface et al., 2019). An OT uses evidence-based approaches to enhance performance and participation from students who qualify for occupational therapy and other related services, such as physical therapy (Frolek Clark et al., 2019).

Physical Therapists

Although there is limited data about school-based physical therapy, it is known that, much like an OT, physical therapists (PTs) assist students with physical disabilities by providing direct care or acting as consultants to educators and families (Jeffries et al., 2019; Moriarty & Brown, 2010; United States Bureau of Labor Statistics, 2020a). According to the American Physical Therapy Association (APTA), 7,000 PTs work in schools across the United States and serve both general education and special education populations (APTA, n.d.). Physical therapy is a meaningful service to schools and is often identified as a “related service” in the literature surrounding school-based physical therapy (Jeffries et al., 2019). Physical therapists treat students with physical impairments through biomechanical interventions in the general classroom or in an on-campus therapy room location (Moriarty & Brown, 2010). School-based PTs render services that support the student's educational and functional goals (Jeffries et al., 2019).

Students who qualify for physical therapy based on assessment evidence receive therapy through various service delivery modalities, including direct, indirect or selection of adaptive or assistive devices, and consultative (Jeffries et al., 2019; Moriarty & Brown, 2010). Direct

services are services provided directly from the therapist to the student within a determined physical setting, such as a classroom or designated therapy room (Moriarty & Brown, 2010).

When the PT assists a student in the selection of adaptive or assistive devices, this is considered an indirect service model of therapy (Moriarty & Brown, 2010). This service delivery option is less intrusive to the student's academic and extracurricular activities (Moriarty & Brown, 2010).

When PTs choose consultation as the delivery method, they are responsible for working with the multidisciplinary team and making sure they are working toward the functional mobility goals of the student (Moriarty & Brown, 2010). Consultation delivery methods are often less invasive as they are interwoven within the school day and access the teacher and other specialists assigned to the student for therapeutic benefit (Moriarty & Brown, 2010).

Child Life Specialists

A child life specialist works in healthcare settings that serve children and families. They are classified as a 'hospital-based' or 'facility-based' child life specialist, depending on the setting in which they provide services (Green, 2018). Regardless of the work location, a child life specialist can also serve as an advocate for the child upon re-entering school after a lengthy hospital stay or during chronic illness (Lookabaugh & Ballard, 2018). In a hospital setting, the child life specialist provides therapies through play, interventions during hospitalizations, and developmentally appropriate consultations for the child about procedures and medications (LeBlanc et al., 2014). Child life specialists assist with the stresses of medically fragile students and go into the school settings to advocate for or explain care plans as needed by the child or family (Burns-Nader & Hernandez-Reif, 2016). As consultants in the school setting, they work with the school nurse and general education teacher to provide expertise and insight gained from interactions with the student and family (Lookabaugh & Ballard, 2018).

Family Advocates

Public Law 99-457 was passed in 1986, and lawmakers established the necessity to add early intervention and family support for qualifying children ages three through five (Bailey et al., 2012). They also uphold that families play an important role in the development of children, especially those with disabilities (Bailey et al., 2012). Families positively impact school climate if they support school efforts through volunteering, parent-teacher conferences, and actively engaging in their students' learning (Vaughn et al., 2018). Families rely on family advocates in school settings for support within a family-centered school approach (Bailey et al., 2012). Family advocates coordinate services for students and act as a liaison with educators, families, and related services (Heitin, 2013). Related services include but are not limited to mental health and counseling, occupational therapy, physical therapy, transportation, social services, and speech therapy. Family advocates also assist families and students with transition plans that are useful when moving into new settings, such as an alternative placement, promotion to the next grade level, or a new school (Fox et al., 2002).

Family advocates and other professional stakeholders such as school social workers, physical therapists, occupational therapists, and child life specialists should be responsive to the student's needs and the environments in which they will receive academic and related services (Hartmann, 2016). Gallagher et al. (2018) asserted from their research that a more collaborative approach used within the K–12 school setting between teachers and other professional stakeholders was beneficial to a student's overall success and adaptability. Teachers and other professional stakeholders need adequate time to engage in professional learning communities with one another (Tracy-Bronson et al., 2019). More time in collaboration allows each professional on the multidisciplinary team to establish clear definitions of roles and

responsibilities as they seek to provide both academic and related services to students (Tracy-Bronson et al., 2019). Professional collaboration allows each team member to be a contributing source of communication, a problem-solver, and share ideas. Educators should feel adequately prepared to collaborate with other professional stakeholders, such as social workers, mental health professionals, or family advocates, to provide holistic care for the students they serve (Rosenfield et al., 2018).

Professional Collaboration

Organizations such as kindergarten through 12th-grade (K–12) public schools need to define what collaboration looks like among internal and external stakeholders (Campbell, 2018). Collaboration efforts and experiences increase employee retention and invite innovative practices to be shared and appreciated (Baker et al., 2011). As professionals engage in collaboration, the barriers of silos within organizations begin to break down, which encourages professionals to seek additional expertise and support (Campbell, 2018). Successful collaboration includes professionals at all levels within the organization and encourages a shift from autonomous or hierarchical cultures to shared or distributed leadership in day-to-day functions (McMaster, 2014). The shift in school improvement literature was commonly described as an effort toward collaboration and away from bureaucracy (Hargreaves & Goodson, 2006). Professional learning communities are an example of one area in which collaboration is cultivated for growth, idea sharing, and innovation in K–12 public schools.

Professional Learning Communities

Professional learning communities (PLCs) are composed of teachers and other professional stakeholders who willingly engage in reflective dialogue that guides understanding and growth (Schaap & de Bruijn, 2018). Professional learning communities are formed as an

effort to create organizational and instructional change in the K–12 public school setting. Hipp and Huffman (2010) asserted that the focus of PLCs was to sustain teachers and create a culture of learning for students. The following terms were used interchangeably within literature surrounding PLCs: collaborative learning communities, communities of practice, or professional learning groups (DuFour, 2004; Owen, 2016; Schaap & de Bruijn, 2018). While terms may vary, professional learning community researchers agreed that PLCs were not only meetings for discussions or weekly lesson planning but important spaces for learning, reflection, and change (DuFour, 2004; Owen, 2016).

Professional learning and development are not isolated events but rather process-oriented as growth and understanding occurring over time (Soine & Lumpe, 2014). Collaboration within professional learning communities (PLCs) consequently leads to necessary changes in professional development. Teachers need constructive feedback from their colleagues to increase the effectiveness of their practices (DuFour, 2004). Teachers and other professionals need ample time for collaboration to share expertise through professional dialogue as they seek to serve kindergarten through 12th-grade (K–12) students best (Hipp & Huffman, 2010; Owen, 2016). Ideally, teachers and other professional stakeholders collaborate over extended periods and on a regular basis. Consistency and time allow for the nurturing of interprofessional respect between teachers and other professionals (Owen, 2016). Establishing authentic interprofessional respect is foundational as the team supports one another during the implementation of new practices and pedagogies (Owen, 2016). A shared vision and values supported by school leadership are important aspects of developing constructive professional learning communities (Heggen et al., 2018).

As teacher burnout and disengaged students are on the rise, it is increasingly important for teachers and professional stakeholders to engage in learning communities that nurture innovation and teamwork (Owen, 2016). Owen (2016) also reported that if the context is nurturing and supportive of professional learning, then teachers and other professionals are renewed and have a sense of reinvigoration. Collaboration within professional learning communities (PLCs) consequently leads to necessary changes in professional development. Common characteristics of successful PLCs include collegiality, communication, shared-vision, pedagogical risk-taking with a focus on student learning, distributed leadership, and interprofessional collaboration (Owen, 2016).

Interprofessional Collaboration

Interprofessional collaboration in the K–12 public school setting includes parents, students, educators, and other professional stakeholders working together to create the best educational plan for optimal student success (Ogletree et al., 2017). Due to the advancement of services provided to students in K–12 school settings, interprofessional collaboration is imperative. Teachers and other professionals increasingly collaborate in the K–12 public school setting to minimize student stresses, such as anxiety, that negatively affect academic growth and performance (Dobbs-Oates & Wachter Morris, 2016).

Interprofessional collaboration is important as discipline-specific knowledge and skills are merged into common educational goals (Stone & Charles, 2018). Interprofessional collaboration occurs when teachers and other professional stakeholders work together for overall student improvement (Bronstein et al., 2011). Interprofessional collaboration abides by the same premise as PLCs, asserting that collaboration among internal and external stakeholders is ongoing rather than a task to complete and file away (Soine & Lumpe, 2014; Stone & Charles,

2018). Collaboration allows each person involved to experience different ideas and perspectives, creating interprofessional respect as shared responsibility for the students (Stone & Charles, 2018). Teachers, like their students, need opportunities to learn and grow with input from other professional stakeholders (Rigelman & Ruben, 2012).

Many educators begin a teaching career with little to no experience or training in the area of professional collaboration (Dobbs-Oates & Wachter Morris, 2016). In addition to limited preprofessional training, there are issues that undermine collaboration and teamwork among educators and other professional stakeholders once they are in practice, such as insufficient time for consultation and lack of communication skills (Rosenfield et al., 2018). Along with desires for more preprofessional training on collaboration, educators reported feeling underprepared to collaborate with interdisciplinary teams and often request additional professional development training on interprofessional skills (Dobbs-Oates & Wachter Morris, 2016).

Interprofessional Education in Preprofessional Curriculum

Interprofessional education (IPE) is gaining traction as a popular and recommended feature for all higher education professional curricula (Halupa, 2015). Interprofessional education consists of faculty, practicing professionals, and students from various professions learning together as a team. Interprofessional education experiences are designed to connect students from two or more professions in which to demonstrate effective collaboration and improve social determinants of health and educational outcomes (Dobbs-Oates & Wachter Morris, 2016; WHO, 2010). In addition to imparting content knowledge, IPE encourages the concept of teamwork between professions which contributes to the development of professional identity and interprofessional knowledge (Witt Sherman et al., 2017). Interprofessional education experiences remain underutilized in educator preparation curricula but are suggested for

developing interdisciplinary and collaborative skills, such as communication and interprofessional respect (Hartmann, 2016).

Crocker et al. (2016) explored the question, “How do educators develop a shared purpose to work together to plan and implement IPE strategies?” (p. 671). The authors discussed the challenges of setting up interprofessional communities and implementing interprofessional strategies.

Participants reported that in some cases, they needed to reflect on previous personal and clinical experiences with other professions in order to reframe these earlier experiences so that they would not ‘tarnish their openness to work with educators from these professions. (Crocker et al., 2016, p. 673)

Collaboration among some professions, such as healthcare, was more adaptable to IPE experiences than other professions. The interprofessional collaboration among professionals in the field of healthcare naturally lends an inherent need to understand the roles and responsibilities of colleagues. For example, medical doctors need to understand the role and responsibility of a radiologist and vice versa.

Implementing IPE experiences in preprofessional programs, such as teacher preparation, may serve as a key curricular shift to cultivating professional collaboration and improving future student or client educational outcomes (Rosenfield et al., 2018). Interprofessional experiences include simulations, experiential learning, collaboration with colleagues, collaboration with other professional stakeholders, and internships with interprofessional components (Abrandt Dahlgren et al., 2016). Interprofessional education is most effective when it reflects authentic service settings likely to be experienced by the learners now or in the future (Hammick et al., 2007). An example of this type of setting is students in a teacher preparation program engaging in a

multidisciplinary team meeting to create an individualized education program for a student with special needs in a simulated setting. The ideal vision of IPE is to provide preservice students with applicable, realistic, and active learning experiences that include valuable feedback and measurable outcomes from facilitators in order to practice meeting the various needs of future students and clients (Abrandt Dahlgren et al., 2016; Dobbs-Oates & Wachter Morris, 2016).

Distributed Leadership

An IPE curricula design is directly aligned with distributed leadership theory in that “distributed leadership does not dismiss hierarchical structures, nor does it exclude those in senior leadership positions; it provokes a shift in their purpose and focus” (Carbone et al., 2017, p. 183). Distributed leadership is a conceptual approach focused on the act of collective leadership rather than specific leadership roles and responsibilities within the IPE experiences (McMaster, 2014). Applied models of distributed leadership maintain the importance of collaborative roles and responsibilities and inherent leadership ability among all team members (Wieczorek & Lear, 2018). Each team member, or stakeholder, brings unique expertise and skill to the IPE experience. Distributed leadership focuses on an inclusive outlook among teams within organizations in which to improve teaching and learning practices (McMaster, 2014).

Chapter Summary

Collaboration is of growing importance as kindergarten through 12th-grade (K–12) public school demographics diversify and more specialists, such as social workers, physical therapists, occupational therapists, child life specialists, and family advocates, establish school-based practices (Parris et al., 2018; Stone & Charles, 2018). Identifying key areas of day-to-day collaboration between teachers and specialists, or other professional stakeholders, is informative to teacher preparation training. Currently, there are very few resources that contribute to the

implementation of IPE into teacher preparation programs. This study aimed to contribute to the importance of IPE implementation into teacher training programs and identify and teach necessary collaboration skills that preservice teachers will need as they enter their professional careers. Teachers and other professional stakeholders are expected to share responsibility in community school initiatives and the expanded social-emotional care of students; therefore, generating training programs that prepare them to collaborate are imperative (Anderson-Butcher et al., 2010; Dobbs-Oates & Wachter Morris, 2016).

Chapter 3: Research Method

The purpose of this program evaluation was to identify elements of collaboration within interprofessional education (IPE) experiences and provide suggestions regarding the future implementation of IPE experiences into the identified teacher preparation program. Program evaluation is the purposeful collection of information about a program's activities, outputs, and outcomes as a means to evaluate present levels of program effectiveness and inform future programming (Patton, 2015, p.18). Due to updated requirements to include interprofessional training by the Texas Education Agency (TEA) and the Association for Advancing Quality Educator Preparation (AAQEP), it was beneficial for faculty from the identified teacher preparation program to evaluate innovative practices surrounding collaboration with other professionals. Program improvement suggestions for a teacher preparation curriculum designed to prepare teachers candidates for collaboration with other professionals were informed by both inside and outside stakeholder perspectives.

The ideal vision of IPE is to provide students in preprofessional training programs with applicable, realistic, and active learning experiences that include valuable feedback from facilitators to practice meeting the various needs of future students and clients (Abrandt Dahlgren et al., 2016; Dobbs-Oates & Wachter Morris, 2016). The IPE experience brings stakeholders together to clarify professional roles and responsibilities, address professional misperceptions, and collaborate to solve real-world problems in a clinical environment conducive to inquiry and reflection (Wright & Wallis, 2019). Participants in IPE experiences take a collective and collaborative role in the inquiry process to improve practices (Abrandt Dahlgren et al., 2016; Dobbs-Oates & Wachter Morris, 2016). Having a collaborative team of knowledgeable stakeholders to provide input during the program evaluation supplied a greater

number of ideas and concepts to choose from, which further strengthens future IPE experiences (Wright & Wallis, 2019). Similar to the process of learning how to implement effective instruction, teacher preparation students also need experiences to practice and refine interprofessional skills, such as collaboration, that they can take in their future schools and classrooms (Camburn & Han, 2015; Darling-Hammond, 2006; Naylor et al., 2015). The primary research questions for this program evaluation were as follows:

RQ1. What elements of collaboration exist within an IPE experience in a teacher preparation program?

RQ2. In what ways, if any, does the nature of collaboration in an IPE experience used in a clinical setting assist preprofessional teachers to better serve kindergarten through 12th-grade (K–12) students in public schools?

RQ3. How does participation in IPE equip preprofessional teachers with imperative communication, problem-solving, and leadership skills needed in the modern kindergarten through 12th-grade (K–12) public school setting?

Research Design and Methodological Approach

The design used for this study was a mixed-methods program evaluation. Program evaluation is the “process of systematically gathering empirical data and contextual information about an intervention program—specifically answers to what, who, how, whether, and why questions that will assist in assessing a program’s planning, implementation, and/or effectiveness” (Chen, 2015, p. 6). Program evaluation grounded in the theory of change is used to make data-informed decisions about effectiveness to improve programs and organizations (Chen et al., 2018; Dhillon & Vaca, 2018; Kaufman & Guerra-Lopez, 2013; Patton, 2015). Program evaluation is used periodically to assess aspects of program performance in

organizations (Chen, 2015). Program evaluation was suitable to address the limited IPE experiences available to students in the teacher preparation program at a private liberal arts university (Chen, 2015).

A logic model was created as a guide for the evaluation and to provide the identified teacher preparation program with an ideal vision of integrating IPE into the current curriculum (Chen et al., 2018). A logic model is a road map that provides a clear structure for the intended effects of a program's activities and inputs (Dhillon & Vaca, 2018). The logic model for this program evaluation is presented in Figure 2. The logic model orients the situation and shares information about the inputs, outputs, goals, assumptions, and external limitations. Chen et al. (2018) described a logic model as a plan that systematically identifies the inputs, resources, supports needed, outputs, and outcomes to assist in delivering the identified intervention. Rogers (2014) explained that the theory of change is the understanding of activities and their contributions to the desired outcome or intended impacts on an identified program. Informed by the theory of change, this logic model guided the research activities, data sources, and overarching research questions (Dhillon & Vaca, 2018).

Figure 2*Logic Model*

SITUATION					
<ul style="list-style-type: none"> The teacher preparation program is accredited by the Texas Education Agency. The teacher preparation program is approved by the State of Texas to prepare classroom teachers for service in Pre–K through twelfth grade in 20 fields. The teacher preparation program is a nationally recognized program in teacher preparation. The teacher preparation program has recently been awarded full accreditation by Association for Advancing Quality in Educator Preparation (AAQEP) through June 30, 2026. Full accreditation acknowledges that a program prepares effective educators who continue to grow as professionals and has demonstrated the commitment and capacity to continue to do so. New developments have occurred in AAQEP 2020 accreditation standards. The teacher preparation program identified limited interprofessional education (IPE) experiences within the current curriculum. There is a common desire among faculty to provide facilitated IPE experiences that will supply teacher candidates with opportunities to interact among other professional stakeholders before entering the teaching profession. 					
INPUTS	OUTPUTS		SHORT-TERM OUTCOMES	MEDIUM-TERM OUTCOMES	LONG-TERM OUTCOMES
<i>Resources Needed</i>	<i>Activities</i>	<i>Participants</i>	<i>Changes in Learning</i>	<i>Changes in Action</i>	<i>Changes in Behavior</i>
Teacher Education faculty time Outside stakeholder time Former students of the identified teacher preparation program time Interprofessional education task force time	Evaluate existing courses for natural integration of IPE Evaluate faculty readiness for IPE implementation through a Needs Assessment Tool Provide teacher preparation students with IPE experiences during preprofessional training with facilitation from faculty and outside stakeholders Evaluate recent teacher preparation graduates' level of preparedness to interact with other professionals upon entering their profession	Teacher Education faculty Outside stakeholders: a) Former students from the graduating classes of 2018 and 2019 of the identified teacher preparation program with one to four semesters of professional experience in a kindergarten through twelfth-grade (K–12) setting b) IPE task force members	Discover areas for IPE opportunities in existing courses Teacher preparation students will learn about the professional roles and responsibilities of other professionals in which they will have professional interaction Teacher preparation students will learn about teamwork and collaboration Teacher preparation students will learn effective communication skills Teacher preparation students will learn leadership skills	Integrate IPE experiences into existing courses Teacher preparation students understand the professional roles and responsibilities of other professionals in which they will have professional interaction Teacher preparation students exhibit interprofessional respect during interactions with other professionals Teacher preparation students collaborate and work on IPE teams Teacher preparation students effectively communicate during planning and IPE experiences Teacher preparation students distribute leadership roles and	Interprofessional education experiences are consistently used to provide teacher preparation students with opportunities for collaboration and they understand their own profession in relation to others Teacher preparation students are prepared and equipped to collaborate with other professional stakeholders in order to serve the diverse needs of students in their classrooms better Teacher preparation students apply interprofessional skills into K–12 settings benefitting the students they serve

				exhibit personal leadership skills during IPE experiences	
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ASSUMPTIONS <ul style="list-style-type: none"> • Interprofessional education experiences enhance communication and collaboration skills. • Interprofessional education experiences generate interprofessional respect • More IPE experiences will provide teacher preparation students with the appropriate skills needed to collaborate effectively with other professionals in the professional setting. • Lessons and skills gleaned from IPE experiences during preservice training will be transferred into professional practice. 	EXTERNAL FACTORS <ul style="list-style-type: none"> • State and national changes in the accreditation of teacher preparation programs. • University administration and the state licensure entity dictates faculty workload and other facets of the teacher preparation program that impact the curriculum design, course sequence, and teaching methods utilized. • COVID-19 restrictions of human to human contact during an educational research project.
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It is common for short-term, medium-term, and long-term goals to be identified in a logic model if used as part of the program evaluation process (Dhillon & Vaca, 2018). Short-term goals depict changes in learning, medium-term goals are changes in actions, and long-term goals are changes in behavior (Dhillon & Vaca, 2018). The optimum long-term outcome for implementation of IPE into the identified teacher preparation curriculum is for teacher preparation students to apply interprofessional skills that benefit students they serve in K–12 settings.

Population, Setting, and Sample

The lack of interprofessional preparedness is a problem that affects many teacher preparation programs (Gherardi & Whittlesey-Jerome, 2018). This study's identified teacher preparation program is departmentalized within the College of Education and Human Services (CEHS) at a private liberal arts university located in a medium-sized city in West Central Texas. The teacher preparation program has 242 current students and offers degrees of certification in elementary, middle school, and high school. The teacher preparation program is accredited by the Texas Education Agency (TEA) and is a member in good standing of the Association for

Advancing Quality in Educator Preparation (AAQEP). The AAQEP is a national accrediting body that supports innovation and improvement for teacher preparation programs.

In response to university IPE initiatives and after reviewing the site visit report from the AAQEP, the teacher preparation faculty of the identified program discovered a need for additional IPE experiences throughout the current curriculum. There is a common desire among faculty members to provide facilitated interprofessional experiences that supply teacher candidates with various opportunities to interact with other professional stakeholders before entering the teaching profession. In this study, other professionals were identified as social workers, mental health professionals, physical therapists, occupational therapists, child life specialists, and family advocates.

The sample of participants in this study included both inside and outside professional stakeholders to the identified teacher preparation program. A professional stakeholder is defined by this study as a person who has a vested interest in a program (Chen, 2015). Teacher preparation faculty were identified as inside stakeholders and participated in content analysis as they reviewed course syllabi, course assignments, and course activities. Eight of the 11 full-time teacher preparation faculty were invited to participate in a needs assessment tool (see Figure 3). The three faculty members that did not participate in the content analysis or needs assessment tool were the researcher and two dissertation committee members. The needs assessment tool was used to identify gaps between “what is” and “what could be” in the identified teacher preparation program (Chen, 2015). Teacher preparation faculty also indicated what types of IPE experiences are currently used to prepare teacher preparation students for collaboration with other professionals.

Figure 3*Needs Assessment Tool*

CURRENT STATE	RESPONSE DESCRIPTORS	DESIRED FUTURE STATE
	1 – STRONGLY DISAGREE 2 – DISAGREE 3 – AGREE 4 – STRONGLY AGREE	
STRONGLY DISAGREE AGREE STRONGLY DISAGREE AGREE		STRONGLY DISAGREE AGREE STRONGLY DISAGREE AGREE
1 2 3 4		1 2 3 4
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	I believe I am prepared to design effective IPE experiences for undergraduate teacher preparation students.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	I believe I am prepared to write objectives and learning outcomes aligned to selected IPE competencies for the courses I teach.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	I believe I am prepared to incorporate written, oral, and collaborative communication assignments (discussion, presentations, group meetings, etc.) in the courses I teach.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	I believe I am prepared to use different pedagogical styles when facilitating interpersonal, critical thinking, and problem-solving skills.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	I believe I am capable of providing undergraduate students with IPE opportunities that integrate both internal and external stakeholders.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

There are 58 recent graduates from the identified teacher preparation program who graduated during the 2018–2019 academic year. Recent 2018–2019 graduate participants were purposefully selected from the employment data spreadsheet. The employment data is maintained by the teacher certification officer for the identified teacher preparation program. The employment data spreadsheet includes contact information, current employment status, grade

level, and the content being taught by teacher preparation graduates of the identified program.

The selection of recent graduates excluded those who were enrolled in graduate school programs at the time of the program evaluation. The recent teacher preparation graduates selected for the study had participated in a preliminary IPE experience and were documented as a teacher of record for one to four semesters in a kindergarten through 12th-grade (K–12) context.

In addition to recent teacher preparation graduates, Texas kindergarten through 12th-grade (K–12) school principals were identified as an outside stakeholder resource in this study. The number of beginning teachers assessed is included in the Texas Education Agency Principal Survey report, which is sent to the identified teacher preparation program each year. In the 2017–2018 report, there were 24 new teachers assessed. There is no way to determine if there were duplicates. Duplicates, in this case, means one principal evaluating two recent graduates from the identified teacher preparation program. These principals completed surveys about early career teachers. Utilizing outside stakeholder support and feedback is fundamental to good program evaluations (Chen, 2015).

Data Sources and Analysis

The first steps in this program evaluation were to evaluate the current curriculum as well as faculty readiness for IPE implementation with a needs assessment tool. The needs assessment tool (see Figure 3) was given to eight teacher preparation faculty in the College of Education and Human Services (CEHS). Prior to requesting participation in the needs assessment tool, a definition of IPE and related IPE competencies (see Appendix C) created by the CEHS IPE task force was shared with the teacher preparation faculty. The teacher preparation faculty were also provided a copy of the updated Association for Advancing Quality in Educator Preparation (AAQEP) expectations framework and standards from 2020. A needs assessment tool delineates

the gap between “what is” and “what should be” relating to readiness and skills for implementing IPE into the current curriculum (Kaufman & Guerra-Lopez, 2013). Needs assessment tools are designed to evaluate existing programs and establish goals (Kaufman & Guerra-Lopez, 2013).

The needs assessment tool in Figure 3 aligns with the AAQEP expectations framework and standards. In standard two, it is written that “educator preparation programs should prepare students to collaborate with colleagues to support professional learning” (AAQEP, 2020b, p. 11). To satisfy and reflect on this standard, teacher preparation faculty rated how prepared they felt to design effective IPE experiences for undergraduate teacher preparation students and how prepared they felt to write objectives and learning outcomes aligned to selected IPE competencies for the courses they teach. The next three questions in the needs assessment tool (see Figure 3) addressed collaborative communication assignments, preparedness to use different pedagogical styles, and provided IPE experiences with professional stakeholders for undergraduate students. In standard three, it is stated by AAQEP (2020b) that “professional educator program faculty should engage multiple stakeholders, including completers, local educators, schools, and districts, in data collection, analysis, planning, improvement, and innovation” (p. 12). In standard four, AAQEP (2020b) outlines the expectation that teacher preparation faculty will provide teacher preparation students with “opportunities to engage the field’s shared challenges and foster and support innovation with local partners and stakeholders” (AAQEP, 2020b, p. 12).

It was necessary to evaluate current and desired teacher preparation faculty performance outcomes and discern discrepancies for each variable associated with the IPE initiative. Knowing whether teacher preparation faculty felt prepared to design effective IPE instruction and assessment for undergraduate students as well as their feelings of preparedness to use different

pedagogical styles when facilitating interpersonal, critical thinking, and problem-solving skills is an important predictor to rate of implementation and adoption (Rogers, 2003). The results of the needs assessment tool were used to inform necessary training and the appropriate systematic approach to take when sharing the ideal vision of IPE with teacher preparation faculty for program improvement (Kaufman & Guerra-Lopez, 2013).

After reviewing the needs assessment tool results, I used frequency counts to disaggregate the data into shareable results for the teacher preparation faculty to review. No identifying information, including faculty names, was shared in the final needs assessment report. I offered a shared learning experience to teacher preparation faculty participants to review the course syllabi. See Appendix D for a sample of a course syllabus that will be reviewed. The shared learning and collaboration among teacher preparation faculty during this process was also important for the rate of implementation and adoption because team members worked together to achieve common goals (Dobbs-Oates & Wachter Morris, 2016; Rogers, 2003). A common goal among faculty was to provide students with meaningful IPE experiences within the teacher preparation curriculum.

In addition to shared learning, I desired an intentionally reflective process throughout the study to provide formative and summative evidence when challenges and successes occurred (Camburn & Han, 2015). Both formative and summative evaluation methods were used for data collection and analysis throughout the mixed-methods program evaluation. The formative evaluation methods included descriptive statistics of the needs assessment tool to inform future interprofessional experiences. Formative data in program evaluation was of foremost importance to accelerate the learning and development of people in a deliberately developmental organization (Kegan & Lahey, 2016). The summative evaluations included semistructured

interviews with a purposeful selection of recent teacher preparation graduates. Purposeful sampling is used in qualitative research as an intentional process of selecting participants based on certain criteria to best inform the study (Creswell & Poth, 2018). In this study, purposeful sampling included recent graduates from the 2018–2019 academic year who participated in an IPE experience and were a teacher of record for one to four semesters in a professional setting.

As a result of the COVID-19 social distancing restrictions across the state and with guidance from the university institutional review board (IRB), the avoidance of face-to-face meetings with human subjects during the interview process was imperative. I completed all IRB training and conducted the interviews with five recent teacher preparation graduates per IRB interview recommendations. The recent graduates were selected from the 2018–2019 employment data spreadsheet using purposeful sampling. Recent graduates were identified as outside stakeholders and were invited to participate in a semistructured interview via Zoom Pro. Zoom Pro is an online video and audio-conferencing resource that allows online meetings, conference calls, video webinars, and cross-platform messaging. I explained the use of Zoom Pro to participants and collected informed consent from all parties before the audio recordings (Creswell & Poth, 2018).

The interview protocol included more specific questions related to the study's aim (Patton, 2015). The interview questions were aligned with evaluation questions one through six in Figure 4, the AAQEP Standards in Appendix B, and the identified questions in the Texas Education Agency Principal Survey in Appendix E. The interview protocol I used during the semistructured interviews can be found in Appendix F. The semistructured interviews provided structure while allowing for adjustments as needed during the interview process (Saldaña & Omasta, 2018). I stated my name, time, date, my current position and then provided a brief

description of the project (Creswell & Poth, 2018). The recent graduates were then asked to answer the following open-ended questions:

1. How do you define your own professional role as a teacher?
2. What are your primary responsibilities as a teacher?
3. How did your preprofessional training influence your understanding of other professionals' roles and responsibilities?
4. What types of IPE experiences or collaboration experiences did you participate in during your preprofessional training?
5. How did these IPE experiences inform your current profession?
6. How do you define collaboration, specifically relating to other professionals, in education?
7. What did you learn about collaboration with other professionals during your preprofessional training?
8. How did the IPE experiences prepare you to serve students with diverse needs?
9. What other types of professionals have you interacted with as a teacher?
10. In what capacity are you interacting with other professionals?

Following the semistructured interviews, audio files were downloaded and sent to Transcription Puppy, a digital data transcription service. Once the transcriptions of the interviews were complete, I received them as separate text files. I downloaded and analyzed the interview transcripts to determine accuracy, themes, and patterns (Saldaña & Omasta, 2018). Coding was used to thematically condense information into a richer form (Saldaña & Omasta, 2018). I condensed the interviews using the in vivo coding method. In vivo coding is an abridged version of the participant's language and was used to extract thematic symbols from the interviews

(Saldaña & Omasta, 2018). Words and phrases that were repetitive or stood out were noted and used to inform the qualitative data analysis and report (Saldaña & Omasta, 2018). While in vivo coding was preferred as the primary coding method, I also noted emergent themes within the research and used descriptive coding methods to synthesize the information (Saldaña & Omasta, 2018).

In addition to faculty responses on the needs assessment tool, content analysis, and semistructured interviews with recent graduates, I reviewed the results from the 2017–2018 Texas Education Agency Principal Survey. Due to low reporting numbers of teachers rated by the Texas Education Agency Principal Survey in 2018–2019 and 2019–2020, I focused on the results from 2017–2018 in this study. The results of the survey were shared in the study using descriptive statistics. The Texas Principal Survey is administered each year by the Texas Education Agency (TEA) to evaluate educator preparation programs (Texas Education Agency [TEA], 2020). I inferred that the questions in the Texas Education Agency Principal Survey in Appendix E were aligned with the Texas Teacher Standards in Appendix A based on the common language used for each of the standards, competencies, and expectations. The Texas Education Agency Principal Survey is a relatively new survey created by a panel of experts and is used to measure the performance of first-year teachers who graduated from state-accredited educator preparation programs (TEA, 2020). The identified teacher preparation program is recognized and accredited by TEA, and the results inform program decisions and goals. The survey assesses educator preparation programs' effectiveness in preparing first-year teachers to succeed in the classroom (TEA, 2020). Principals are required to complete the survey for newly certified first-year teachers employed in their schools, and the survey only applies to Texas educator preparation programs (TEA, 2020).

The Texas Education Agency Principal Survey is a tool used by TEA in which principals are asked to rate first-year teachers on a Likert scale of zero to three. A rating of zero equals *not at all prepared*, and a rating of three equals *well prepared*. The survey is used to evaluate the first-year teachers' preparedness in the following areas: planning, instruction, creating an effective learning environment, professional practices and responsibilities, students with disabilities, English language learners, and overall preparedness (TEA, 2020). The data from this survey is sent to the educator preparation program and posted on the Texas Education Agency website in the section labeled Preparation and Continuing Education: Choosing an Educator Preparation Program (TEA, 2020). The survey and specific questions in each standard category can be found in Appendix E. Due to the nature of this research study and focus on IPE, specific questions were identified in which to withdraw information relevant to this specific program evaluation. The information was analyzed using descriptive statistics. The following questions from the Texas Education Agency Principal Survey of first-year teachers were identified as follows:

Professional Practices

- 33. To what extent was this first-year teacher prepared to find and follow district expectations for professional standards?
- 35. To what extent was this first-year teacher prepared to advocate for the needs of the students in the classroom?

Students with Disabilities

- 44. To what extent was this first-year teacher prepared to collaborate with other relevant staff to meet the academic, developmental, and behavioral needs of students with disabilities?

The evaluation questions, corresponding logic model component, data sources, sampling source, and types of data analysis are displayed in the evaluation matrix in Figure 4. Evaluation matrices are commonly used in program evaluations to align research questions with the proposed logic model (Dhillon & Vaca, 2018). The evaluation matrix (see Figure 4) was created from various outputs and outcomes addressed in the logic model (see Figure 2) and corresponding questions in the needs assessment tool (see Figure 3). For example, the first item in the needs assessment tool is written, “I believe I am prepared to design effective IPE experiences for undergraduate teacher preparation students.” Evaluation question 1a in the evaluation matrix is “What types of IPE experiences are used to prepare teacher preparation students to collaborate with other professionals?” Each of the primary research questions and corresponding evaluation questions is outlined in the evaluation matrix (see Figure 4). The interview protocol included questions that corresponded with the evaluation questions as further efforts to address the primary research questions.

Figure 4

Evaluation Matrix

RESEARCH AND EVALUATION QUESTIONS	LOGIC MODEL COMPONENT(S)	DATA SOURCE(S)	SAMPLING	DATA ANALYSIS
Research Question 1. What elements of collaboration exist within an IPE experience in a teacher preparation program? Evaluation Question 1a. What types of IPE experiences are used to prepare teacher preparation students to collaborate with other professionals?	Output: Evaluate existing courses for natural integration of IPE. Provide teacher preparation students with IPE experiences during preprofessional training with facilitation from faculty and outside stakeholders.	Program Curriculum	Course Syllabi	Content Analysis
Research Question 1. What elements of collaboration exist within an IPE experience in a teacher preparation program? Evaluation Question 1b. I believe I am prepared to design effective IPE experiences for	Output: Evaluate faculty readiness for IPE implementation through a Needs Assessment Tool.	Needs Assessment Tool aligned with AAQEP Standards	Teacher Preparation Faculty	Descriptive Statistics

undergraduate teacher preparation students.				
<p>Research Question 1. What elements of collaboration exist within an IPE experience in a teacher preparation program?</p> <p>Evaluation Question 1c. I believe I am prepared to write objectives and learning outcomes aligned to selected IPE competencies for the courses I teach.</p>	<p>Output: Evaluate faculty readiness for IPE implementation through a Needs Assessment Tool.</p>	<p>Needs Assessment Tool aligned with AAQEP Standards</p>	Teacher Preparation Faculty	Descriptive Statistics
<p>Research Question 2. How does the nature of collaboration exist in an IPE experience used in a clinical setting assist preprofessional teachers to better serve kindergarten through twelfth-grade (K–12) students in public schools?</p> <p>Evaluation Question 2a. I believe I am capable of providing undergraduate students with IPE opportunities that integrate both internal and external stakeholders.</p>	<p>Output: Evaluate faculty readiness for IPE implementation through a Needs Assessment Tool.</p>	<p>Needs Assessment Tool aligned with AAQEP Standards</p>	Teacher Preparation Faculty	Descriptive Statistics
<p>Research Question 2. How does the nature of collaboration in an IPE experience used in a clinical setting assist preprofessional teachers to better serve kindergarten through twelfth-grade (K–12) students in public schools?</p> <p>Evaluation Question 2b. In what ways are teacher prep students taught to understand and define their own professional roles and responsibilities?</p>	<p>Output: Evaluate recent teacher preparation graduates' level of preparedness to interact with other professionals upon entering their profession.</p> <p>Outcome:</p> <p>Short-Term Teacher preparation students will learn about the professional roles and responsibilities of other professionals in which they will have professional interaction.</p> <p>Medium-Term Teacher preparation students will understand the professional roles and responsibilities of other professionals in which they will have professional interaction.</p> <p>Long-Term Interprofessional education experiences are consistently used to provide teacher preparation students with opportunities for collaboration and they understand their own profession in relation to others.</p>	Semistructured Zoom interview	<p>Purposeful sampling of former teacher preparation students from graduating classes of 2018 and 2019. Only inclusive of former students who have completed one to four semesters teaching in a kindergarten through twelfth-grade (K–12) setting.</p>	Qualitative inquiry with primary coding for themes

<p>Research Question 2. How does the nature of collaboration in an IPE experience used in a clinical setting assist preprofessional teachers to better serve kindergarten through twelfth-grade (K–12) students in public schools?</p> <p>Evaluation Question 2c. To what extent are teacher prep students prepared to collaborate with other professionals to meet the diverse needs of students in kindergarten through twelfth-grade (K–12) settings?</p>	<p>Outcome: Long-Term Teacher preparation students are prepared and equipped to collaborate with other professional stakeholders in order to serve the diverse needs of students in their classrooms better.</p> <p>Teacher preparation students apply interprofessional skills into K–12 settings benefitting the students they serve.</p>	Semistructured Zoom interview	Purposeful sampling of former teacher preparation students from graduating classes of 2018 and 2019. Only inclusive of former students who have completed one to four semesters teaching in a kindergarten through twelfth-grade (K-12) setting.	Qualitative inquiry with primary coding for themes
<p>Research Question 3. How does participation in IPE equip preprofessional teachers with imperative communication, problem-solving, and leadership skills needed in the modern kindergarten through twelfth-grade (K–12) public school setting?</p> <p>Evaluation Question 3a. How well do the IPE experiences prepare teacher prep students for collaboration with other professionals?</p>	<p>Output: Evaluate existing courses for natural integration of IPE.</p> <p>Provide teacher preparation students with IPE experiences during preprofessional training with facilitation from faculty and outside stakeholders.</p>	Program Curriculum	Course Syllabi	Content Analysis
<p>Research Question 3. How does participation in IPE equip preprofessional teachers with imperative communication, problem-solving, and leadership skills needed in the modern kindergarten through twelfth-grade (K–12) public school setting?</p> <p>Evaluation Question 3b. I believe I am prepared to incorporate written, oral, and collaborative communication assignments (discussion, presentations, group meetings, etc.) in the courses I teach.</p>	<p>Output: Evaluate faculty readiness for IPE implementation through a Needs Assessment Tool.</p>	Needs Assessment Tool aligned with AAQEP Standards	Teacher Preparation Faculty	Descriptive Statistics
<p>Research Question 3. How does participation in IPE equip preprofessional teachers with imperative communication, problem-solving, and leadership skills needed in the modern kindergarten through twelfth-grade (K–12) public school setting?</p> <p>Evaluation Question 3c. I believe I am prepared to use different pedagogical styles when facilitating interpersonal, critical thinking, and problem-solving skills.</p>	<p>Output: Evaluate faculty readiness for IPE implementation through a Needs Assessment Tool.</p>	Needs Assessment Tool aligned with AAQEP Standards	Teacher Preparation Faculty	Descriptive Statistics

<p>Research Question 3. How does participation in IPE equip preprofessional teachers with imperative communication, problem-solving, and leadership skills needed in the modern kindergarten through twelfth-grade (K–12) public school setting?</p> <p>Evaluation Question 3d. In what ways are teacher prep students taught to understand the professional roles and responsibilities of other professionals in which they will have professional interaction?</p>	<p>Output: Evaluate recent teacher preparation graduates' level of preparedness to interact with other professionals upon entering their profession.</p> <p>Outcome: Short-Term Teacher preparation students will learn about the professional roles and responsibilities of other professionals in which they will have professional interaction.</p> <p>Medium-Term Teacher preparation students will understand the professional roles and responsibilities of other professionals in which they will have professional interaction.</p> <p>Long-Term Interprofessional education experiences are consistently used to provide teacher preparation students with opportunities for collaboration and they understand their own profession in relation to others.</p>	Semistructured Zoom interview	<p>Purposeful sampling of former teacher preparation students from graduating classes of 2018 and 2019. Only inclusive of former students who have completed one to four semesters teaching in a kindergarten through twelfth-grade (K–12) setting.</p>	Qualitative inquiry with primary coding for themes
<p>Research Question 3. How does participation in IPE equip preprofessional teachers with imperative communication, problem-solving, and leadership skills needed in the modern kindergarten through twelfth-grade (K–12) public school setting?</p> <p>Evaluation Question 3e. What types of IPE experiences were most formative for the teacher preparation students in their development of collaboration and leadership?</p>	<p>Output: Provide teacher preparation students with IPE experiences during preprofessional training with facilitation from faculty and outside stakeholders.</p> <p>Outcome: Short-Term Discover areas for IPE opportunities in existing courses.</p> <p>Medium-Term Integrate IPE experiences into existing courses.</p> <p>Long-Term Interprofessional education experiences are consistently used to provide teacher preparation students with opportunities for collaboration and they understand their own profession in relation to others.</p>	Semistructured Zoom interview	<p>Purposeful sampling of former teacher preparation students from graduating classes of 2018 and 2019. Only inclusive of former students who have completed one to four semesters teaching in a kindergarten through twelfth-grade (K–12) setting.</p>	Qualitative inquiry with primary coding for themes

<p>Research Question 3. How does participation in IPE equip preprofessional teachers with imperative communication, problem-solving, and leadership skills needed in the modern kindergarten through twelfth-grade (K–12) public school setting?</p> <p>Evaluation Question 3f. What are the most important skills needed for collaboration with other professionals?</p>	<p>Outcome:</p> <p>Short-Term Teacher preparation students will learn about teamwork and collaboration.</p> <p>Teacher preparation students will learn effective communication skills.</p> <p>Teacher preparation students will learn leadership skills.</p> <p>Medium-Term Teacher preparation students collaborate and work on IPE teams.</p> <p>Teacher preparation students effectively communicate during planning and IPE experiences.</p> <p>Teacher preparation students distribute leadership roles and exhibit personal leadership skills during IPE experiences.</p> <p>Long-Term Teacher preparation students are prepared and equipped to collaborate with other professional stakeholders in order to better serve the diverse needs of students in their classrooms.</p>	Semistructured Zoom interview	<p>Purposeful sampling of former teacher preparation students from graduating classes of 2018 and 2019. Only inclusive of former students who have completed one to four semesters teaching in a kindergarten through twelfth-grade (K–12) setting.</p>	Qualitative inquiry with primary coding for themes
<p>Research Question 3. How does participation in IPE equip preprofessional teachers with imperative communication, problem-solving, and leadership skills needed in the modern kindergarten through twelfth-grade (K–12) public school setting?</p> <p>Evaluation Question 3g. What are the outside stakeholder's perspectives on student readiness for collaboration with other professionals to meet the diverse needs of students in kindergarten through twelfth-grade (K–12) settings?</p>	<p>Outcome:</p> <p>Long-Term Teacher preparation students effectively communicate during planning and IPE experiences.</p> <p>Teacher preparation students distribute leadership roles and exhibit personal leadership skills during IPE experiences.</p>	Texas Education Agency (TEA) Principals Appraisal Survey	Texas Education Agency Principals Appraisal Survey responses of first-year teachers from the identified teacher preparation program	Quantitative analysis and descriptive and comparative statistics from the accountability system for educator preparation programs

Upon completion of the data analysis and coding of the interviews, I provided a full written report including thematic findings, applicable vignettes, results of the study, and future implications. Information from at least three different sources was obtained to achieve triangulation and saturation. Saldaña and Omasta (2018) stated that qualitative research should

consider “the first principle of triangulation, which involves considering data from at least three different sources to help ensure more dimension to the data” when determining the number of participants (Saldaña & Omasta, 2018, pp. 98–99). This study’s population sources were current teacher preparation faculty, recent graduates from the 2018–2019 academic year, and Texas school principals. These sources were noted in the Data Sources section of the Evaluation Matrix in Figure 4. Additionally, the program evaluation results were shared with the identified teacher preparation program’s faculty and the College of Education and Human Services (CEHS). I shared both positive and negative outcomes. The final program evaluation report included how the current teacher education program aligned with accreditation standards outlined by the Association for Advancing Quality in Educator Preparation (AAQEP) ideals and provided future recommendations based on those findings (Patton, 2015).

Methods for Establishing Trustworthiness

There were four perspectives identified to establish trustworthiness in the qualitative aspect of this research. Those four perspectives were credibility, transferability, dependability, and confirmability (Saldaña & Omasta, 2018). I established credibility by thoroughly reviewing the literature surrounding IPE and how it connected to teacher preparation training programs and professional expectations. Interprofessional education is primarily researched and implemented in healthcare training programs (Dobbs-Oates & Wachter Morris, 2016; Zorek & Raehl, 2013). Therefore, it was important to make clear connections of the potential value of IPE to teacher preparation programs (Dobbs-Oates & Wachter Morris, 2016; Witt Sherman et al., 2017; Zorek & Raehl, 2013). Presenting theories and methodologies in the literature review were also important for establishing credibility.

As a means to enhance transferability, I thoroughly described the context of the study. Rich contextual descriptions provide future researchers with tools to make decisions about how to apply the design and findings in other situations (Creswell & Poth, 2018). The context of the study is the lens in which the methodological approach and findings can be viewed (Creswell & Poth, 2018). The context for this mixed-method program evaluation was a four-year undergraduate teacher preparation program at a small private liberal arts university.

An outside stakeholder with K–12 public school experience and another colleague with qualitative research experience completed a second coding pass on a small sample of the interviews “to ensure the consistency and thus accuracy of the analysis” (Saldaña & Omasta, 2018, p. 272). The second coding pass was an effort to strengthen the credibility and dependability of the study. I committed to thoroughly reviewing the data, creating an audit trail of memos, and using reflection throughout the mixed-methods program evaluation (Saldaña & Omasta, 2018). Creating an audit trail through memoing is the technique of documenting thought processes, ideas, and key concepts as a means to clarify understanding and establish confirmability of a study (Creswell & Poth, 2018). I made sure to share both successes and failures within the research to maintain transparency.

To establish trustworthiness within the quantitative aspect of this research, I ensured that the research questions were aligned with the approved Texas Administrative Code Teacher Standards (2014) in Appendix A, the corresponding accreditation standards outlined by the Association for Advancing Quality in Educator Preparation (AAQEP, 2020b) in Appendix B, and the Texas Education Agency Principal Survey (TEA, 2020) in Appendix E.

Ethical Considerations

I maintained compliance with the university's institutional review board (IRB) by using ethical research procedures during the study. I successfully completed university IRB ethics training as well as a web-based training on Protecting Human Research Participants. Informed consent documents were sent to all participants. I introduced myself, outlined the study, and provided confirmation of time commitment and interview structure (Saldaña & Omasta, 2018). Due to COVID-19 restrictions and guidance from the university IRB, I avoided face-to-face meetings with human subjects. I obtained IRB approval before beginning the process of data collection. I also obtained written approval from the dean of the College of Education and Human Services and written approval from the chair of Teacher Education to complete the mixed-methods program evaluation of the identified teacher preparation program (Creswell & Poth, 2018).

Role of the Researcher and Positionality

Informed by the nature of collaboration in IPE and common characteristics of program evaluation, a collaborative approach to this study was logical when addressing the lack of IPE present in the teacher preparation curriculum. Collaboration among stakeholders in program evaluation provides more meaningful and accurate results (Wright & Wallis, 2019). In this study, I created, administered, and evaluated the needs assessment tool (see Figure 3) that was completed by teacher preparation faculty in the College of Education and Human Services (CEHS). The needs assessment tool (see Figure 3) is aligned with the updated accreditation standards and expectations from the AAQEP. I also conducted any necessary interviews and follow-up with participating faculty, recent graduates, or other professional stakeholders.

Research participants may face psychological, physical, social, economic, legal, or confidentiality risks when engaging in a study (Saldaña & Omasta, 2018). There were risks to taking part in this study; however, those risks were minimal. Participant loss of confidentiality risk in this study was low, and measures to minimize loss of confidentiality risks were monitored throughout. I assured all participants that maintaining confidentiality was a priority during the study. I also provided a disclaimer that despite maximum efforts, there was a low possibility confidentiality would be breached (Saldaña & Omasta, 2018). Faculty participants may have experienced social discomfort during the needs assessment and course evaluation, but I assured them that results were only used to inform program goals of IPE implementation. I took appropriate measures to combat negative positionality and prevent possible influence that I may have had on recent graduate participant responses during the interview process (Creswell & Poth, 2018). There were no anticipated economic, psychological, physical, or legal risks for participating in this study.

Assumptions

Assumptions of this research were that IPE experiences would enhance communication and collaboration skills (Dobbs-Oates & Wachter Morris, 2016; Zorek & Raehl, 2013). Based on the literature surrounding IPE, it was assumed that IPE experiences in teacher preparation programs generate interprofessional respect and that more IPE experiences provide teacher preparation students with the appropriate skills needed to effectively collaborate with other professionals (Dobbs-Oates & Wachter Morris, 2016). It was also assumed that teacher preparation students glean collaboration, teamwork, and skills from IPE experiences with which they can recall and transfer into professional practice.

Limitations and Delimitations

Potential bias may have existed within this study as I am an instructor in the identified teacher preparation program. I am also the director of IPE for the College of Education and Human Services (CEHS). Positionality among faculty and recent graduate participants was recognized and minimized by all means credible (Saldaña & Omasta, 2018). After completion of the primary coding passes on all interviews with recent teacher preparation graduates, and to combat possible positionality, I asked another colleague and outside professional stakeholder with experience in the K–12 public setting to complete a secondary coding pass on randomly selected interviews (Creswell & Poth, 2018; Saldaña & Omasta, 2018).

I acknowledged the population and gender bias within this study due to the overwhelming number of females in both the teaching profession and in the identified teacher preparation program. More than half of the recent graduates in the employment data spreadsheet and from the identified teacher preparation program were female. I acknowledged this in the limitations and transferability report.

Another delimitation of the study was the focus on social workers, OTs, PTs, child life specialists, and family advocates in the “other professionals” category of the literature review. While there are other professionals who work in the school setting, for example, school counselors and speech and language pathologists (SLPs), the focus on professionals who are not typically trained during their preprofessional programs to work in a school setting was intentional. The rationale for the focus on these professional stakeholders was supported by the common misunderstanding of their role and responsibility in the K–12 school setting. Teachers commonly understand the role and responsibility of an administrator, school counselor, speech and language pathologist, or curriculum specialist but rarely anticipate the need to understand the

roles and responsibilities of social workers, OTs, PTs, child life specialists, or family advocates (Dobbs-Oates & Wachter Morris, 2016; Hartmann, 2016). Additionally, these stakeholders do not serve as instructional specialists and are often labeled as “related services” (Gherardi & Whittlesey-Jerome, 2018; Phillippo & Blosser, 2013).

I only completed the mixed-methods program evaluation on one teacher preparation program, and the focus of the evaluation was on IPE. An additional delimitation of the study was time allocation. It would have been beneficial for the identified teacher preparation program, as well as other teacher preparation programs, to conduct this study over time and reevaluate the program each year as teacher preparation faculty further implement IPE instruction and experiences into the curriculum and specific course content.

Chapter Summary

Program evaluation is a valuable tool used by researchers to evaluate program effectiveness and provide recommendations for program improvement (Patton, 2015). Finding the right direction for program evaluation is vital (Kaufman & Guerra-Lopez, 2013). A needs assessment tool, semistructured interviews with recent graduates, and the Texas Education Agency Principal Survey informed the program evaluation data and provided a clear vision moving toward change (Kaufman & Guerra-Lopez, 2013). Implementation of IPE into teacher preparation curriculum is a short-term outcome that ideally provides teacher preparation students with IPE skills in which to apply in their classrooms for the long term (Newcomer et al., 2015).

Chapter 4: Results

The purpose of this program evaluation was to identify elements of collaboration within interprofessional education (IPE) experiences and to provide suggestions regarding the future implementation of IPE experiences into the identified teacher preparation program. The research questions for this study include the following:

RQ1. What elements of collaboration exist within an IPE experience in a teacher preparation program?

RQ2. In what ways, if any, does the nature of collaboration in an IPE experience used in a clinical setting assist preprofessional teachers to better serve kindergarten through 12th-grade (K–12) students in public schools?

RQ3. How does participation in IPE equip preprofessional teachers with imperative communication, problem-solving, and leadership skills needed in the modern kindergarten through 12th-grade (K–12) public school setting?

I received university IRB approval prior to data collection. Content analysis and alignment to the Texas Administrative Code Teacher Standards and corresponding Association for Advancing Quality in Educator Preparation (AAQEP) standards and expectations was the first step to evaluating the need for IPE implementation. Eight of the 11 current full-time faculty in the identified teacher preparation program qualified to participate in the study. The three faculty members that did not participate in the needs assessment tool or content analysis were the researcher and two dissertation committee members. Faculty participants completed the IPE needs assessment tool (see Figure 3). The needs assessment tool was used to identify gaps between “what is” or the “current state” and “what could be” or the “desired state” in the identified teacher preparation program (Chen, 2015).

The needs assessment tool in Figure 3 aligned with the AAQEP expectations framework and standards. In standard two, it is written that “educator preparation programs should prepare students to collaborate with colleagues to support professional learning” (AAQEP, 2020b, p. 11). To satisfy and reflect on this standard, teacher preparation faculty rated how prepared they felt to design effective IPE experiences for undergraduate teacher preparation students and how prepared they felt to write objectives and learning outcomes aligned to selected IPE competencies for the courses they teach. The next three questions in the needs assessment tool (see Figure 3) addressed collaborative communication assignments, preparedness to use different pedagogical styles, and provided IPE experiences with professional stakeholders for undergraduate students. Standard three of the AAQEP (2020b) stated that “professional educator program faculty should engage multiple stakeholders, including completers, local educators, schools, and districts, in data collection, analysis, planning, improvement, and innovation” (p. 12). In standard four, AAQEP (2020b) outlined the expectation that teacher preparation faculty will provide teacher preparation students with “opportunities to engage the field’s shared challenges and foster and support innovation with local partners and stakeholders” (p. 12).

Faculty participants also performed a content analysis and alignment for the courses they currently teach. The content analysis included the faculty identifying areas of their course content in which they felt IPE could be naturally integrated. Faculty members provided future curriculum and program ideas about course instruction, assignments, projects, and field-related experiences via a follow-up email or in an open-ended question at the end of the needs assessment tool.

While gathering data from the needs assessment tool, I completed semistructured interviews with recent graduates from the identified teacher preparation program. The

semistructured interview included 10 questions with the intent to address the second and third research questions as well as evaluation questions eight through 12 in the evaluation matrix (see Figure 4). The evaluation matrix (see Figure 4) contains the research and evaluation questions, the logic model components, data sources, sampling, and data analysis. The viewpoints of recent graduates about professional roles and responsibilities as a teacher, evaluation of preliminary IPE experiences during preprofessional training, and preparedness for collaboration upon entering their teaching careers were sought through semistructured audio interviews to evaluate the current state of the teacher preparation program.

Recent 2018–2019 graduate participants were purposefully selected from an employment data spreadsheet. The employment data was maintained by the teacher certification officer for the identified teacher preparation program. The employment data spreadsheet included contact information, current employment status, grade level, and the content being taught by teacher preparation graduates of the identified program. The selection of recent graduates excluded those who are currently enrolled in graduate school programs. The recent teacher preparation graduates selected participated in a preliminary IPE experience as part of their training coursework and were the teacher of record for one to four semesters in a kindergarten through 12th-grade (K–12) context. Seven recent graduates met sampling criteria for the semistructured interview.

Graduates were solicited to participate in the semistructured interviews via email. Five of the seven recent graduates met the criteria and signed consent forms to participate in the interview process. The interviews were transcribed and analyzed using an *in vivo* coding method. The use of *in vivo* coding allowed me to highlight the participant's voice and extract exact words to give meaning to the data (Saldaña & Omasta, 2018).

In addition to faculty responses on the needs assessment tool, content analysis, and semistructured interviews with recent graduates, I reviewed the 2017–2018 Texas Education Agency Principal Survey results. The Texas Principal Survey is administered by the Texas Education Agency (TEA) to evaluate educator preparation programs (TEA, 2020). The Texas Education Agency Principal Survey is a new survey created by a panel of experts used to measure the performance of first-year teachers who graduated from state-accredited educator preparation programs (TEA, 2020). The identified teacher preparation program is recognized and accredited by TEA, and the results from the survey inform program decisions and goals. The survey assesses educator preparation programs' effectiveness in preparing first-year teachers to succeed in the classroom (TEA, 2020). Principals are required to complete the survey for newly certified first-year teachers employed in their schools, and the survey only applies to Texas educator preparation programs (TEA, 2020).

During the literature review portion of this study, I found that professional educators report feeling underprepared to collaborate with interdisciplinary teams (Anderson, 2013; Dobbs-Oates & Wachter Morris, 2016). The importance and necessity of collaboration among professionals in K–12 schools were evident in a study of the literature surrounding collaboration among teachers and other professionals. Providing robust IPE experiences throughout preprofessional training and in multiple contexts is emerging as a necessary component in state and revised national program accreditation standards and expectations. Additionally, integrating IPE experiences into preprofessional training may assist teacher preparation students to feel more equipped as they collaborate with other professional stakeholders during their professional careers. Educators should feel adequately prepared to collaborate with other professional stakeholders, such as social workers or mental health professionals, to provide holistic care for

the students they serve (Rosenfield et al., 2018). Other professional stakeholders are those who have a vested interest in a program (Chen, 2015).

Research Question 1

Research question 1 for this study addressed the elements of collaboration that existed within an interprofessional education (IPE) experience in the identified teacher preparation program. A mixed-method program evaluation was used to evaluate both the current state and desired state of each primary research question using multiple data sources. Research question number 1 was, “What elements of collaboration exist within an IPE experience in a teacher preparation program?” To address this research question, three aligned evaluation questions and two data sources were used during the study (see Figure 4). The data sources included content analysis of the identified teacher preparation program curriculum and a needs assessment tool completed by current teacher preparation faculty.

After thematic analysis of the data sources for research question one, the main theme, common themes, and subthemes are included in Table 1. The main theme for research question one was collaboration in IPE. The themes in the content analysis with faculty members were that IPE is a missing component in the current teacher preparation curriculum, and the most natural integration of IPE should target field placement courses. In the needs assessment tool, the current and desired states of faculty’s preparedness to both design effective IPE experiences and write IPE objectives and learning outcomes were common themes. Subthemes for research question one were the effective design of IPE experiences and the faculty members feeling prepared to align objectives and outcomes to IPE competencies.

Table 1*Themes for RQ1*

Main Theme	Theme(s)	Subtheme(s)
Collaboration in IPE	Missing component in current curriculum	Effective design of IPE experiences
	Targeting field placement courses	Prepared to align objectives and outcomes to IPE competencies
	Current state	
	Desired state	

Evaluation Question 1a

Evaluation question 1a was, “What types of interprofessional education (IPE) experiences are used to prepare teacher preparation students to collaborate with other professionals?” The data source for this question was the content analysis of the program curriculum. Faculty participants evaluated existing course syllabi for natural integration of IPE and sent course and program improvement ideas to me via email. A common theme in the responses from faculty participants was that the implementation of IPE was a missing component in the current curriculum. One faculty member wrote the following in the final open-ended section of the needs assessment tool:

I think that IPE is an important piece that has been missing in our program. Our last principal survey data indicated that many of our students still struggle with special education (SPED) and English as a Second Language (ESL) students. I think that if they were better equipped to work with specialists and interventionists and felt confident knowing their roles that they would be more successful. There is SO much we cannot prepare them for, but I think equipping them with the skills needed to interact and be

knowledgeable about other stakeholders on their campuses, the more successful they'll be.

Another faculty member wrote, "I believe leadership is the key to successful systemic change." Faculty members desire for the current curriculum to contain varied and more robust IPE experiences for current students.

The most common theme among faculty members' ideas for natural integration of IPE experiences into current courses was to target courses that contain field placements and experiences with outside stakeholders. Students in courses with field experience are integrated into schools and classrooms in which they interact with students, teachers, parents, and other professional stakeholders such as administrators, counselors, school psychologists, social workers, occupational therapists (OTs), physical therapists (PTs), family advocates, and child life specialists.

Currently, students in the teacher preparation program only have one identified IPE experience. This experience takes place in a special education course that is required in the degree plan for all teacher candidates. This course does not include a field-based component. Students in this course are required to participate in a college-wide mock Admission, Review, and Dismissal (ARD) meeting. In order to prepare for the mock ARD meeting, teacher preparation students are put into groups with other students from across the College of Education and Human Services (CEHS). The students meet three to four times with their groups to share professional roles and responsibilities, review a case study, and make recommendations based on the services needed. The students also create an individualized education program (IEP) and present their goals and accommodations in a simulation experience with faculty and outside professional stakeholders from the community. This experience is designed to fulfill the IPE

definition and meet the IPE competencies created by the CEHS IPE Task Force (see Appendix C).

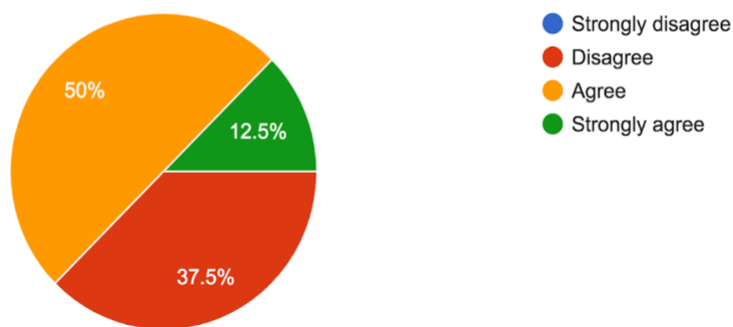
Evaluation Question 1b

Evaluation question 1b was, “I believe I am prepared to design effective interprofessional education (IPE) experiences for undergraduate teacher preparation students” (see Figure 4). The data source for evaluation question 1b was the needs assessment tool completed by participating faculty in the identified teacher preparation program. The identified themes from this data source are the current and desired state of preparedness to design effective IPE experiences. The first item in the needs assessment tool focused on the current and desired state of their preparedness to design effective IPE experiences. Faculty members responded on a scale from one to four and ranging from *strongly disagree* to *strongly agree*. The statement in the needs assessment tool was written identical to evaluation question three, “I believe I am prepared to design effective IPE experiences for undergraduate teacher preparation students.” The current state results for the first item are available in Figure 5. Only 12.5% of teacher preparation faculty participants in this study strongly agreed they are prepared to design effective IPE experiences. Fifty percent *agreed* and 37.5% *disagreed* that they are prepared to design effective IPE experiences.

Figure 5*Current State of Preparedness to Design Effective IPE Experiences*

I believe I am prepared to design effective IPE experiences for undergraduate teacher preparation students.

8 responses

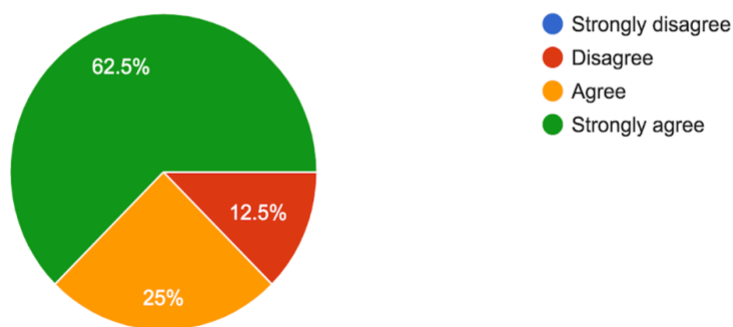


The desired state results for the first item in the needs assessment tool are available in Figure 6. Compared to the current state in Figure 5, 62.5% of teacher preparation faculty participants *strongly agreed* that they desire to be prepared to design effective IPE experiences for undergraduate teacher preparation students. Twenty-five percent *agreed* and 12.5% *disagreed* that they believe they desire to be prepared to design effective IPE experiences for undergraduate teacher preparation students. In Figures 5 and 6, it is visually clear that teacher preparation faculty express a desire for change as it relates to designing effective IPE experiences.

Figure 6*Desired State of Preparedness to Design Effective IPE Experiences*

I believe I am prepared to design effective IPE experiences for undergraduate teacher preparation students.

8 responses

*Evaluation Question 1c*

Evaluation question 1c was, “I believe I am prepared to write objectives and learning outcomes aligned to selected IPE competencies for the courses I teach” (see Figure 4). The data source for this evaluation question was the needs assessment tool completed by participating faculty in the identified teacher preparation program. The identified themes from this data source are the current and desired state of preparedness to write IPE objectives and learning outcomes. The second item in the needs assessment tool focused on the current and desired state of preparedness to write IPE objectives and learning outcomes. The statement in which the faculty responded is written identically to evaluation question four, “I believe I am prepared to write objectives and learning outcomes aligned to selected IPE competencies for the courses I teach.” The current state results of the second item in the needs assessment tool are disaggregated in Figure 7. Twenty-five percent of the teacher preparation faculty participants *strongly agreed* that they are currently prepared to write objectives and learning outcomes aligned with selected IPE competencies for the courses they teach. Currently, 37.5% of faculty participants *agreed*, and

37.5% *disagreed* that they are prepared to write IPE objectives and learning outcomes in their current courses.

The desired state for the second item of the needs assessment tool is found in Figure 8. The current and desired states for the second item, seen in Figure 7 and Figure 8, exhibit no change in percentages between *strongly agree*, *agree*, and *disagree*. In the desired state of item two, 25% of faculty *strongly agreed*, 37.5% of faculty *agreed*, and 37.5% *disagreed* that they believe they are prepared to write objectives and learning outcomes aligned to selected IPE competencies for the courses they currently teach.

Figure 7

Current State of Preparedness to Write IPE Objectives and Learning Outcomes

I believe I am prepared to write objectives and learning outcomes aligned to selected IPE competencies for the courses I teach.

8 responses

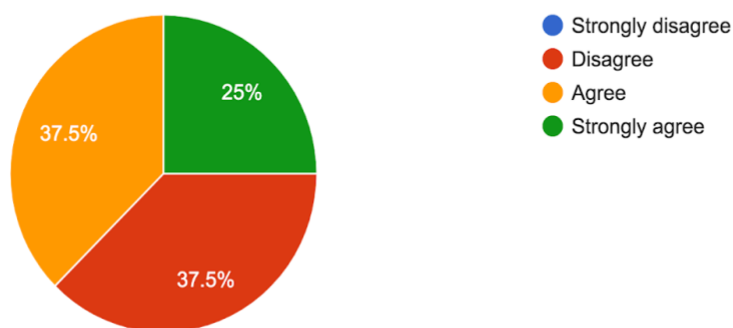
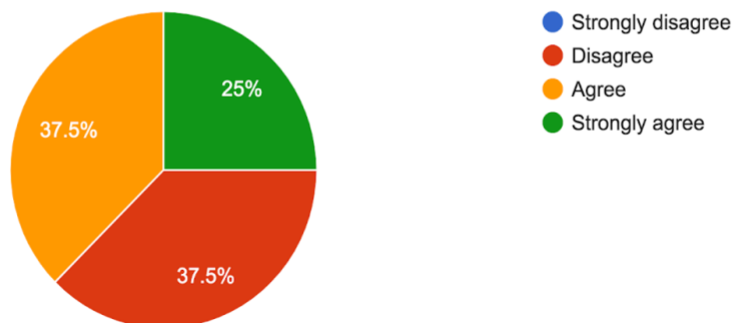


Figure 8*Desired State of Preparedness to Write IPE Objectives and Learning Outcomes*

I believe I am prepared to write objectives and learning outcomes aligned to selected IPE competencies for the courses I teach.

8 responses

**Research Question 2**

Research question 2 was, “How does the nature of collaboration in an IPE experience used in a clinical setting assist preprofessional teachers to better serve kindergarten through 12th-grade (K–12) students in public schools?” The purpose of this question was to evaluate collaborative experiences in the current teacher preparation program, define collaboration, and identify the benefits of using IPE for collaborative experiences with both internal and external stakeholders. Two data sources and aligned evaluation questions were used to address research question two. The specific data sources used were a needs assessment tool and semistructured interviews with purposefully selected recent graduates.

After a thorough review of the data from the needs assessment tool and the interviews, I identified the main theme, common themes, and subthemes (see Table 2). The main theme was the identification of collaborative training opportunities and experiences in the clinical setting. The themes from the needs assessment tool completed by faculty members were the current and

desired states of the capability of providing IPE opportunities that integrate internal and external stakeholders into their current courses. The common themes extracted from recent graduate participants' answers to the interview questions aligned with research question two were defining professional roles and responsibilities, meeting learning outcomes, safe learning environments, getting to know students, content knowledge, communication with parents, identifying other professional stakeholders and services, holistic care of students' needs beyond academics, diverse needs of students, and preprofessional training. The subthemes that emerged from the data were keeping students safe in the classroom and due to COVID-19 guidelines, scheduling, and working with aides or paraprofessionals.

Table 2

Themes for RQ2

Main Theme	Theme(s)	Subtheme(s)
Collaborative training opportunities or experiences in the clinical setting	Current state	Safety: COVID-19 guidelines
	Desired state	Schedules
	Meeting learning outcomes	Working with aides
	Safe learning environments	
	Getting to know students	
	Content knowledge	
	Communication with parents	
	Working with other professionals	
	Student's diverse and individual needs	
	Preparedness to participate in Admission, Review, and Dismissal (ARD) meetings	

Evaluation Question 2a

The fifth needs assessment item was written identical to evaluation question 2a (see Figure 4) and was used to evaluate the current and desired state of the faculty participants' belief in their capability to provide IPE opportunities that integrate other professional stakeholders. The identified themes from this data source were the current and desired state of the capability to provide experiences integrating stakeholders. Faculty rated themselves on a four-point scale from *strongly agree* to *strongly disagree*. "I believe I am capable of providing undergraduate students with IPE opportunities that integrate both internal and external stakeholders," was the statement in which the eight respondents rated themselves. Internal stakeholders in this program evaluation were students and faculty within the identified teacher preparation program. Outside stakeholders were identified as community members or other professionals in a related human service field or preprofessional program who have a vested interest in the identified teacher preparation program. Examples of outside stakeholders in this study included practicing teachers and administrators, social work students, nursing students, child and family studies students, OT students, school psychology students, and faculty from other departments or colleges.

Figure 9 represents the current state of faculty and beliefs of personal capability about providing IPE opportunities and inclusion of other professional stakeholders. Twenty-five percent of faculty members *strongly agreed*, 37.5% *agreed*, and 37.5% *disagreed* that they are currently capable of providing IPE opportunities that integrate internal and external stakeholders. Figure 10 represents a summary of the desired state for item five of the needs assessment tool. Compared to the current state in Figure 9, 50% *strongly agreed* that they desire the capability of providing IPE opportunities that integrate both internal and external stakeholders. Thirty-seven-point-five percent *agree* and 12.5% *disagreed* that they have the capability of providing IPE

opportunities that integrate both internal and external stakeholders. In comparing the data from the fifth needs assessment item, as seen in Figures 9 and 10, teacher preparation faculty express a desire for change as it relates to the steps it would take to feel capable of providing IPE opportunities with other stakeholders.

Figure 9

Current State of Capability of Providing IPE Opportunities That Integrate Internal and External Stakeholders

I believe I am capable of providing undergraduate students with IPE opportunities that integrate both internal and external stakeholders.

8 responses

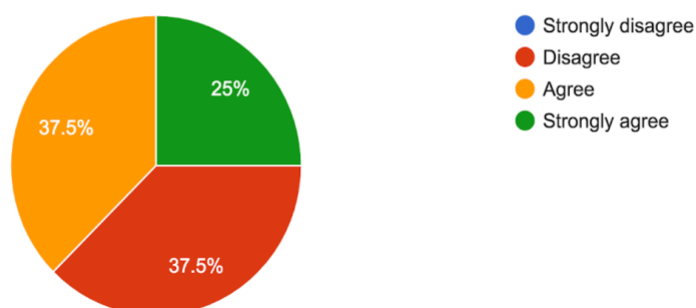
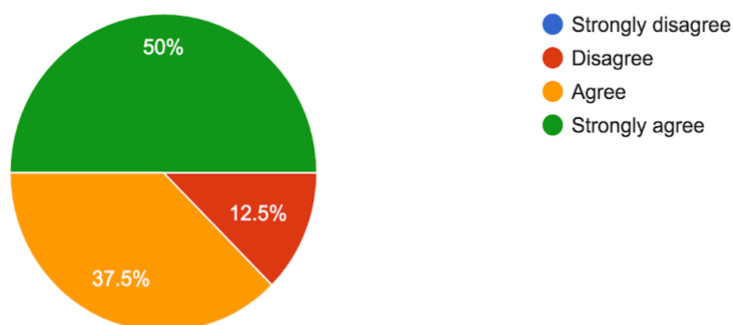


Figure 10

Desired State of Capability of Providing IPE Opportunities That Integrate Internal and External Stakeholders

I believe I am capable of providing undergraduate students with IPE opportunities that integrate both internal and external stakeholders.

8 responses



Evaluation Question 2b

Evaluation question 2b was, “In what ways are teacher prep students taught to understand and define their own professional roles and responsibilities” (see Figure 4). This evaluation question was used to develop two of the semistructured interview questions within the interview protocol. The common themes that emerged from these two questions, which focused on professional roles and responsibilities as a teacher, were guiding students to meet learning outcomes, creating safe learning environments, getting to know students, strong content knowledge, communication with parents, and working with other professionals to meet the students’ diverse needs. All five purposefully selected recent graduate participants were asked two questions related to defining their role as a teacher and naming their primary responsibilities as a teacher. As a means to maximize collaboration efforts and better serve K–12 students in public schools, preprofessional and practicing teachers should understand their professional role

and primary responsibilities (Dobbs-Oates & Wachter Morris, 2016; Trust et al., 2016). They should also have a clear understanding of their own profession in relation to other professionals they will encounter in a school setting (Dobbs-Oates & Wachter Morris, 2016; Trust et al., 2016).

The first interview question was, “How do you define your own professional role as a teacher?” Participant 1 stated, “I identify my role as a teacher as someone who is tasked with guiding students to meet learning objectives in a safe environment.” Participant 2 stated, “My professional role is to create an emotionally safe space for my students and to create deep and meaningful connections with them.” Participant 5 stated,

I define my own professional role as a teacher by getting to know my students and knowing the background knowledge that I need to teach my students ... knowing the core subjects [content knowledge], and what I need to know to teach them.

The second interview question was, “What are your primary responsibilities as a teacher?” Participant 1 stated, “My number one responsibility ... is to keep them safe. Then my other responsibilities are to help them learn to love learning and to help them see their own potential.” Participant 2 also addressed safety but focused on social distancing and COVID-19 guidelines. Participant 3 discussed “helping communicate with parents” and “working with other professionals in regards to services that the students might need, such as medications they need to take at certain times or services such as speech or occupational therapy.” Participant 3 and Participant 5 discussed working with other professionals to create daily schedules conducive to ensuring students receive the services they need. Participant 4 stated that her primary responsibilities as a teacher are “Helping the kids understand the content, working with them to keep them on top of homework, teach them responsibility and independence and stuff like that.”

Primary responsibilities as a teacher for Participant 5 are, “Getting to know each of my students’ backgrounds and their interests, getting to know how they are learning ... as well as different ways I can help them learn.”

Evaluation Question 2c

Evaluation question 2c was, “To what extent are teacher prep students prepared to collaborate with other professionals to meet the diverse needs of students in kindergarten through 12th-grade (K–12) settings” (see Figure 4). Three separate interview questions were used during the semistructured interviews with recent graduates to address evaluation question 2c. Each of the five recent graduate participants was asked one question about the influence of IPE on their preparedness to serve students with diverse needs. The other two questions in the interview protocol were focused on their interaction with other professionals. The common themes that emerged from responses to these three questions were feeling prepared to participate in an ARD meeting, understanding that students have individual needs, and feelings of preparedness to work with other professionals.

In response to the interview question, “How did the interprofessional experiences prepare you to serve students with diverse needs?” Participant 1 said, “It prepared me more by showing me how diverse students can be.” Participant 2 referred to the preliminary IPE ARD simulation that she participated in during her preprofessional training. She answered with the following:

It helped a lot with understanding how an ARD meeting works and the different people that would be in there. It helped me understand the differences in each child, and IEPs are very specific to the individual, and each kid needs something a little bit different.

Participant 3 said that she had not had the opportunity to participate in an ARD as a teacher, but she has referred students for speech evaluations. She said that the IPE experience during her

preprofessional training helped her be “aware of what to look for” and that she “understood what was expected” of her during the Response to Intervention (RTI) process. Participant 4 discussed accommodations for a student with Type 1 diabetes and the medical plan for a student with a seizure disorder. She said, “We had a meeting with the nurse and their parents and the school counselor at the beginning of the year to talk about the plans for every child for the year.”

Participant 5 said that because of the IPE experience, “I got to work with a lot of different students [other students in preprofessional programs] that had diverse backgrounds.” She explained that practicing in a clinical setting was helpful “because where I work now, we have a very diverse demographic at my school.”

Each recent graduate participant was also asked to identify other types of professionals they interacted with as a teacher. The other types of professionals mentioned by the recent graduate participants were the school nurse, speech therapist, school counselor, social workers, behavior interventionist, occupational therapist (OT), ESL specialist, and special education teachers and aides. Following the identification of other types of professionals, they were asked, “In what capacity are you interacting with other professionals?” Participant 1 stated, “I have been working with other professionals on a daily basis and with other gen ed professionals working to set assessments and to set learning objectives.” Participant 2 discussed getting to know other professionals on campus “since they typically will use the music classroom as a time to pull students.” She said, “It helps me build rapport with those professionals and then also I am able to go ask them my questions.” She also expressed that she felt underprepared to handle medical needs and accidents in her classroom. She stated, “going to her [school nurse] was really helpful, and I go to her office almost every other day to ask a couple of questions.”

At the time of the interview, Participant 3 was in the process of “referring a student to speech” and continuously collaborated with the speech therapist for students currently in speech. Participant 3 also worked with the campus English as a Second Language (ESL) specialist and the behavior interventionist on a consistent basis. She shared about “a student who is working with the social worker on a constant basis.” When asked about the capacity in which she was interacting with other professionals, Participant 4 said, “the nurse had a meeting with the child’s teachers to talk about their 504.” A section 504 plan is the result of a civil rights law set to protect students with disabilities while ensuring they receive accommodations or modifications in their least restrictive environment (Spiel et al., 2014; Vaughn et al., 2018). She said, “If there was an event that needed medical attention, I would call her.” She also talked about a student in her classroom with a seizure disorder and expressed a desire to feel more prepared when talking with the nurse. “I probably would have liked a little bit more training on the procedure for dealing with that child,” she mentioned. Participant 5 is primarily interacting with the ESL specialists. She said the following:

I have eight out of 19 kids that are served for ESL right now. I get to plan with my ESL aide to tell them what we are learning about that week so she can further help them in their assignments.

Research Question 3

Interprofessional education (IPE) consists of faculty, practicing professionals, and students from various professions learning together as a team. Interprofessional education experiences implemented in other preprofessional programs give students a relevant context in which to solidify their professional identity and practice interprofessional respect (Witt Sherman et al., 2017). Interprofessional respect includes clear communication, kind and ethical behavior

toward colleagues, active listening, motivation, encouragement, and constructive feedback (Dobbs-Oates & Wachter Morris, 2016). These interprofessional skills are important as teachers, administrators, and other professional stakeholders interact and advocate for the students they will serve in public schools. The purpose of research question three was to evaluate the current and desired states of activities in the identified teacher preparation program that are used to prepare teacher candidates for collaboration and communication with other professionals. Research question 3 was, “How does participation in IPE equip preprofessional teachers with imperative communication, problem-solving, and leadership skills needed in the modern kindergarten through 12th-grade (K–12) public school setting?” The specific data sources used to address research question three were the content analysis of the program curriculum, a needs assessment tool completed by participating faculty, semistructured interviews with recent teacher preparation graduates, and the Texas Education Agency Principal Survey.

After thematic analysis of the four data sources for research question 3, the main theme, common themes, and subthemes were identified and included in Table 3. The main theme for research question three is communication, also called interprofessional respect, in research surrounding IPE. The themes in the content analysis with faculty members were that IPE is a missing component in the current teacher preparation curriculum, and the most natural integration of IPE should target field placement courses. In the needs assessment tool, the current and desired state of faculty members’ current and desired state of preparedness to incorporate collaborative communication assignments and use of different pedagogical approaches were common themes. In the semistructured interview data, the main themes were relationships and rapport with families and other professionals. They also talked about the importance of communication with coworkers to benefit their practice and services for students.

Table 3*Themes for RQ3*

Main Theme	Theme(s)	Subtheme(s)
Communication	Missing component in current curriculum	Aides
	Targeting field placement courses	
	Current state	
	Desired state	
	Collaborative communication	
	Varied pedagogical styles	
	Relationships with families	
	Relationships with other professionals	
	Rapport	
	Lesson planning with colleagues and other professionals	
	Collaboration	
	Collaboration with students	
	Collaboration with families	

It was also revealed in the Texas Education Agency Principal Survey data regarding the identified teacher preparation program that collaboration with other professionals to meet the diverse needs of students and communication with students' families are important measures of evaluation and success in the first years of teaching. Subthemes for research question three were extracted from discussions about aides, students, and parents.

Evaluation Question 3a

Evaluation question 3a was, “How well do the IPE experiences prepare students for collaboration with other professionals” (see Figure 4). The data source for this question was the content analysis of the program curriculum. Faculty participants evaluated existing course syllabi for natural integration of IPE and sent course and program improvement ideas to me via email. Similar to the results from evaluation question 1a (see Figure 4), a common theme among faculty members’ responses was that the implementation of IPE into the current curriculum was a missing component in the current curriculum. Based on the definition of IPE provided to faculty in the needs assessment tool, faculty felt that intentional IPE implementation would better prepare students for collaboration with other teachers and other professionals. A faculty participant wrote the following:

I think that if they were better equipped to work with specialists and interventionists and felt confident knowing their roles that they would be more successful. There is SO much we cannot prepare them for, but I think equipping them with the skills needed to interact and be knowledgeable about other stakeholders on their campuses, the more successful they’ll be.

The most common theme among faculty members’ ideas for natural integration of IPE experiences into current courses was to target courses that contain field placements and experiences with outside stakeholders. Students in courses with field experience are integrated into schools and classrooms in which they interact with students, teachers, parents, and other professional stakeholders such as administrators, counselors, school psychologists, social workers, occupational therapists (OTs), physical therapists (PTs), family advocates, and child life specialists.

Evaluation Question 3b

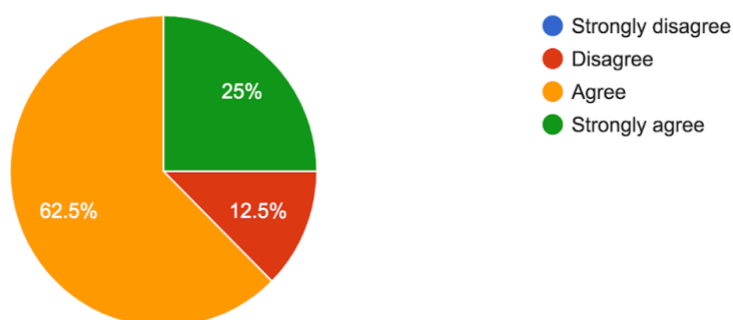
The third item in the needs assessment tool, which aligned to evaluation question 3b, was used to evaluate the current and desired state of preparedness to incorporate collaborative communication assignments (see Figure 4). Faculty responded to the statement, “I believe I am prepared to incorporate written, oral, and collaborative communication assignments (discussion, presentations, group meetings, etc.) in the courses I teach.” The identified themes from this data source are the current and desired state of preparedness to incorporate collaborative communication assignments. The current state results of the third item in the needs assessment tool are available in Figure 11. Twenty-five percent of the teacher preparation faculty participants *strongly agreed*, 62.5% *agreed*, and 12.5% *disagreed* that they were currently prepared to incorporate written, oral, and collaborative communication assignments in the courses they teach.

The desired state for the third item of the needs assessment tool is found in Figure 12. In the current and desired states for the third item (see Figures 11 and 12), there is no change in percentages between *strongly agree*, *agree*, and *disagree*. In the desired state of item three, 25% of faculty *strongly agreed*, 62.5% of faculty *agreed*, and 12.5% *disagreed* that they believed they were prepared to incorporate written, oral, and collaborative communication assignments into the courses they teach.

Figure 11*Current State of Preparedness to Incorporate Collaborative Communication Assignments*

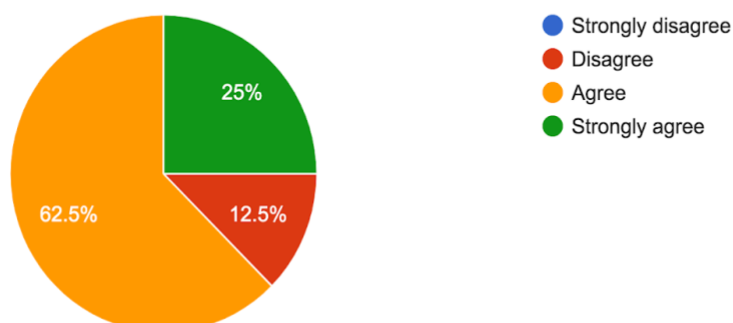
I believe I am prepared to incorporate written, oral, and collaborative communication assignments (discussion, presentations, group meetings, etc.) in the courses I teach.

8 responses

**Figure 12***Desired State of Preparedness to Incorporate Collaborative Communication Assignments*

I believe I am prepared to incorporate written, oral, and collaborative communication assignments (discussion, presentations, group meetings, etc.) in the courses I teach.

8 responses

***Evaluation Question 3c***

The fourth item in the needs assessment tool was used to evaluate the current and desired state of preparedness to use different pedagogical styles in the current curriculum. The fourth

item of the needs assessment tool was written in an identical format to evaluation question 3c (see Figure 4). The identified themes from this data source were the current and desired state of preparedness to use different pedagogical styles. Faculty rated themselves on a scale from *strongly agree* to *strongly disagree* in response to the statement, “I believe I am prepared to use different pedagogical styles when facilitating interpersonal, critical thinking, and problem-solving skills.” The use of one or a combination of constructivism through experiential learning, inquiry-based approaches, collaborative methods, and reflective practices were some of the pedagogical styles that were effective when facilitating interpersonal, critical thinking, and problem-solving skills. The identified themes from this data source were the current and desired state of preparedness to use different pedagogical styles. As seen in Figure 13, 37.5% of the faculty *strongly agreed* that they are currently prepared to use different pedagogical styles in their classroom. Half of the faculty participants *agree* with this statement, and 12.5% *disagreed* that they are currently prepared to use different pedagogical approaches.

Figure 13

Current State of Preparedness to Use Different Pedagogical Styles

I believe I am prepared to use different pedagogical styles when facilitating interpersonal, critical thinking, and problem-solving skills.

8 responses

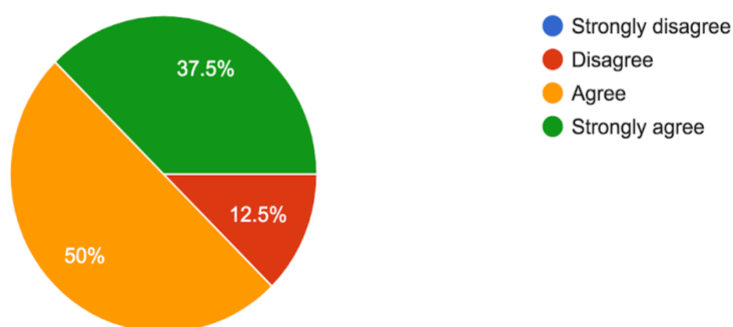


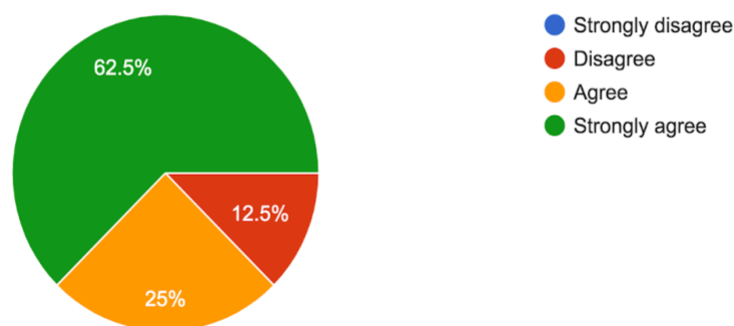
Figure 14 is a visual representation of the summary of the desired state responses to item four on the needs assessment tool. Compared to the current state in Figure 13, 62.5% *strongly agreed* that they desire the preparedness to use different pedagogical styles. Twenty-five percent *agree*, and only 12.5% *disagreed* that they desire the preparedness to use different pedagogical styles. In comparing the data from the fourth needs assessment item, as seen in Figures 13 and 14, it appears clear that teacher preparation faculty express a desire for change as it relates to using different pedagogical styles when facilitating interpersonal, critical thinking, and problem-solving skills.

Figure 14

Desired State of Preparedness to Use Different Pedagogical Styles

I believe I am prepared to use different pedagogical styles when facilitating interpersonal, critical thinking, and problem-solving skills.

8 responses



Evaluation Question 3d

Evaluation question 3d was, “In what ways are teacher prep students taught to understand the professional roles and responsibilities of other professionals in which they have professional interaction” (see Figure 4). The data source for this question was semistructured interviews with five purposely selected recent graduates. Recent graduates were asked one question about the influence of their preprofessional roles on their understanding of other professionals’ roles and

responsibilities. The common themes from the recent graduates' answers were that they learned the importance of working with other professionals and that building relationships and strong rapport would assist them in serving the "whole child."

The interview question was, "How did your preprofessional training influence your understanding of other professionals' roles and responsibilities?" In response to the interview question, Participant 1 said, "It showed me the importance of them [other professionals] beforehand." She went on to say, "I did not realize how many supporting roles there were ... I had not realized how many people there were to help each student succeed." Participant 2 said, "It impacted me a decent amount by exposing me to different people who might be in an education field ... like social work programs in schools." Participant 2 generally had positive things to say about her preprofessional training but felt underprepared to work with paraprofessionals. She stated, "I also do not feel like I was fully prepped for how to handle aides in the classrooms I am teaching in," and went on to say she has "struggled with creating a professional rapport with aides." Participant 3 said that "it was helpful to be made aware" and be given "tips on relationships" when working with other professionals. She continued, "I was also made aware of a lot of protocols that would be necessary to work with them, such as ARD [meetings] or RTI and communicating with nurses and looking at health forms and keeping things private." Participant 4 said that her preprofessional training taught her "that this is not just all about the content." She said, "We must work with these other professionals ... it is everything for the whole child." Participant 5 referenced the IPE ARD experience and said, "I got to practice collaborating with students and parents. I also got to practice collaborating with different co-workers whether I was collaborating with the principal or a team member on my grade level."

Evaluation Question 3e

Evaluation question 3e was, “What types of interprofessional education (IPE) experiences were most formative for the teacher preparation program students in their development of collaboration and leadership” (see Figure 4). The data source for this evaluation question was semistructured interviews with recent teacher preparation graduates. Recent graduate participants were asked two separate interview questions that corresponded with the evaluation question 3e. The common themes from the data provided in response to these two questions were lesson planning with colleagues and other professionals, collaboration during tutoring sessions, collaboration with students, and collaboration with families.

The first interview question they were asked was, “What types of interprofessional education experiences or collaboration experiences did you participate in during your preprofessional training?” Participant 1 discussed writing “unit plans together.” She went on to say the following:

We were tasked with creating lesson plans together and helping certain groups of students [by] trying to meet their needs. Since we were able to collaborate with other preprofessionals, I was able to be exposed to a lot of different methods and a lot of different styles that maybe were not [the styles] that I had known how to use, but I was able to learn from them.

Due to the semistructured nature of this interview, I also asked Participant 1, “What types of experiences did you have to collaborate with professionals outside of teacher education?” She said, “I was able to collaborate very closely with some social work majors during the ARD... and how they are able to help students outside of school.”

Participant 2 worked with a child life specialist during her preprofessional training. She also worked with “a social work major to tutor kids after school.” When asked about interprofessional experiences or collaboration experiences, Participant 3 said, “What comes to mind is was when we did this simulation ... and we played the roles of other professionals and how to work with them.” Participant 4 defined collaboration as “collaboration is sharing information, strategies, and practices that can help the child be successful.” When I asked her what she learned during preprofessional training about collaboration with other professionals, she struggled to provide a clear answer. She said, “I do not know everything. My training was more how to teach the material.” Participant 5 described participation in tutoring sessions and mock interviews.

The second question they were asked to further answer in evaluation question 3e was, “How did these interprofessional education experiences inform your current profession?”

Participant 1 stated the following:

As a teacher, it has left me a lot more open to possibilities of ways that students can get help when outside of my control ... but working with [other] professionals, it allowed me to see what other resources were available. So, I am better able to help them and provide them with even more resources.

Participant 2 said, “It made me realize that there are a lot more people that are invested in the child than just the classroom teacher and the parents ... I have other resources.” Participant 3 said she had to make a list of other “workers on campus” that included “other professionals such as the speech pathologist or the school nurse and the secretary.” Participant 4 said that she participated in a mock ARD experience in her special education class. “We had a mock ARD experience where we talked about the different needs of a child and then the professionals that

could step in those cases for the kinds of services that might be offered in a real-life situation.” She also stated, “it helped me look at the child instead of just their grades ... like what other things might the child be experiencing.” Participant 5 focused her response on collaboration with students and parents. She said the following:

It gave me insight into what I would be collaborating within my job now. I got to practice collaborating with students. I got to practice collaborating with parents in meetings via email, in person, over the phone, and I also got to practice collaborating with different coworkers.

Evaluation Question 3f

Evaluation question 3f was, “What are the most important skills needed for collaboration with other professionals” (see Figure 4). The data source for this evaluation question was semistructured interviews with recent teacher preparation graduates. They were asked two questions during the interview that focused on collaboration. The common themes in evaluation question 3f were the importance of collaboration among colleagues, collaboration with students, collaboration with families, and learning that they do not have to do their job in isolation.

The first question was, “How do you define collaboration, specifically relating to other professionals, in education?” Participant 1 defined collaboration as “people working together toward one goal ... and then on education it would be a group of people, not necessarily just teachers, working together toward the goal of helping students be safe and succeed in learning.” Participant 2 defined collaboration as “creating a rapport and asking for help.” Participant 3 said that collaboration was “working together for each other and with each other to meet the needs of the students.” Participant 4 said that “collaboration is sharing information, strategies, and practices that can help the child be successful and help the teacher and the child build a better

academic relationship.” Participant 5 said, “I define collaboration by getting to use our voices to talk with each other and share our ideas and our thoughts.”

The second question was, “What did you learn about collaboration with other professionals during your preprofessional training?” Participant 1 said that “collaboration was a lot more important than I had previously thought ... I had been of the mindset that I needed to do it all by myself.” As participant 4 continued to discuss collaboration during her preprofessional training, she stated the following:

If I am doing it all by myself, then the students are going to hurt from that because there is only so much one person can do. When you collaborate, you have so many more resources available and so many more learning styles available that it helps reach even more students.

Participant 2 said,

Working with different people has let me understand the different types of diagnoses that happen ... where I cannot do it this way because there is a physical reaction and so working with, especially medical professionals, has really helped me understand how I should react to students.

Participant 3 said, “I learned to be very careful about what you say and when you say because there are a lot of rules and laws that I did not want to break. I learned to ask questions rather than assume.” Participant 4 said, “Collaboration is important because even though I did have all this training, I do not know everything.” She learned “what resources are available and how to get people in connection with those resources.” Participant 5 said that collaboration is “a key role in how I make connections with other people, whether it is students, whether it is parents, whether it is coworkers.”

Evaluation Question 3g

Evaluation question 3g was, “What are the outside stakeholders’ perspectives on student readiness for collaboration with other professionals to meet the diverse needs of students in kindergarten through 12th-grade (K–12) settings” (see Figure 4). The data source used for this evaluation question was the Texas Education Agency Principal Survey. Texas school principals are identified in this study as an outside stakeholder to the identified teacher preparation program. This report presents results from the principal survey of first-year teachers. Percentages note the percent of teachers prepared by an educator preparation program (EPP) that received an average score of *sufficiently prepared* or *well prepared* when all applicable questions were averaged and within each of the six categories. The overall percentage serves as indicator 2 of the Accountability System for Educator Preparation (ASEP) Accountability Performance Indicators. The percentages within each category are consumer information required by the Texas Education Code. In the 2017–2018 Texas Education Agency Principal Survey, the identified teacher preparation program had an overall score of 89 in comparison to the state average of 73. In the category of working with students with disabilities, principals evaluate a new teacher’s ability “to collaborate with others such as paraeducators and teachers.” The identified teacher preparation program was rated at 92% on this item. In the area of building and maintaining positive relationships rapport with students, they received a 91% rating. In the area of building and maintaining positive rapport and two-way communication with students’ families, they received a 97%. After a closer look at each question in each category, there were identified themes for improvement in the areas of preparing preservice teachers to collaborate with other professionals to meet the diverse needs of their students.

Chapter Summary

Collaboration among teachers and other professional stakeholders is a key component to providing students in kindergarten through 12th grade (K–12) with academic, social, emotional, and medical needs. Both teacher preparation faculty members and recent graduates expressed the benefits of collaborative experiences in preprofessional training and a desire for continued implementation of interprofessional education (IPE) experiences into the identified teacher preparation program. Faculty participants desired change in courses with a field-based component and overall program curriculum. They also expressed a need for clear definitions of IPE and consultation with other professionals and corresponding training programs for future implementation. Recent graduates expressed the importance of even one IPE experience on their current ability to identify their own professional roles and responsibilities and those of other professionals they commonly collaborate with to meet the diverse needs of the students they serve.

Chapter 5: Discussion, Conclusions, and Recommendations

Educators in teacher preparation programs are expected by local and national accrediting agencies, such as the Texas Education Agency (TEA) and the Association for Advancing Quality in Educator Preparation (AAQEP), to prepare preprofessional teachers to collaborate with other professionals and equip them with communication skills for meaningful collaboration. It is important for preprofessional teachers to be aware of both their own professional roles and responsibilities and those of other professional stakeholders with which they will work in a school-based setting. The professional stakeholders identified in this study were teachers, social workers, occupational therapists (OTs), physical therapists (PTs), child life specialists, and family advocates. Training preprofessional educators and other professionals about the holistic care of K–12 students within an isolated and discipline-specific context can prove problematic when collaboration is required later in their professional roles (Rosenfield et al., 2018). When educators and other professional stakeholders utilize a more integrated approach to understand the corresponding roles and responsibilities of each team member, greater student success and improved schools often result (Dobbs-Oates & Wachter Morris, 2016; Trust et al., 2016).

In response to a common desire from health and human service professionals for purposeful interdisciplinary training, licensure programs are progressively integrating interprofessional education (IPE) into preprofessional curricula (Witt Sherman et al., 2017). Interprofessional education initiatives are commonly utilized in healthcare training programs with set initiatives, frameworks, and competencies (Dobbs-Oates & Wachter Morris, 2016; Zorek & Raehl, 2013). However, IPE is underutilized in other professional curricula such as teacher preparation, child and family studies, communication disorders, and social work (Dobbs-Oates & Wachter Morris, 2016). Interprofessional education is gaining traction as a

recommended feature for all higher education professional curricula (Halupa, 2015).

Interprofessional education experiences are designed by stakeholders and facilitators to provide students in preprofessional training programs with active learning experiences to transfer into future professional settings (Abrandt Dahlgren et al., 2016; Dobbs-Oates & Wachter Morris, 2016).

A needs assessment and content analysis of the teacher preparation program regarding the implementation of IPE experiences to better prepare preprofessional teachers was completed to identify areas of curricular growth and desire for change. Prior to this study, no formal program evaluation had been completed regarding the implementation of IPE into the identified teacher preparation program. The purpose of this program evaluation was to identify elements of collaboration within IPE experiences and provide suggestions regarding the future implementation of IPE experiences into the identified teacher preparation program.

Various participants and stakeholders contributed to the findings of this study. Participants included teacher preparation faculty, recent teacher preparation graduates, and Texas school principals who were identified as an outside stakeholder resource. A needs assessment tool completed by teacher preparation faculty members was the first step in the data collection process. The needs assessment tool was used to identify gaps between “what is” or the “current state” and “what could be” or the “desired state” in the identified teacher preparation program (Chen, 2015). After completing the IPE needs assessment tool, faculty participants performed a content analysis and alignment for the courses they currently teach. The second step in the data collection process was semistructured interviews with recent teacher preparation graduates. The final step in data collection was the review and analysis of the Texas Education Agency Principals Survey of educator preparation programs.

The discussion section of this chapter includes conclusions related to each of the three primary research questions and the perceived limitations of the study. The chapter also includes implications for future practice in the identified teacher preparation program, recommendations for the integration of IPE, and recommendations for future research based on the findings within the study.

Discussion

Research Question 1: What Elements of Collaboration Exist Within an IPE Experience in a Teacher Preparation Program?

The purpose of this research question was to identify the elements of collaboration that exist within an interprofessional education (IPE) experience in the identified teacher preparation program. To investigate this research question during the study, I used three aligned evaluation questions from the evaluation matrix (see Figure 4) and two data sources during the study. The data sources included content analysis of the identified teacher preparation program curriculum and a needs assessment tool; both sources were completed by current teacher preparation faculty. The themes in the content analysis with faculty members were that IPE is a missing component in the current teacher preparation curriculum, and the most natural integration of IPE should target field placement courses. In the needs assessment tool, the current and desired states of faculty's preparedness to both design effective IPE experiences and write IPE objectives and learning outcomes were common themes.

The main theme for research question 1 was collaboration in IPE. Collaboration is an important component of an IPE experience. Interprofessional education experiences are designed for two or more students from different professional training programs to collaborate and learn alongside one another (Dobbs-Oates & Wachter Morris, 2016). After a thorough review of the

literature and analysis of the research data, I believe it is imperative for teacher preparation programs to intentionally train preprofessional teachers on how to collaborate with their colleagues and other professionals. Collaborative training in a preprofessional setting allows preprofessional students to practice important communication and leadership skills with the support and formative feedback from faculty and other professional stakeholders. During an IPE experience, preprofessional students are allowed to stop, think, regroup, or ask questions to combat continued misconceptions before they enter their professional setting.

There are a number of issues that undermine collaboration and teamwork among educators and other professional stakeholders once they are working in schools, such as lack of preprofessional training, insufficient time for consultation, and lack of communication skills (Rosenfield et al., 2018). Educators reported feeling underprepared to collaborate with interdisciplinary teams and requested more training in interprofessional skills (Dobbs-Oates & Wachter Morris, 2016). When educators feel undertrained or underprepared, they carry negative attitudes and beliefs about the effectiveness of multidisciplinary teams and exhibit disengagement or resistance during the process of collaboration (Rosenfield et al., 2018). Interprofessional education is designed to be used within preprofessional programs providing collaboration training that is transferable into professional careers, with goals to decrease feelings of frustration and lack of preparedness (Dobbs-Oates & Wachter Morris, 2016).

Faculty participants in this study commonly stated that field placement courses should target the most natural integration of IPE into the current curriculum. Interprofessional education experiences include simulations, experiential learning, collaboration with colleagues, collaboration with other professional stakeholders, and internships with interprofessional components (Abrandt Dahlgren et al., 2016). Interprofessional education is most effective when

it reflects authentic service settings likely to be experienced by the learners now or in the future (Hammick et al., 2007). In addition to a field-based experience, an example of an authentic service setting is students in a teacher preparation program engaging in a multidisciplinary team meeting to create an individualized education program for a student with special needs in a simulated setting.

Currently, teacher preparation students in the identified program have only one IPE opportunity. The IPE opportunity is integrated into a special education course that students seeking teacher certification at all levels are required to complete for satisfaction of their degree. The targeted course does not include a field-based component. Students in the special education course are required to participate in a college-wide mock Admission, Review, and Dismissal (ARD) meeting. During an ARD meeting, a group of educators, parents, and other professional stakeholders determine whether or not a student is eligible for special education services (Idol, 2006). In order to prepare for the mock ARD meeting, teacher preparation students are put into collaborative groups with preprofessional students from various departments and courses across the College of Education and Human Services (CEHS). They meet three to four times with their groups to share professional roles and responsibilities, review a case study, and make recommendations based on the services needed. The preprofessional multidisciplinary groups also create an individualized education program (IEP) and present goals and accommodations in a simulation experience with faculty and outside professional stakeholders from the community.

Overall, teacher preparation faculty members expressed a desire for change in providing more collaborative IPE experiences with both inside and outside stakeholders in the courses they teach. Faculty identified leadership and communication as important aspects of collaboration. The consistent elements of collaborative practice in the IPE literature are leadership,

communication, responsibility, mutual trust and respect, autonomy, and assertiveness (Way et al., 2000). More than half, 62.5%, of the faculty participants *strongly agree* that they desire to be prepared to design effective IPE experiences for undergraduate teacher preparation students.

All of the courses that were analyzed by faculty participants include collaborative experiences in lesson planning and processing content with other teacher preparation candidates but rarely include collaboration with outside professional stakeholders. The courses with the most access to outside professional stakeholders were courses that include a field component. Courses that include field experiences allow for teacher candidates to interact with students, teachers, parents, and other professional stakeholders such as administrators, counselors, school psychologists, social workers, occupational therapists (OTs), physical therapists (PTs), family advocates, and child life specialists. While there was no overall change in the needs assessment data between the current and desired states of preparedness to write IPE objectives and learning outcomes, 25% of faculty *strongly agreed* and 37.5% *agreed* that they desire to be more prepared in this area. I believe that further understanding of IPE and the important elements of collaboration in an IPE experience will benefit faculty members as they modify assignments, projects, and assessments to include IPE. Aligning IPE competencies to current course objectives and learning outcomes will serve as a launching point for authentic integration of IPE into the curriculum.

Research Question 2: How Does the Nature of Collaboration in an IPE Experience Used in a Clinical Setting Assist Preprofessional Teachers to Better Serve Kindergarten Through 12th-Grade (K–12) Students in Public Schools?

The purpose of this question was to evaluate collaborative experiences in the current teacher preparation program, define collaboration, and identify the benefits of using

interprofessional education (IPE) for collaborative experiences with both internal and external stakeholders. Two data sources and aligned evaluation questions (see Figure 4) were used to address research question 2. The specific data sources used were a needs assessment tool and semistructured interviews with purposefully selected recent graduates. The main theme from the data for research question 2 was the identification of collaborative training opportunities and experiences in the clinical setting. The clinical setting in this study is identified as a learning environment or closely simulated setting that includes both inside and outside stakeholders. The themes from the needs assessment tool completed by faculty members were the current and desired states of the capability of providing IPE opportunities that integrate internal and external stakeholders into their current courses. Common themes extracted from recent graduate participants' answers to the interview questions aligned with research question two were defining professional roles and responsibilities, meeting learning outcomes, safe learning environments, getting to know students, content knowledge, communication with parents, identifying other professional stakeholders and services, holistic care of students' needs beyond academics, diverse needs of students, and preprofessional training.

Teacher preparation faculty participants in this study expressed a desire for change as it relates to the steps it would take to feel capable of providing IPE opportunities with other stakeholders. In the needs assessment data, 50% of the participating faculty members *strongly agreed* that they desire the capability of providing IPE opportunities that integrate both internal and external stakeholders. Interprofessional education experiences embedded in preprofessional training programs and clinical settings should be constructed to prepare preservice teachers with important communication and leadership skills needed for collaboration with both internal and external stakeholders. Interprofessional education experiences are inherently collaborative and

require two or more preprofessionals to participate in active collaboration and learn alongside one another (Dobbs-Oates & Wachter Morris, 2016; WHO, 2010). During an IPE experience in a clinical setting, faculty, colleagues, or outside stakeholders have the opportunity to provide formative feedback in a timely manner to enhance the mastery of collaborative skills (Hattie & Timperley, 2007). The teacher preparation faculty in the identified program were already skilled in some of the foundational aspects of an IPE experience, such as formative and timely feedback. The key to systemic change to the current curriculum and instruction would be the inclusion of other professional stakeholders.

In the literature used to inform accreditation standards and expectations, it is recognized that integrating outside stakeholders into teaching and learning sustains improved learning outcomes. Quality teacher preparation in higher education requires meaningful partnerships to provide preservice students with integrated experiences that mirror what they encounter in schools as professional educators (Stein & Stein, 2016). Teachers “cultivate their craft” through authentic experiences, much like other adults in professional fields (Camburn & Han, 2015, p. 512). Local schools are a critical context for stakeholder partnerships, but teacher preparation programs should also seek opportunities for internal partnerships within the university (Stein & Stein, 2016). The Texas Administrative Code (2014) contains the detailed performance standards set as guidelines for preprofessional training, appraisal, and professional development of teachers (see Appendix A). The professional practices and responsibilities of educators are specifically addressed in standard six of the Texas Administrative Code. The TEA expects that “teachers consistently hold themselves to a high standard for individual development, pursue leadership opportunities, collaborate with other educational professionals, communicate regularly with stakeholders, maintain professional relationships, comply with all campus and school district

policies, and conduct themselves ethically and with integrity” (Teacher Administrative Code, 2014, p. 2).

Parallel to the Texas Administrative Code Teacher Standards, the AAQEP maintains in standards two, three, and four that quality teacher preparation programs should prepare preprofessional educators to engage with other professionals in professional practice as well as be engaged with system improvement (AAQEP, 2020b). The AAQEP is a national accrediting body for educator preparation programs and is the national accrediting body of the identified teacher preparation program in this study. See Appendix B for a complete version of the updated AAQEP Standards and Expectations Framework. Additionally, AAQEP requires programs with membership and in good standing to be innovative and promote improvement through stakeholder support (AAQEP, 2020a). The AAQEP (2020b) guide to accreditation outlines the following expectations and improvements for teacher preparation programs in standards two, three, and four:

Standard Two: Completer Professional Competence and Growth

Program completers adapt to working in a variety of contexts and grow as professionals. Program completers engage in professional practice in educational settings and show that they have the skills and abilities to do so in a variety of *additional* settings and community or cultural contexts. For example, candidates must have broad and general knowledge of the impact of culture and language on learning, yet they cannot, within the context of any given program, experience working with the entire diversity of student identities or in all types of school environments. Candidate preparation includes first-hand professional experience accompanied by reflection that prepares candidates to

engage effectively in different contexts they may encounter throughout their careers.

Evidence shows that completers:

- 2a. Understand and engage local school and cultural communities, and communicate and foster relationships with families, guardians, or caregivers in a variety of communities
- 2b. Engage in culturally responsive educational practices with diverse learners and do so in diverse cultural and socioeconomic community contexts
- 2c. Create productive learning environments and use strategies to develop productive learning environments in a variety of school contexts
- 2d. Support students' growth in international and global perspectives
- 2e. Establish goals for their own professional growth and engage in self-assessment, goal setting, and reflection
- 2f. Collaborate with colleagues to support professional learning

Evidence for this standard will show that program completers have engaged successfully in relevant professional practice and are equipped with strategies and reflective habits that will enable them to serve effectively in a variety of school placements and educational settings appropriate to the credential or degree sought.

Standard Three: Quality Program Practices

Preparation programs ensure that candidates, upon completion, are ready to engage in professional practice, to adapt to a variety of professional settings, and to grow throughout their careers. Effective program practices include consistent offering of coherent curricula; high-quality, diverse clinical experiences; dynamic, mutually beneficial partnerships with stakeholders; and comprehensive and transparent quality

assurance processes informed by trustworthy evidence. Each aspect of the program is appropriate to its context and to the credential or degree sought.

Evidence shows the program:

- 3a. Offers coherent curricula with clear expectations that are aligned with state and national standards, as applicable
- 3b. Develops and implements quality clinical experiences, where appropriate, in the context of documented and effective partnerships with P–12 schools and districts
- 3c. Engages multiple stakeholders, including completers, local educators, schools, and districts, in data collection, analysis, planning, improvement, and innovation
- 3d. Enacts admission and monitoring processes linked to candidate success as part of a quality assurance system aligned to state requirements and professional standards
- 3e. Engages in continuous improvement of programs and program components and investigates opportunities for innovation through an effective quality assurance system
- 3f. Maintains capacity for quality reflected in staffing, resources, operational processes, and institutional commitment

Evidence related to this standard will include documentation of program practices and resources as well as the program’s rationale for its structure and operation.

Standard Four: Program Engagement in System Improvement

Program practices strengthen the P–20 education system in light of local needs and in keeping with the program’s mission. The program is committed to and invests in

strengthening and improving the education profession and the P–20 education system.

Each program’s context (or multiple contexts) provides particular opportunities to engage the field’s shared challenges and to foster and support innovation. Engagement with critical issues is essential and must be contextualized. Sharing results of contextualized engagement and innovation supports the field’s collective effort to address education’s most pressing challenges through improvement and innovation.

The program provides evidence that it:

- 4a. Engages with local partners and stakeholders to support high-need schools and participates in efforts to reduce disparities in educational outcomes
- 4b. Seeks to meet state and local educator workforce needs and to diversify participation in the educator workforce through candidate recruitment and support
- 4c. Supports completers’ entry into or continuation in their professional role, as appropriate to the credential or degree being earned
- 4d. Investigates available and trustworthy evidence regarding completer placement, effectiveness, and retention in the profession and uses that information to improve programs
- 4e. Meets obligations and mandates established by the state, states, or jurisdiction within which it operates
- 4f. Investigates its own effectiveness relative to its institutional or programmatic mission and commitments. (AAQEP, 2020b, pp. 11–12)

Evidence for this standard will address identified issues in light of local and institutional context.

These standards and criteria can be used as a curriculum framework for teacher preparation program faculty as they advance collaborative experiences between internal and external partners (Dhillon & Vaca, 2018; Parris et al., 2018). It is evident in both the Texas Administrative Code (2014) and the AAQEP (2020b) Expectations Framework and Standards that an ongoing understanding of student diversity, defining teachers' roles and responsibilities, and identifying and collaborating with other professional stakeholders are important curricular components for teacher preparation programs.

Five recent teacher preparation graduates were interviewed for this study. Six of the interview questions they answered were aligned with research question two and evaluation questions 2b and 2c in the evaluation matrix (see Figure 4). In the first two interview questions, they were asked to define their own professional roles and responsibilities as a teacher. Several researchers acknowledged that as a means to maximize collaboration efforts and better serve K–12 students in public schools, preprofessional and practicing teachers should understand their professional role and primary responsibilities (Dobbs-Oates & Wachter Morris, 2016; Trust et al., 2016). After a review of the literature and analysis of the interview data, I believe it is important for preprofessional teachers to understand and be able to articulate their professional roles and responsibilities and how those relate to other professional stakeholders to better serve their students in the K–12 context. When faculty members understand their professional roles and responsibilities, they are better able to distribute leadership among team members, collaboration is enhanced, and each team member knows what is expected of them (Schot et al., 2020). Each of the recent graduates articulated clearly how they understand their professional roles and responsibilities as a teacher. The common themes in their responses included guiding students to meet learning outcomes, creating safe learning environments, getting to know

students, strong content knowledge, communication with parents, and working with other professionals to meet students' diverse needs.

Recent graduate participants were able to describe their own roles and responsibilities but were less familiar with the roles and responsibilities of other professionals unless they were interacting with them on a regular basis. They identified the “other types of professionals” they have interacted with and in what capacity. Each of the recent graduates had a clear understanding of how to collaborate with the speech and language pathologist (SLP), the English as a Second Language (ESL) teacher, and the special education teacher because they recalled learning about those professionals during preprofessional training and had daily or weekly interaction with those professionals. However, recent graduates were surprised to learn how often they would interact with paraprofessionals or teacher aides and related services such as the school nurse and social workers. Teachers commonly understand the role and responsibility of an administrator, school counselor, speech and language pathologist, or curriculum specialist but rarely anticipate the need to understand the roles and responsibilities of social workers, occupational therapists (OTs), physical therapists (PTs), child life specialists, or family advocates (Dobbs-Oates & Wachter Morris, 2016; Hartmann, 2016). Additionally, these stakeholders do not serve as instructional specialists and are often labeled as “related services” (Gherardi & Whittlesey-Jerome, 2018; Phillippo & Blosser, 2013).

Another question in the semistructured interviews with recent graduates focused on how the IPE experiences embedded in their special education course prepared them to serve students with diverse needs. The growth and change of diversity in kindergarten through 12th-grade (K–12) public schools in the United States directly impacts the students' overall school experiences (Parris et al., 2018). As public schools become more diverse, so do the needs of the K–12 student

(Howard, 2018; Scott & Scott, 2015). Recent graduate participants stated that the experience helped them be prepared to interact with other professionals and to understand just how diverse students could be. One student stated, “If you have met one student with autism, you have met one student with autism.” I inferred her statement to mean that each child will have different needs and that the IPE experience prepared her to individualize rather than generalize her instruction and assessment strategies. One of the recent graduates discussed the importance of participating in a simulated event because it allowed for immediate feedback from her instructor. The ideal vision of IPE is to provide preservice students in professional training programs with applicable, realistic, and active learning experiences that include valuable feedback from facilitators to practice meeting the various needs of future students and clients (Abrandt Dahlgren et al., 2016; Dobbs-Oates & Wachter Morris, 2016). Recent graduate participants felt the most valuable aspect of the IPE experience was being able to interact with outside professional stakeholders. They reported “learning a lot from other professionals who had different experiences and perspectives.” Recent graduates especially appreciated the other professional stakeholders who participated in the experience that were already in a professional role. Outside professional stakeholders were chosen for the simulation based on their experience working with students and families in the K–12 school setting. Recent graduates held tightly to the feedback of the experienced stakeholders because they felt their advice would be imperative as they entered the teaching profession.

Research Question 3: How Does Participation in IPE Equip Preprofessional Teachers With Imperative Communication, Problem-Solving, and Leadership Skills Needed in the Modern Kindergarten Through 12th-Grade (K–12) Public School Setting?

The purpose of research question 3 was to evaluate the current and desired states of activities in the identified teacher preparation program that are used to prepare teacher candidates for collaboration and communication with other professionals. The specific data sources that I used to investigate research question three were the content analysis of program curriculum, a needs assessment tool completed by participating faculty, semistructured interviews with recent teacher preparation graduates, and the Texas Education Agency Principal Survey.

The themes in the content analysis with faculty members were that interprofessional education (IPE) is a missing component in the current teacher preparation curriculum, and the most natural integration of IPE should target field placement courses. In the needs assessment tool, the current and desired state of faculty members' current and desired state of preparedness to incorporate collaborative communication assignments and use of different pedagogical approaches were common themes. In the semistructured interview data, the main themes were relationships and rapport with families and other professionals and communication with coworkers to benefit their practice and services for students. In the Texas Education Agency Principal Survey data regarding the identified teacher preparation program, it is evident that collaboration with other professionals to meet the diverse needs of students and communication with students' families are important measures of evaluation and success in the first years of teaching.

The main theme for research question 3 was communication. Communication is a fundamental aspect of the interprofessional respect that preprofessional students practice during

an IPE experience. Interprofessional respect includes clear communication, kind and ethical behavior toward colleagues, active listening, motivation, encouragement, and constructive feedback (Dobbs-Oates & Wachter Morris, 2016). These interprofessional skills are important as teachers, administrators, and other professional stakeholders interact and advocate for the students they will serve in public schools. The most common theme among faculty members' ideas for natural integration of IPE experiences into current courses was to target courses that contain field placements and experiences with outside stakeholders. Students in courses with field experience are integrated into schools and classrooms in which they interact with students, teachers, parents, and other professional stakeholders, such as administrators, counselors, school psychologists, social workers, occupational therapists (OTs), physical therapists (PTs), family advocates, and child life specialists. During field placement courses, current teacher preparation students have the opportunity to write and enact lesson plans in collaboration with cooperating teachers and professionals. They also had opportunities to communicate with parents and other professionals. Current students are often given assignments or readings that require them to reflect on their interactions, or potential interactions, with parents but are rarely given reading or assignments that require them to think about future interactions with other professional stakeholders.

In the needs assessment data regarding communication and problem-solving, faculty responded to the following statement: "I believe I am prepared to incorporate written, oral, and collaborative communication assignments (discussion, presentations, group meetings, etc.) in the courses I teach." While there was no change in the descriptive statistics between current and desired states (see Figures 11 and 12), 25% of faculty *strongly agreed*, and 62.5% of faculty *agreed* that they are prepared to incorporate written, oral, and collaborative communication

assignments into the courses they teach. Interprofessional education experiences that require preprofessional students to practice essential communication skills, such as being clear and concise, are important for their future practice as they interact with other professionals for the holistic care of their students (Rodriguez Fuentes et al., 2017). To accentuate researchers' recommendations for more robust preprofessional collaboration training in teacher prep programs, professional educators report feeling underprepared to communicate and collaborate with interdisciplinary teams (Anderson, 2013; Dobbs-Oates & Wachter Morris, 2016). Teachers often request additional professional development training for interprofessional skills and more time for collaboration (Dobbs-Oates & Wachter Morris, 2016).

Additionally, on the needs assessment tool, faculty rated themselves on a scale from *strongly agree* to *strongly disagree* in response to the statement, "I believe I am prepared to use different pedagogical styles when facilitating interpersonal, critical thinking, and problem-solving skills." Teacher preparation faculty expressed a desire for change as it relates to using different pedagogical styles when facilitating interpersonal, critical thinking, and problem-solving skills. Compared to the current state of 37.5% who *strongly agree*, 62.5% *strongly agreed* that they desire the preparedness to use different pedagogical styles. The use of one or a combination of constructivism through experiential learning, inquiry-based approaches, collaborative methods, and reflective practices are some of the pedagogical styles that are effective when facilitating interpersonal, critical thinking, and problem-solving skills.

During the semistructured interviews, the recent graduates identified and discussed the IPE experiences that they participated in during their preprofessional training and how those collaborative experiences informed their current professional practice. They also defined collaboration and discussed what they learned about collaboration with other professionals

during their preprofessional training. The common themes from the interview data included lesson planning with colleagues and other professionals and the importance of collaboration among colleagues, collaboration during tutoring sessions, collaboration with students, collaboration with families, and recognition that they do not have to do their job in isolation.

To holistically serve K–12 students, teachers and other school-based professionals should desire collaboration and positive student relationships (Dobbs-Oates & Wachter Morris, 2016; Fisher et al., 2018). One participant defined collaboration as “people working together toward one goal.” For teachers and other professionals to seek a common goal, key communication skills need to be taught in preprofessional training programs. Professional collaboration allows each team member to be a contributing source of communication, problem-solving, and ideas. Educators should feel adequately prepared to collaborate with other professional stakeholders, such as social workers or mental health professionals or family advocates, to provide holistic care for the students they serve (Rosenfield et al., 2018). Collaboration allows each person involved to experience different ideas and perspectives, creating interprofessional respect as shared responsibility for the students (Stone & Charles, 2018). Teachers, like their students, need opportunities to learn and grow with input from other professional stakeholders (Rigelman & Ruben, 2012). Many educators begin a teaching career with little to no experience or training in the area of professional collaboration (Dobbs-Oates & Wachter Morris, 2016). Although they had a few collaborative experiences in their preprofessional training, the recent graduates were aware that they could not carry out their jobs in isolation. Recent graduate participants recognized the importance of collaboration with other professionals to care for their students holistically. Participant 1 stated the following:

If I am doing it all by myself, then the students are going to hurt from that because there is only so much one person can do. When you collaborate, you have so many more resources available and so many more learning styles available that it helps reach even more students.

The final data source for research question 3 was the Texas Education Agency Principal Survey. Texas school principals were identified in this study as an outside stakeholder to the identified teacher preparation program. This report presents results from the principal survey of first-year teachers. The percentages in the survey represent the percent of teachers prepared by an educator preparation program (EPP) that received an average score of sufficiently prepared or well prepared when all applicable questions were averaged and within each of the six categories. The overall percentage serves as indicator 2 of the Accountability System for Educator Preparation (ASEP) Accountability Performance Indicators. The percentages within each category are consumer information required by the Texas Education Code. In the 2017–2018, the Texas Education Agency Principal Survey showed the identified teacher preparation program had an overall score of 89 in comparison to the state average of 73. In the category of working with students with disabilities, principals evaluate a new teacher's ability "to collaborate with others such as paraeducators and teachers." The identified teacher preparation program was rated at 92% on this item. In the area of building and maintaining positive relationships rapport with students, they received a 91% rating. In the area of building and maintaining positive rapport and two-way communication with students' families, they received a 97%. After a closer look at each question in each category, there were identified themes for improvement in the areas of preparing preservice teachers to collaborate with other professionals to meet the diverse needs of their students.

Limitations and Delimitations

This study had potential limitations. The first limitation was that all of the program evaluation data came from one teacher preparation program at a private liberal arts university and may not be generalizable to other types of teacher preparation programs. Potential bias may exist within this study, as I am an instructor in the identified teacher preparation program. I am also the director of interprofessional education (IPE) for the College of Education and Human Services. My role could have affected the interpretation of the results in the study. I analyzed and coded information collected from the needs assessment tool, semistructured interviews, and the Texas Education Agency Principal Survey. The information could have been interpreted differently if done by another faculty member without a vested interest in the integration of IPE into the current teacher preparation curriculum. Additionally, due to three faculty members participating in the research and serving as dissertation committee members, only eight of the 11 full-time faculty members were eligible to participate in the needs assessment tool and content analysis.

Another possible limitation was the purposeful selection of recent graduates from the 2018–2019 academic year for the semistructured interviews. The recent graduates selected for the interviews had to meet two criteria. First, they participated in a preliminary IPE experience during their preprofessional training. Second, they have completed one to four semesters teaching in a kindergarten through 12th-grade (K–12) setting. These criteria limited the number of recent graduates who were eligible for an interview. Seven recent graduates from the 2018–2019 undergraduate cohort met the inclusion criteria. Only five of the seven that met the criteria agreed to participate in the semistructured interview for this study. All five of the recent graduates who participated in the interview were female. I acknowledge the population and

gender bias within this study due to the overwhelming number of females in both the teaching profession and in the identified teacher preparation program.

As the primary researcher, I completed all of the semistructured interviews with the recent graduates. The reasoning for conducting the interviews myself was due to the semistructured nature of the interviews. As students answered questions, and with my knowledge of IPE, I was able to ask further questions for clarification. If another colleague or outside stakeholder had completed the interviews, they might not have been inclined to strengthen the answers from recent graduates with additional probing or information. After completing a primary coding pass on each interview and to further combat possible positionality, an outside stakeholder with teaching and administrative experience in the K–12 school setting completed a secondary coding pass on randomly selected interviews (Creswell & Poth, 2018; Saldaña & Omasta, 2018). However, due to my role as an instructor in the identified program, this may still pose a positionality concern within the study results.

A delimitation of the study was the focus on social workers, OTs, PTs, child life specialists, and family advocates in the “other professionals” category of the literature review. While there are other professionals who work in the school setting (e.g., school counselors and speech and language pathologists), the focus on professionals who are not typically trained during their preprofessional programs to work in a school setting was intentional. The rationale for the focus on these professional stakeholders is supported by the common misunderstanding of their role and responsibility in the K–12 school setting. Teachers commonly understand the role and responsibility of an administrator, school counselor, speech and language pathologist, or curriculum specialist but rarely anticipate the need to understand the roles and responsibilities of social workers, OTs, PTs, child life specialists, or family advocates (Dobbs-Oates & Wachter

Morris, 2016; Hartmann, 2016). Additionally, these stakeholders do not serve as instructional specialists and are often labeled as “related services” (Gherardi & Whittlesey-Jerome, 2018; Phillippo & Blosser, 2013). Noting this delimitation is important because, as anticipated, the recent graduates often mentioned the school counselor and speech and language pathologists (SLPs) in their responses during the interview.

Implications

Recent graduate participants revealed the need for more interaction and low-stakes experiences with other professional stakeholders within the current curriculum. A professional stakeholder is a person who has a vested interest in a program (Chen, 2015). The professional stakeholders identified in this study are teachers, social workers, OTs, PTs, child life specialists, and family advocates. Additional stakeholders with a common interest in the preprofessional training of teachers also include speech-language pathologists (SLPs), English as a Second Language (ESL) specialists, special education teachers, school counselors, school psychologists, school administrators, school nurses, and paraprofessionals or aides. Interprofessional education (IPE) is commonly built into healthcare training programs but less often into teacher preparation programs (Dobbs-Oates & Wachter Morris, 2016). Students in the K–12 setting could benefit from a group of people who are trained to understand their own professional roles and responsibilities and are prepared to collaborate with other professionals in which they have common interaction (Dobbs-Oates & Wachter Morris, 2016). The recent graduate participants had one introductory IPE experience in their preprofessional training but recognized the value of that experience and how it prepared them to understand their role and interaction with other professionals. Dobbs-Oates & Wachter Morris (2020) asserted that when teacher preparation

students are exposed to even one introductory IPE experience, it is a meaningful and memorable experience that transfers into their professional environment.

Faculty participants stated that IPE was a missing component and identified program improvement needs in the current curriculum. They commonly identified courses with field experiences in which to integrate IPE experiences. Courses with field experiences are a natural source for IPE due to the preprofessional teacher's interaction with students, teachers, administrators, and other related school personnel when they are observing, tutoring, or teaching on K–12 campuses. Effective and intentional partnerships are imperative for preprofessional teachers. Teacher preparation faculty should also seek to design lessons, assignments, projects, and assessments for field-based courses that involve other professional stakeholders (Dobbs-Oates & Wachter Morris, 2016). Teacher preparation faculty should engage with other preprofessional training programs with a vested interest in school-based work. Partnering faculty from human service disciplines could create common goals and objectives in a field-based IPE experience but maintain individualized plans for assessment (Dobbs-Oates & Wachter Morris, 2016).

The need to clarify the definition of IPE to recent graduates during the interview process implies a misunderstanding or lack of knowledge about IPE. Teacher preparation students should have a clear understanding of what it means to interact with other professional stakeholders and be able to identify collaborative experiences. When teacher preparation students have a clear understanding of what it means to interact with each other and other professional stakeholders, they are able to delegate tasks and draw support that enables a feeling of effectiveness and transfers to student improvement and success (Buring et al., 2009). Formal IPE experiences are helpful for students as they develop confidence in communicating with other professionals. They

should also understand the terminology associated with IPE. This can be remedied as faculty align courses to the state and national standards and expectations surrounding preparing preprofessional teachers to interact with other professional stakeholders.

Recommendations

Recommendations for IPE integration into the current teacher preparation program are informed by the desired states from the needs assessment tool and faculty analysis of current courses they teach. Faculty participants consistently agreed that IPE is a missing component in the current teacher preparation program and recommended that courses with field experiences be targeted for IPE implementation. Students in courses with field experience are integrated into schools and classrooms in which they interact with students, teachers, parents, and other professional stakeholders such as administrators, counselors, school psychologists, social workers, occupational therapists (OTs), physical therapists (PTs), family advocates, and child life specialists. Based on the results of this study, it is recommended that faculty members in the identified teacher preparation program who teach courses with field experiences further evaluate current course requirements, assignments, and projects that lend themselves to the integration of IPE. It is also recommended that those faculty members consult with the IPE curriculum implementation committee to gain a better understanding of the IPE competencies and the types of experiences that qualify as an IPE experience for their courses.

At the start of this study, the IPE task force was made up of two social work faculty members, one teacher preparation faculty member, two communication disorders faculty members, two exercise science and nutrition faculty members, two nursing faculty members, one occupational therapy faculty member, the associate dean of the College of Education and Human Services (CEHS), and the dean of CEHS. Currently, the IPE task force has shifted to an

implementation phase of innovation. With this shift to the new phase of innovation, a director was appointed, and three subcommittees were created. The three subcommittees are simulation implementation, curriculum implementation, and long-term planning. The subcommittees are made up of various faculty from CEHS, the school psychology program, and the School of Nursing. Each subcommittee has both broad and specific committee roles.

The simulation implementation subcommittee's broad committee roles include identification and enactment of collaborative simulation experiences in multiple settings, and the specific roles include the planning and logistics of both large and small group simulations. The curriculum implementation subcommittee's broad committee roles include a continuous review of new courses and revision of IPE courses using program review data, and their specific roles are to solicit and review new IPE course proposals, request IPE course instructors as needed, and provide updates to courses and departments for accreditation purposes. The long-term planning subcommittee's broad committee roles include developing long-term sustainable goals, and the specific roles include developing an IPE research agenda, professional development opportunities for professionals in the community, and formal recognition of students who excel in IPE during their degree and course requirements. I recommend that teacher preparation faculty who teach a course with a field-based component actively participate on one of the three IPE subcommittees. Participation in the subcommittees will provide a clearer understanding of IPE and supply innovative ways in which to integrate IPE into the current curriculum. Participation on the subcommittees will also allow for collegiality among professional stakeholders such as social work faculty, occupational therapy (OT) faculty, physical therapy (PT) faculty, speech and language pathology (SLP) faculty, School of Nursing faculty, school psychology faculty, etc.

These professional stakeholders serve as potential partners in future IPE experiences for the identified teacher preparation program.

The final recommendation is for all faculty members of the identified teacher preparation program to encourage or require current teacher preparation students to participate in at least one of the recently developed IPE special topics courses. Each course is worth one credit hour and would be a strong source for professional development and collaboration with other human service professionals. To successfully complete program requirements, teacher preparation students at all levels and certifications have to obtain 20 professional development hours. There are three IPE special topics courses that have been developed and are approved through the appropriate department and academic councils. The titles of the IPE courses are Interprofessional Education and Ethics, Interprofessional Skills in Simulation, and Topics in Interprofessional Education: Exploring Vocation. See Appendix G for IPE course descriptions. Each of the three IPE courses is team-taught by two instructors from different programs within the CEHS. For example, a faculty member taught the ethics course from the CEHS Occupational Therapy (OT) program and a faculty member from the Teacher Education program. The interdisciplinary approach provides students with two different professional perspectives covering the same general topic.

Recommendations for Future Research

A recommendation for future research stems from the broad and short-term goals of each interprofessional education (IPE) subcommittee. Further research about the implementation of IPE into preprofessional training for teacher preparation programs is necessary. There is a large body of research surrounding collaboration in schools and professional learning communities, but there is little research in the area of IPE in teacher preparation programs (Dobbs-Oates &

Wachter Morris, 2016). Teacher preparation faculty in the identified program should seek advice from corresponding subcommittee members who are currently using IPE research to strengthen their courses. Teacher preparation faculty should also seek opportunities to partner with other faculty members in the education and human service disciplines to develop more robust and authentic IPE experiences for their courses. Other teacher preparation programs may benefit from the partnership with corresponding human service and allied health programs as they create IPE experiences for preprofessional teachers.

A second recommendation is the use of the SPICE-R2 (see Appendix H) developed by Joseph A. Zorek, PharmD and Board Certified Geriatric Pharmacist, to inform future research and program reporting efforts. As teacher preparation faculty make curricular shifts to include more IPE experience, they should use the pre- and postsurvey created by the director and other leaders of the IPE task force to evaluate the diffusion of innovation of IPE. This survey was adapted and included the SPICE-R2 questions. Typically, the SPICE-R2 is a 10-question survey to evaluate the health and human services professions students' perception of IPE and how it impacts their practice before and after an IPE experience (Dominguez et al., 2015). The wording of the instrument is heavily focused on healthcare professions and cannot be changed due to copyrights; however, students from other departments who completed this survey were taught to insert discipline-specific language when reading the survey. The directions in the adapted survey included this note: "If you are in the field of Teacher Education or School Psychology, please consider this from the perspective of working with your interprofessional colleagues in an educational setting." Participants were also given the opportunity to select their academic department before taking the survey and provide answers to two open-ended questions about the experience at the end of the survey. This survey would provide insight to teacher preparation

faculty about how the IPE experience influences a preprofessional student's understanding of and their ability to collaborate with other professionals.

A final recommendation is to continue research efforts of IPE and the impact on teacher preparation programs as it is more readily integrated into the identified teacher preparation program and other teacher preparation programs across the nation. It will be important for faculty and program evaluators to look at preprofessional student outcomes and feelings of preparedness as they encounter more collaborative experiences in their preprofessional training. I recommend that all teacher preparation programs evaluate the types of IPE experiences that could be an indelible part of the preprofessional training curriculum. Additionally, designated teacher preparation faculty should follow up with graduates who participated in IPE experiences via interview or survey as a means to inform program improvement and systemic change over time.

Chapter Summary

Program evaluations grounded in the theory of change are used to make data-informed decisions about effectiveness to improve programs and organizations (Chen et al., 2018; Dhillon & Vaca, 2018; Kaufman & Guerra-Lopez, 2013; Patton, 2015). Program evaluation is used periodically to assess aspects of program performance in organizations (Chen, 2015). The purpose of this program evaluation was to identify elements of collaboration within interprofessional education (IPE) experiences and provide suggestions regarding the future implementation of IPE experiences into the identified teacher preparation program. Program recommendations and future research recommendations were informed by the perspectives of current teacher preparation faculty, recent teacher preparation graduates, and other professional stakeholders. There is a need to create more robust IPE experiences in the current teacher

preparation program to fully prepare preprofessional teachers for various types of professional interaction with both inside and outside stakeholders. Quality teacher preparation in higher education requires meaningful partnerships to provide preservice students with integrated experiences that mirror what they encounter in schools as professional educators (Stein & Stein, 2016).

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Appendix A: Texas Administrative Code Teacher Standards

(a) Purpose. The standards identified in this section are performance standards to be used to inform the training, appraisal, and professional development of teachers.

(b) Standards.

(1) Standard 1—Instructional Planning and Delivery. Teachers demonstrate their understanding of instructional planning and delivery by providing standards-based, data-driven differentiated instruction that engages students, makes appropriate use of technology, and makes learning relevant for today's learners.

(A) Teachers design clear, well organized, sequential lessons that build on students' prior knowledge.

(i) Teachers develop lessons that build coherently toward objectives based on course content, curriculum scope and sequence, and expected student outcomes.

(ii) Teachers effectively communicate goals, expectations, and objectives to help all students reach high levels of achievement.

(iii) Teachers connect students' prior understanding and real-world experiences to new content and contexts, maximizing learning opportunities.

(B) Teachers design developmentally appropriate, standards-driven lessons that reflect evidence-based best practices.

(i) Teachers plan instruction that is developmentally appropriate, is standards-driven, and motivates students to learn.

(ii) Teachers use a range of instructional strategies, appropriate to the content area, to make subject matter accessible to all students.

(iii) Teachers use and adapt resources, technologies, and standards-aligned instructional materials to promote student success in meeting learning goals.

(C) Teachers design lessons to meet the needs of diverse learners, adapting methods when appropriate.

(i) Teachers differentiate instruction, aligning methods and techniques to diverse student needs, including acceleration, remediation, and implementation of individual education plans.

(ii) Teachers plan student groupings, including pairings and individualized and small-group instruction, to facilitate student learning.

(iii) Teachers integrate the use of oral, written, graphic, kinesthetic, or tactile methods to teach key concepts.

(D) Teachers communicate clearly and accurately and engage students in a manner that encourages students' persistence and best efforts.

(i) Teachers ensure that the learning environment features a high degree of student engagement by facilitating discussion and student-centered activities as well as leading direct instruction.

(ii) Teachers validate each student's comments and questions, utilizing them to advance learning for all students.

- (iii) Teachers encourage all students to overcome obstacles and remain persistent in the face of challenges, providing them with support in achieving their goals.
- (E) Teachers promote complex, higher-order thinking, leading class discussions and activities that provide opportunities for deeper learning.
- (i) Teachers set high expectations and create challenging learning experiences for students, encouraging them to apply disciplinary and cross-disciplinary knowledge to real-world problems.
- (ii) Teachers provide opportunities for students to engage in individual and collaborative critical thinking and problem-solving.
- (iii) Teachers incorporate technology that allows students to interact with the curriculum in more significant and effective ways, helping them reach mastery.
- (F) Teachers consistently check for understanding, give immediate feedback, and make lesson adjustments as necessary.
- (i) Teachers monitor and assess student progress to ensure that their lessons meet students' needs.
- (ii) Teachers provide immediate feedback to students in order to reinforce their learning and ensure that they understand key concepts.
- (iii) Teachers adjust content delivery in response to student progress through the use of developmentally appropriate strategies that maximize student engagement.

(2) Standard 2—Knowledge of Students and Student Learning. Teachers work to ensure high levels of learning, social-emotional development, and achievement outcomes for all students, taking into consideration each student's educational and developmental backgrounds and focusing on each student's needs.

- (A) Teachers demonstrate the belief that all students have the potential to achieve at high levels and support all students in their pursuit of social-emotional learning and academic success.
- (i) Teachers purposefully utilize learners' individual strengths as a basis for academic and social-emotional growth.
- (ii) Teachers create a community of learners in an inclusive environment that views differences in learning and background as educational assets.
- (iii) Teachers accept responsibility for the growth of all of their students, persisting in their efforts to ensure high levels of growth on the part of each learner.
- (B) Teachers acquire, analyze, and use background information (familial, cultural, educational, linguistic, and developmental characteristics) to engage students in learning.
- (i) Teachers connect learning, content, and expectations to students' prior knowledge, life experiences, and interests in meaningful contexts.
- (ii) Teachers understand the unique qualities of students with exceptional needs, including disabilities and giftedness, and know how to effectively address these needs through instructional strategies and resources.
- (iii) Teachers understand the role of language and culture in learning and know how to

modify their practices to support language acquisition so that language is comprehensible and instruction is fully accessible.

- (C) Teachers facilitate each student's learning by employing evidence-based practices and concepts related to learning and social-emotional development.
- (i) Teachers understand how learning occurs and how learners develop, construct meaning, and acquire knowledge and skills.
- (ii) Teachers identify readiness for learning and understand how development in one area may affect students' performance in other areas.
- (iii) Teachers apply evidence-based strategies to address individual student learning needs and differences, adjust their instruction, and support the learning needs of each student.

(3) Standard 3—Content Knowledge and Expertise. Teachers exhibit a comprehensive understanding of their content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and their ability to match objectives and activities to relevant state standards.

- (A) Teachers understand the major concepts, key themes, multiple perspectives, assumptions, processes of inquiry, structure, and real-world applications of their grade-level and subject-area content.
 - (i) Teachers have expertise in how their content vertically and horizontally aligns with the grade-level/subject-area continuum, leading to an integrated curriculum across grade levels and content areas.
 - (ii) Teachers identify gaps in students' knowledge of subject matter and communicate with their leaders and colleagues to ensure that these gaps are adequately addressed across grade levels and subject areas.
 - (iii) Teachers keep current with developments, new content, new approaches, and changing methods of instructional delivery within their discipline.
- (B) Teachers design and execute quality lessons that are consistent with the concepts of their specific discipline, are aligned to state standards and demonstrate their content expertise.
 - (i) Teachers organize curriculum to facilitate student understanding of the subject matter.
 - (ii) Teachers understand, actively anticipate, and adapt instruction to address common misunderstandings and preconceptions.
 - (iii) Teachers promote literacy and the academic language within the discipline and make discipline-specific language accessible to all learners.
- (C) Teachers demonstrate content-specific pedagogy that meets the needs of diverse learners, utilizing engaging instructional materials to connect prior content knowledge to new learning.
 - (i) Teachers teach both the key content knowledge and the key skills of the discipline.
 - (ii) Teachers make appropriate and authentic connections across disciplines, subjects, and students' real-world experiences.

(4) Standard 4—Learning Environment. Teachers interact with students in respectful ways at all times, maintaining a physically and emotionally safe, supportive learning environment that is characterized by efficient and effective routines, clear expectations for student behavior, and organization that maximizes student learning.

- (A) Teachers create a mutually respectful, collaborative, and safe community of learners by using knowledge of students' development and backgrounds.
 - (i) Teachers embrace students' backgrounds and experiences as an asset in their learning environment.
 - (ii) Teachers maintain and facilitate respectful, supportive, positive, and productive interactions with and among students.
 - (iii) Teachers establish and sustain learning environments that are developmentally appropriate and respond to students' needs, strengths, and personal experiences.
- (B) Teachers organize their classrooms in a safe and accessible manner that maximizes learning.
 - (i) Teachers arrange the physical environment to maximize student learning and to ensure that all students have access to resources.
 - (ii) Teachers create a physical classroom set-up that is flexible and accommodates the different learning needs of students.
- (C) Teachers establish, implement, and communicate consistent routines for effective classroom management, including clear expectations for student behavior.
 - (i) Teachers implement behavior management systems to maintain an environment where all students can learn effectively.
 - (ii) Teachers maintain a strong culture of individual and group accountability for class expectations.
 - (iii) Teachers cultivate student ownership in developing classroom culture and norms.
- (D) Teachers lead and maintain classrooms where students are actively engaged in learning as indicated by their level of motivation and on-task behavior.
 - (i) Teachers maintain a culture that is based on high expectations for student performance and encourages students to be self-motivated, taking responsibility for their own learning.
 - (ii) Teachers maximize instructional time, including managing transitions.
 - (iii) Teachers manage and facilitate groupings in order to maximize student collaboration, participation, and achievement.
 - (iv) Teachers communicate regularly, clearly, and appropriately with parents and families about student progress, providing detailed and constructive feedback and partnering with families in furthering their students' achievement goals.

(5) Standard 5—Data-Driven Practice. Teachers use formal and informal methods to assess student growth aligned to instructional goals and course objectives and regularly review and analyze multiple sources of data to measure student progress and adjust instructional strategies and content delivery as needed.

- (A) Teachers implement both formal and informal methods of measuring student progress.

- (i) Teachers gauge student progress and ensure student mastery of content knowledge and skills by providing assessments aligned to instructional objectives and outcomes that are accurate measures of student learning.
 - (ii) Teachers vary methods of assessing learning to accommodate students' learning needs, linguistic differences, or varying levels of background knowledge.
- (B) Teachers set individual and group learning goals for students by using preliminary data and communicate these goals with students and families to ensure mutual understanding of expectations.
- (i) Teachers develop learning plans and set academic as well as social-emotional learning goals for each student in response to previous outcomes from formal and informal assessments.
 - (ii) Teachers involve all students in self-assessment, goal setting, and monitoring progress.
 - (iii) Teachers communicate with students and families regularly about the importance of collecting data and monitoring progress of student outcomes, sharing timely and comprehensible feedback so they understand students' goals and progress.
- (C) Teachers regularly collect, review, and analyze data to monitor student progress.
- (i) Teachers analyze and review data in a timely, thorough, accurate, and appropriate manner, both individually and with colleagues, to monitor student learning.
 - (ii) Teachers combine results from different measures to develop a holistic picture of students' strengths and learning needs.
- (D) Teachers utilize the data they collect and analyze to inform their instructional strategies and adjust short- and long-term plans accordingly.
- (i) Teachers design instruction, change strategies, and differentiate their teaching practices to improve student learning based on assessment outcomes.
 - (ii) Teachers regularly compare their curriculum scope and sequence with student data to ensure they are on track and make adjustments as needed.

(6) Standard 6—Professional Practices and Responsibilities. Teachers consistently hold themselves to a high standard for individual development, pursue leadership opportunities, collaborate with other educational professionals, communicate regularly with stakeholders, maintain professional relationships, comply with all campus and school district policies, and conduct themselves ethically and with integrity.

- (A) Teachers reflect on their teaching practice to improve their instructional effectiveness and engage in continuous professional learning to gain knowledge and skills and refine professional judgment.
- (i) Teachers reflect on their own strengths and professional learning needs, using this information to develop action plans for improvement.
 - (ii) Teachers establish and strive to achieve professional goals to strengthen their instructional effectiveness and better meet students' needs.
 - (iii) Teachers engage in relevant, targeted professional learning opportunities that align with their professional growth goals and their students' academic and social-emotional needs.
- (B) Teachers collaborate with their colleagues, are self-aware in their interpersonal

- interactions, and are open to constructive feedback from peers and administrators.
- (i) Teachers seek out feedback from supervisors, coaches, and peers and take advantage of opportunities for job-embedded professional development.
 - (ii) Teachers actively participate in professional learning communities organized to improve instructional practices and student learning.
- (C) Teachers seek out opportunities to lead students, other educators, and community members within and beyond their classrooms.
- (i) Teachers clearly communicate the mission, vision, and goals of the school to students, colleagues, parents and families, and other community members.
 - (ii) Teachers seek to lead other adults on campus through professional learning communities, grade- or subject-level team leadership, committee membership, or other opportunities.
- (D) Teachers model ethical and respectful behavior and demonstrate integrity in all situations.
- (i) Teachers adhere to the educators' code of ethics in §247.2 of this title (relating to Code of Ethics and Standard Practices for Texas Educators), including following policies and procedures at their specific school placement(s).
 - (ii) Teachers communicate consistently, clearly, and respectfully with all members of the campus community, including students, parents and families, colleagues, administrators, and staff.
 - (iii) Teachers serve as advocates for their students, focusing attention on students' needs and concerns and maintaining thorough and accurate student records.

Appendix B: Association for Advancing Quality in Educator Preparation (AAQEP)

Standards and Expectations Framework

AAQEP was founded by educators in 2017 to promote the preparation of effective educators in innovative, outcome-focused programs that engage education's toughest challenges directly and in context. AAQEP's comprehensive standards specify aspects of completer performance and program practice that distinguish effective programs. Its system leverages collaboration in quality assurance to foster improvement and support innovation. Download the complete *Guide to AAQEP Accreditation* at aaqep.org.

Standard 1: Candidate/Completer Performance *Program completers perform as professional educators with the capacity to support success for all learners.* Candidates and completers exhibit the knowledge, skills, and professional dispositions of competent, caring, and effective professional educators. Successful candidate performance requires knowledge of learners, context, and content. Candidates demonstrate the ability to plan for and enact and support instruction and assessment that is differentiated and culturally responsive. Evidence shows that, by the time of program completion, candidates exhibit knowledge, skills, and abilities of professional educators appropriate to their target credential or degree, including:

- 1a. Content, pedagogical, and professional knowledge relevant to the credential or degree sought
- 1b. Learners, learning theory including social, emotional, and academic dimensions, and application of learning theory
- 1c. Culturally responsive practice, including intersectionality of race, ethnicity, class, gender identity and expression, sexual identity, and the impact of language acquisition and literacy development on learning
- 1d. Assessment of and for student learning, assessment and data literacy, and use of data to inform practice
- 1e. Creation and development of positive learning and work environments
- 1f. Dispositions and behaviors required for successful professional practice

Evidence will include multiple measures, multiple perspectives (from program faculty, P-12 partners, program completers, graduates' employers), and direct measures and evidence of performance in a field/clinical setting appropriate to the program.

Standard 2: Completer Professional Competence and Growth *Program completers adapt to working in a variety of contexts and grow as professionals.* Program completers engage in professional practice in educational settings and show that they have the skills and abilities to do so in a variety of *additional* settings and community/cultural contexts. For example, candidates must have broad and general knowledge of the impact of culture and language on learning, yet they cannot, within the context of any given program, experience working with the entire diversity of student identities or in all types of school environments. Candidate preparation includes first-hand professional experience accompanied by reflection that prepares candidates to engage effectively in different contexts they may encounter throughout their careers. Evidence shows that completers:

- 2a. Understand and engage local school and cultural communities, and communicate and foster relationships with families/guardians/caregivers in a variety of communities

2b. Engage in culturally responsive educational practices with diverse learners and do so in diverse cultural and

socioeconomic community contexts

2c. Create productive learning environments and use strategies to develop productive learning environments in a variety of school contexts

2d. Support students' growth in international and global perspectives

2e. Establish goals for their own professional growth and engage in self-assessment, goal setting, and reflection

2f. Collaborate with colleagues to support professional learning

Evidence for this standard will show both that program completers have engaged successfully in relevant professional practice and that they are equipped with strategies and reflective habits that will enable them to serve effectively in a variety of school placements and educational settings appropriate to the credential or degree sought.

Standard 3: Quality Program Practices *The program has the capacity to ensure that its completers meet Standards 1 and 2.* Preparation programs ensure that candidates, upon completion, are ready to engage in professional practice, to adapt to a variety of professional settings, and to grow throughout their careers. Effective program practices include consistent offerings of coherent curricula; high-quality, diverse clinical experiences; dynamic, mutually beneficial partnerships with stakeholders; and comprehensive and transparent quality assurance processes informed by trustworthy evidence. Each aspect of the program is appropriate to its context and to the credential or degree sought. Evidence shows the program:

3a. Offers coherent curricula with clear expectations that are aligned with state and national standards, as applicable

3b. Develops and implements quality clinical experiences, where appropriate, in the context of documented and effective partnerships with P-12 schools and districts

3c. Engages multiple stakeholders, including completers, local educators, schools, and districts, in data collection, analysis, planning, improvement, and innovation

3d. Enacts admission and monitoring processes linked to candidate success as part of a quality assurance system aligned to state requirements and professional standards

3e. Engages in continuous improvement of programs and program components and investigates opportunities for innovation through an effective quality assurance system

3f. Maintains capacity for quality reflected in staffing, resources, operational processes, and institutional commitment

Evidence related to this standard will include documentation of program practices and resources as well as the program's rationale for its structure and operation.

Standard 4: Program Engagement in System Improvement *Program practices strengthen the P-20 education system in light of local needs and in keeping with the program's mission.* The program is committed to and invests in strengthening and improving the education profession and the P-20 education system. Each program's context (or multiple contexts) provides particular opportunities to engage the field's shared challenges and to foster and support innovation. Engagement with critical issues is essential and must be contextualized. Sharing results of contextualized engagement and innovation supports the field's collective effort to address

education's most pressing challenges through improvement and innovation. The program provides evidence that it:

- 4a. Engages with local partners and stakeholders to support high-need schools and participates in efforts to reduce disparities in educational outcomes
- 4b. Seeks to meet state and local educator workforce needs and to diversify participation in the educator workforce through candidate recruitment and support
- 4c. Supports completers' entry into or continuation in their professional role, as appropriate to the credential or degree being earned
- 4d. Investigates available and trustworthy evidence regarding completer placement, effectiveness, and retention in the profession and uses that information to improve programs
- 4e. Meets obligations and mandates established by the state, states, or jurisdiction within which it operates
- 4f. Investigates its own effectiveness relative to its institutional or programmatic mission and commitments. Evidence for this standard will address identified issues in light of the local and institutional context.

Scope of AAQEP Standards: The AAQEP standards apply to all types of preparation programs, including initial preparation of teachers, preparation of school building and district leaders, and advanced preparation of educators who are adding credentials or preparing for new professional roles.

AAQEP's quality assurance system is grounded in collaboration, consistent with established accreditation practice, and respectful of context and innovation in its standards and processes. The system supports inquiry and improvement as it provides assurance of quality to stakeholders and the public.

AAQEP's Mission: To promote and recognize quality educator preparation that strengthens the education system's ability to serve all students, schools, and communities.

*The lists within each standard represent aspects of the overall evidence package for the standard; each aspect is *not* a "substandard" to be considered apart from the whole standard. Evidence for each standard is evaluated holistically.

Appendix C: College of Education and Human Services (CEHS) IPE Definition and Competencies

***Interprofessional Education at XXX:** When students from two or more professions learn about, from, and with each other to demonstrate effective collaboration and improve social determinants of health or educational outcomes (adapted from World Health Organization, 2010).*

IPE Competencies

After the completion of an IPE experience, students will be able to:

Values/Ethics of Interprofessional Practice

- Work in cooperation with those who receive services, those who provide services, and others who contribute to or support the delivery of services.
- Interact with high standards of ethical conduct within the client/student, family, and IPE team relationship.
- Manage ethical dilemmas specific to IPE situations within one's professional scope of practice.

Roles/Responsibilities

- Communicate one's roles and responsibilities clearly to clients/students, families, and other professionals.
- Communicate with team members to clarify each member's responsibility in executing components of a treatment plan or intervention.
- Use the unique and complementary abilities of all members of the team to optimize client/student services.

Interprofessional Communication

- Organize and communicate information with clients/students, families, and team members in a form that is understandable, avoiding discipline-specific terminology when possible.
- Express one's knowledge and opinions to team members involved in client/student service with confidence, clarity, and respect, working to ensure a common understanding of information, treatment, and service decisions.
- Recognize individual uniqueness, including experience level, expertise, culture, power, and hierarchy within the team, contributes to effective communication, conflict resolution, and positive interprofessional working relationships (University of Toronto, 2016).

Teams and Teamwork

- Describe the process of team development and the roles and practices of effective teams.
- Use process improvement strategies as needed to increase the effectiveness of interprofessional teamwork and team-based services.
- Reflect on individual performance improvement, as well as team performance improvement.

Appendix D: Sample Course Syllabus

TEACHING STUDENTS WITH SPECIAL NEEDS

SPRING 2020

MWF 8–8:50 (Section .01) and 10–10:50 (Section .02)

Required Texts

Vaughn, S. R., Bos, C. S. & Schumm, J. S. (2018). *Teaching students who are exceptional, diverse, and at-risk in the General Education Classroom*, 7th edition. Upper Saddle River, NJ: Pearson

Draper, S. M. (2010). *Out of my mind*. NY: Simon & Schuster Children's Publishing Division.

Prerequisites and Primary Audience

Prerequisite: EDUC 211. This course is specifically designed to be included in the XXX Teacher Education Program Special Education sequence.

Catalog Description

Provides prospective teachers with an introduction to teaching students with disabilities. State and federal laws, regulations, and policies and procedures for identifying and teaching students with disabilities in schools will be addressed. Students will gain knowledge in effective strategies and resources for teaching students with special needs.

Mission Statements

The mission of XXXXXXXX XXXXXXXX XXXXXXXX is to educate students for Christian service and leadership throughout the world.

The mission of the College of Education and Human Services is to equip students for global ministry through exemplary practice and service in education and human services.

The mission of the Teacher Education Department is to prepare exemplary, committed educators for service in diverse and multicultural communities for the glory of God.

Philosophy of Teaching

It is important for future teachers to be actively involved in their own process of learning. The student through current research, presentations, cooperative learning, discussion, technology tools, and guest speakers will engage in an active learning experience. It is imperative for future educators to have successful strategies and a theoretical framework to access when working with children who have special needs.

The classroom at any level should have the dynamics of a learning community. The instructor and students must work together to create a cooperative and safe learning environment. The most fascinating aspect of classroom communities is the feeling of partnership. The instructor and students should feel like a group of learners working together toward the same goal. While the instructor assumes the role of facilitator, the students should feel ownership over their own learning experience. Responsibility for learning rests in the hands of the student.

Modeling is a key component to the education process. Learning with students is not a weakness, nor does it show incompetence. Students of all ages enjoy seeing teachers enthusiastic about a subject and about learning.

Teaching is a vocational calling and ministry. Teaching allows me to be a servant leader. I strive to provide genuine care and empathy to each student who enters the classroom. As Jesus said to his disciples in the New Testament, “You know that those who are regarded as rulers of the Gentiles lord it over them, and their high officials exercise authority over them. Not so with you. Instead, whoever wants to become great among you must be your servant, and whoever wants to be first must be slave to all” (Mark 10:42-44 New International Version). I am deeply humbled by the opportunity to teach and be called a teacher.

Course Description, Overview, and Objectives

This course provides teacher candidates with an introduction to teaching students with special needs. The course will cover: state and federal laws, regulations, policies and procedures for identifying and teaching students with disabilities in schools. Students will gain knowledge in effective strategies and resources for teaching students with special needs.

Course Structure

The course will incorporate lecture, discussion, experiential learning, multimedia activities, and collaborative learning activities.

Competencies and Measurements

See Course Alignment of Assignments in Canvas, TExEs Competencies, & State Standards.

Curriculum Framework

The curriculum of the XXX Teacher Education Program is aligned with the Pedagogy and Professional Responsibilities Standards and the Texas Teacher Standards outlined in the Texas Administrative Code. In addition, to these state standards and in alignment with the Christian mission of XXX, we have added the following student learning outcome:

Christian Principles and Professional Practice

The teacher reflects on how Christian principles can appropriately inform professional development and practice.

Texas Teacher Standards Texas Administrative Code, Chapter 149

The Texas Teacher Standards are the Texas identified performance standards to be used to inform the training, appraisal, and professional development of teachers. The full descriptions of each standard can be found at the following link: <http://ritter.tea.state.tx.us/rules/tac/chapter149/ch149aa.html>

Standard 1: Instructional Planning and Delivery

Teachers demonstrate their understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students, makes appropriate use of technology, and makes learning relevant for today’s learners.

Standard 2: Knowledge of Students and Student Learning

Teachers work to ensure high levels of learning, social-emotional development, and achievement outcomes for all students, taking into consideration each student’s educational and developmental backgrounds and focusing on each student’s needs.

Standard 3: Content Knowledge and Expertise

Teachers exhibit a comprehensive understanding of their content, discipline, and related pedagogy, as demonstrated through the quality of the design and execution of lessons and their ability to match objectives and activities to relevant state standards.

Standard 4: Learning Environment

Teachers interact with students in respectful ways at all times, maintaining a physically and emotionally safe, supportive learning environment that is characterized by efficient and effective routines, clear expectations for student behavior, and organization that maximizes student learning.

Standard 5: Data-Driven Practice

Teachers use formal and informal methods to assess student growth aligned to instructional goals and course objectives and regularly review and analyze multiple sources of data to measure student progress and adjust instructional strategies and content delivery as needed.

Standard 6: Professional Practices and Responsibilities

Teachers consistently hold themselves to a high standard for individual development, pursue leadership opportunities, collaborate with other educational professionals, communicate regularly with stakeholders, maintain professional relationships, comply with all campus and school district policies, and conduct themselves ethically and with integrity.

Course Outcomes

Upon successful completion of this course:

1. Students will be able to explain the history and systems of special education.
2. Students will be able to explain the identification, including the nature and needs of children with special needs.
 - a. Each Module will address the following for each disability category: 1. Characteristics of each disability category (i.e., Speech, Learning Disabilities, Dyslexia, Emotional Disturbance, etc.). 2. Identification of each disability category. 3. Multisensory, Evidence-based instructional strategies proven to be effective for each of the disability categories.
 - b. Each Module will address the unique Individualized Education Program issues for each disability category.
3. Students will be able to explain the various levels of the RTI process and identify Evidenced-Based Practices (EBP) for individuals at the various tiers that are based on the needs of the individual.
4. Students will be able to apply the EBP as needed.
5. Students will explain how the information from the course will improve their future teaching practice with students with disabilities.

Course Structure and Assignments:

Module 1-*History, Laws, and RTI*

Module 2-*Communicating with Parents and Other Professionals, and Culturally Diverse Students*

Module 3-*Speech Impairments - SI*

Module 4-*Learning Disability and Dyslexia*

Module 5-*Emotional Disturbance - ED*

Module 6-*Other Health Impairments - OHI*

Module 7-*Intellectual Disabilities*

Module 8-*Autism*

Module 9-*Lower Incident Disabilities*

Module 10-*Gifted and Talented*

Module 11-*Putting It All Together – Admission, Review, and Dismissal Simulation*

Quizzes and Class Discussions: You will be required to read selected articles and online sources in this course. When a reading is assigned, there may be a quiz about that chapter, article, or assigned reading at

the beginning of the next class period. The quizzes are not designed to be difficult; however, they are designed to evaluate who is reading the material. Reading the assignments should sufficiently prepare you for all quizzes and/or class activities and discussions. We have many meaningful and purposeful discussions about the assigned readings. You are required to read and study the textbook or articles in order to be sufficiently prepared.

Assignment Submission Standards: Specific requirements and assessment criteria will be provided to you when the assignment is given. Assignments will be accepted when submitted in the required format. If an assignment does not meet the minimum criteria (minimum length, number of citations, etc.) or is not submitted in the required format, it will be considered incomplete and will be returned to the student ungraded. In order to qualify for a grade, the assignment must be resubmitted and will be considered late. At this point, the late work policy outlined below will apply. It is expected that the student will take care of spelling and grammar in all written assignments and utilize APA format for all citations and references. Assignments submitted with excessive errors in spelling and grammar will also be returned ungraded to the student. The assignment must be resubmitted and will be assessed the late penalty. The student will have ONE WEEK to resubmit the assignment if it is returned for any of the reasons described above.

ALL course assignments must be submitted in order to qualify for an A or B in the course. Failure to submit ALL assignments will result in a C being the highest grade possible.

Assignment format: Typed, 1-inch margins, 12-point font, Times New Roman, double spaced OR
Specified format given during introduction of an assignment

The XXX Writing Center, located in the new Learning Commons, welcomes all students who would like free assistance with their writing. Trained and experienced tutors will provide feedback for any writing assignment at any stage of the writing process--from planning and drafting to revising and editing. Hours of operation are posted at www.acu.edu/writingcenter. Please call xxx-xxxx for more information.

Grading Scale

92–100	A
83–91	B
74–82	C
68*–73	D

*below 68 is failing

Late Work: Assignments are due in Canvas at the **TIME AND DATE LISTED IN CANVAS**. Late work will affect the letter grade. Late assignments will receive an automatic deduction of 10 percent from the final grade earned on the assignment. Late assignments will not be accepted after one week from the original due date and will be recorded in the grade book as a zero.

Attendance Policy: You are expected to attend class each time we meet. If it is necessary to miss class, you need to contact the instructor via email or phone. No distinctions will be made between excused and unexcused absences. For the purposes of this course, attendance is more than physical presence. Credit will only be given for meaningful attendance, meaning that you are attending to the task at hand. Absences will be assigned for behaviors including, but not limited to, texting, sleeping, or disruptive talking. Meaningful attendance requires that you come to class prepared by completing and bringing reading material and assignments in order to actively participate and share in class discussions, activities, and reflections. Three tardies or early dismissals will equal one absence. More than 2 absences will lower the final grade by 5 points for each additional absence. In special situations, exceptions may be granted. More than 6 absences will result in being dropped from the course.

In-class assignments, including exams and quizzes, which are missed due to absences not approved by the university, may not be made up, except in extreme cases as approved by the instructor.

Note: The only absences that will not receive a penalty in the attendance portion of your grade are those that are a part of university pre-approved events.

Incomplete Policy: An incomplete may be granted if a teacher candidate has not met the requirements of the course due to extreme situations outside the candidate's control. An incomplete is not given when a student has simply been negligent toward class requirements. An "I" can only be assigned if the candidate has completed at least 75% of the course in good standing. If a student knows early in the semester that life has presented a significant challenge, it is recommended that a conference be scheduled with the course instructor to assess whether it will be in the candidate's best interest to withdraw from the course and take the course at a later time. An "I" is removed by the completion of the necessary work within the next long term or time approved in writing by the instructor; otherwise, the "I" will become an "F" on the student's record. It is also important to understand that an "I" calculates as an "F" in the GPA until it is completed. This may impact a candidate's admission status and/or eligibility for financial aid. For these reasons, the teacher candidate must carefully evaluate whether an "I" is the best option. If it is determined that an "I" is the best option, an Incomplete Policy Contract will be signed by the candidate and the instructor and be filed in the Admission and Candidacy File in the Certification Office. The contract form is included in the Teacher Education Department Forms and Rubrics section of the Teacher Education Handbook.

Academic Integrity Policy: Violations of academic integrity and other forms of cheating, as defined in the Academic Integrity Policy, involve the intention to deceive or mislead or misrepresent. Violations will be addressed as described in the Policy. The Policy is available to review at the provost's website and the following offices: provost, college deans, dean of campus life, director of student judicial affairs, director of residential life, and the Teacher Education Department.

ADA Compliance Statement: XXXXXX XXXXXX XXXXX is dedicated to removing barriers and opening access for students with disabilities in compliance with ADA and Section 504 of the Rehabilitation Act. The Alpha Scholars Program facilitates disability accommodations in cooperation with instructors. In order to receive accommodations, you must be registered with Alpha Scholars Program, and you must complete a specific request for each class in which you need accommodations. If you have a documented disability and wish to discuss academic accommodations, please call our office directly at [REDACTED]

Appendix E: Texas Education Agency Principal Survey

2018–2019 Principal Survey Questions: Keyed to Distributed Data Sets

RESPONSE DESCRIPTORS

WELL PREPARED (Response = 3) All, or almost all, of the time the beginning teacher was able to demonstrate a thorough understanding and had the required knowledge and skills.

SUFFICIENTLY PREPARED (Response = 2) Most of the time, the beginning teacher was able to demonstrate a general understanding and had the required knowledge and skills.

NOT SUFFICIENTLY PREPARED (Response = 1) The beginning teacher demonstrated limited understanding and had partial required knowledge and skills.

NOT AT ALL PREPARED (Response = 0) The beginning teacher demonstrated little to no understanding and had minimal required knowledge and skills.

PLANNING: This block asks questions about this teacher’s preparedness to plan instruction for students.

To what extent was this first-year teacher prepared to

1. design lessons that align with state content standards?
2. design lessons that are appropriate for diverse learning needs?
3. design lessons that reflect research-based best practices?
4. design lessons that are relevant to students?
5. design lessons that integrate technology when appropriate to the lesson (to the extent technology is available at the school)?
6. plan appropriate methods (formal or informal) to measure student progress?
7. use a variety of student data to plan instruction?
8. provide appropriate feedback to students, families, or other school personnel?
9. plan lessons that encourage students to persist when learning is difficult?
10. plan engaging questions that encourage complex or higher-order thinking?
11. plan lessons that use student instructional groups to meet the needs of all students?
12. make sure all instructional resources, materials, and technology are aligned to instructional purposes?

INSTRUCTION: This block asks questions about this teacher's preparedness to implement instruction in the classroom.

To what extent was this first-year teacher prepared to

13. use content-specific pedagogy to deliver lessons aligned with state standards?
14. explain content accurately to students in multiple ways?
15. demonstrate connections between the learning objectives and other disciplines?
16. provide opportunities for students to use different types of thinking, such as analytical, practical, creative, or research-based?
17. use technology when appropriate to the lesson (to the extent technology was available at the school)?
18. differentiate instruction?
19. consistently monitor the quality of student participation and performance?
20. work with a diverse student population?
21. work with a diverse parent and school community population?
22. collect student progress data during instruction?
23. adjust the lesson in progress based on data gathered during instruction? *[data: evidence generated during instruction such as formal or informal, observational, formative, etc.]*
24. maintain student engagement by adjusting instruction and activities based on student responses and behavior?
25. give appropriate time for the lesson from introduction to closure?

LEARNING ENVIRONMENT: This block asks questions about this teacher's preparedness to establish a positive classroom environment that encourages learning.

To what extent was the first-year teacher prepared to

26. organize a safe classroom?
27. organize a classroom learning environment that is accessible for all students?
28. organize a classroom in which procedures and routines are clear and efficient?
29. establish clear expectations for student behavior in the classroom?
30. maintain clear expectations for student behavior in the classroom?

31. implement campus behavior systems consistently and effectively?

32. provide support to students to meet expected behavior standards?

PROFESSIONAL PRACTICES & RESPONSIBILITIES: This block asks questions about this teacher's preparedness to meet the professional responsibilities associated with the role as an educator.

To what extent was this first-year teacher prepared to

33. find and follow district expectations for professional standards?

34. understand and adhere to the Code of Ethics and Standard Practices for Texas Educators?

35. advocate for the needs of the students in the classroom?

36. reflect on his or her strengths and professional learning needs?

37. use data from self-assessment, reflection, and supervisor feedback to set professional goals?

38. prioritize goals to improve professional practice and student performance?

STUDENTS WITH DISABILITIES: This block asks questions about this teacher's preparedness to address the needs of students with disabilities.

39. Does this teacher have students with disabilities as determined by the Texas Education Code §29.003 in his or her classroom? (No = 0, Yes = 1)

STUDENTS WITH DISABILITIES

To what extent was this first-year teacher prepared to

40. differentiate instruction to meet the academic needs of students with disabilities?

41. differentiate instruction to meet the behavioral needs of students with disabilities?

42. develop or implement appropriate formal and informal assessments for students with disabilities to demonstrate their learning?

43. make appropriate instructional decisions based on a student's individualized education program (IEP)?

44. collaborate with other relevant staff to meet the academic, developmental, and behavioral needs of students with disabilities?

45. understand and adhere to the federal and state laws that govern special education services?

ENGLISH LANGUAGE LEARNERS: This block asks questions about this teacher's preparedness to address the needs of students who have limited English language proficiency as determined by the TAC §89.1203.

46. Does this teacher have English Language Learners (ELLs) as determined by the Texas Administrative Code Section 89.1203 in his or her classroom? (No = 0, Yes = 1)

ENGLISH LANGUAGE LEARNERS

To what extent was this first-year teacher prepared to

47. design lessons that adequately support ELLs to master the Texas Essential Knowledge and Skills (TEKS)?

48. develop or implement appropriate formal and informal assessments for ELLs to demonstrate their learning?

49. support ELLs in mastering the English Language Proficiency Standards (ELPS)?

50. understand and adhere to federal and state laws that govern education services for ELLs?

OVERALL EVALUATION: This block asks questions about your overall perspective on the preparedness of this individual to be an effective first-year teacher.

51. What is your overall evaluation of how well the educator preparation program prepared this teacher for the realities of the classroom as they exist on your campus? Select the one statement that most closely matches your current overall perspective of the program.

(3) Well prepared by the program for the first year of teaching.

(2) Sufficiently prepared by the program for the first year of teaching.

(1) Not sufficiently prepared by the program for the first year of teaching.

(0) Not at all prepared by the program for the first year of teaching.

TEACHER EFFECTIVENESS AND STUDENT ACHIEVEMENT

52. How would you rate this teacher's influence on student achievement? Select your answer from the following 10-point scale.

10 The teacher is exceptional, in the top 2% of new teachers I've supervised.

9 The teacher is excellent, in the top 5% of new teachers I've supervised.

8 The teacher is very good.

7 The teacher is good.

6 The teacher is average.

5 The teacher is below average but will likely improve in time.

4 The teacher is below average and will need significant professional development to improve.

3 The teacher is well below average.

2 The teacher is poor.

1 The teacher is unacceptable

Appendix F: Interview Protocol for Recent Teacher Preparation Graduates

(Adapted from Saldaña, J. & Omasta, M. (2018). *Qualitative research: Analyzing life*. SAGE Publications).

Research Question(s):

RQ 1: What elements of collaboration exist within an interprofessional education experience in a teacher preparation program?

RQ 2: How does the nature of collaboration in an interprofessional education experience used in a clinical setting assist preprofessional teachers to better serve kindergarten through twelfth-grade students in public schools?

RQ 3: How does participation in interprofessional education equip preprofessional teachers with imperative communication, problem-solving, and leadership skills needed in the modern kindergarten through twelfth-grade public school setting?

Begin with the introductory script below, followed by the questions in the order written. Please be sure to familiarize yourself with all italicized directions prior to the interview.

Hello, my name is ... (**insert name and introduction you would like to use here**). Thank you for taking the time to talk to me today. Before we begin the interview, do you have any questions about the informed consent form that you completed earlier?

If the participant has questions, please address them using information from the actual consent form provided. Once this is complete, or if they have no questions, continue.

To be sure we have an accurate record of this interview, I am going to be recording our conversation; is this okay?

If the participant objects, explain that, unfortunately, you are unable to continue with the interview. If possible, let the primary researcher know as soon as possible. If the participant is not willing to be recorded, thank him or her for their time, and conclude the interview. If the participant agrees that the interview may be recorded, thank him or her and continue.

Today is (DATE/TIME), and I am speaking with (PARTICIPANT NUMBER 1–10). I am going to be asking you a few questions regarding your educational experience in the Teacher Preparation Program. If there is anything you do not feel comfortable answering or that you do not know the answer to, that is not a problem; just let me know, and we can skip that question.

1. How do you define your own professional role as a teacher?
2. What are your primary responsibilities as a teacher?

3. How did your preprofessional training influence your understanding of other professionals' roles and responsibilities?
4. What types of interprofessional education experiences or collaboration experiences did you participate in during your preprofessional training?
5. How did these interprofessional education experiences inform your current profession?
6. How do you define collaboration, specifically relating to other professionals, in education?
7. What did you learn about collaboration with other professionals during your preprofessional training?
8. How did the interprofessional education experiences prepare you to serve students with diverse needs?
9. What other types of professionals have you interacted with as a teacher?
10. In what capacity are you interacting with other professionals?

Thank you for taking the time to talk to me today. The Teacher Preparation program is always looking for ways to improve, and your input is appreciated! Please feel free to contact Jenn Rogers xxxxx@acu.edu if you have any questions regarding the results of this study.

Appendix G: Interprofessional Education Course Descriptions

Special Topics: Interprofessional Education and Ethics (1 hr)

Instructors: [REDACTED] and [REDACTED]

Description: Interprofessional Education (IPE) is defined at XXX as “*When students from two or more professions learn about, from, and with each other to demonstrate effective collaboration and improve social determinants of health and/or educational outcomes (adapted from World Health Organization, 2010).*” This course will engage students majoring in or interested in helping related professions (i.e., Athletic Training, Communications/Sciences and Disorders, Nursing, Nutrition/Dietetics, Occupational Therapy, Social Work, and Teacher Education) in a robust conversation about professional ethics across disciplinary lines. Students will gain an understanding of the ethical guidelines and principles of each field, how they impact clients, and how they are translated into practice. The use of hands-on, interdisciplinary case studies will be used to help students wrestle with ethical dilemmas.

Dates: SPRING 2021

February 11, 5:00–8:50 PM

February 12, 5:00–9:50 PM

February 13, 9:00 AM–4:00 PM

Maximum enrollment: 14

Minimum requirements: Sophomore Standing, Limited to majors in the College of Education and Human Services or the School of Nursing. Others may enroll with permission.

Special Topics: Interprofessional Skills in Simulation (1 hr)

Instructors: [REDACTED] and [REDACTED]

Description: Interprofessional Education (IPE) is defined at XXX as “*When students from two or more professions learn about, from, and with each other to demonstrate effective collaboration and improve social determinants of health and/or educational outcomes (adapted from World Health Organization, 2010).*” This course will rely on skills learned across selected helping professions (i.e., Athletic Training, Communications/Sciences and Disorders, Nursing, Nutrition/Dietetics, Occupational Therapy, Social Work, and Teacher Education) to engage in hands-on, experiential interprofessional simulation. Each student will be engaged in utilizing knowledge and skills gained in their respective disciplines to contribute to an interdisciplinary team in life-like simulation exercises. Time for preparation and adequate reflection will be built into this course.

Dates: SPRING 2021

March 4, 5:00–8:50 PM

March 5, 5:00–9:50 PM

March 6, 9:00 AM–4:00 PM

Maximum enrollment: 14

Minimum requirements: Sophomore Standing, Limited to majors in the College of Education and Human Services or the School of Nursing. Others may enroll with permission.

Special Topics: Topics in Interprofessional Education: Exploring Vocation (1 hr)

Instructors: TBA

Description: Interprofessional Education (IPE) is defined at XXX as “*When students from two or more professions learn about, from, and with each other to demonstrate effective collaboration and improve social determinants of health and/or educational outcomes (adapted from World Health Organization, 2010).*” This course will explore the idea of Christian vocation in the context of being “called” to the profession of helping others. Taught from the vantage point of professions focusing on helping (i.e., Athletic Training, Communications/Sciences and Disorders, Nursing, Nutrition/Dietetics, Occupational Therapy, Social Work, and Teacher Education), this course will use diverse voices and texts to explore the idea of God creating each practitioner with unique skills, talents, and passion for specific purposes in each of the selected fields of study. Students will be called upon to be largely introspective in understanding their own sense of calling and vocation.

Dates: FALL 2021

TBA

Minimum requirements: Sophomore Standing, Limited to majors in the College of Education and Human Services or the School of Nursing. Others may enroll with permission.

Appendix H: SPICE-R2 Instrument

SPICE-R2 Instrument

Dear Student:

In this survey you are being asked about your attitudes toward interprofessional teams and the team approach to care. By ***interprofessional team***, we mean two or more health professionals (e.g., nurse, occupational therapist, pharmacist, physical therapist, physician, social worker, veterinarian, etc.) who work together to plan, coordinate, and/or deliver care to patients/clients.

PLEASE NOTE: The following scale progresses from “Strongly Disagree (1)” → “Strongly Agree (5)”

INSTRUCTIONS: Please be candid as you indicate the extent of your disagreement/agreement with each of the following statements related to interprofessional teams and the team approach to care.		<i>Strongly Disagree</i> (1)	<i>Disagree</i> (2)	<i>Neutral</i> (3)	<i>Agree</i> (4)	<i>Strongly Agree</i> (5)
1. [T]	Working with students from different disciplines enhances my education	1	2	3	4	5
2. [R]	My role within an interprofessional team is clearly defined	1	2	3	4	5
3. [O]	Patient/client satisfaction is improved when care is delivered by an interprofessional team	1	2	3	4	5
4. [T]	Participating in educational experiences with students from different disciplines enhances my ability to work on an interprofessional team	1	2	3	4	5
5. [R]	I have an understanding of the courses taken by, and training requirements of, other health professionals	1	2	3	4	5
6. [O]	Healthcare costs are reduced when patients/clients are treated by an interprofessional team	1	2	3	4	5
7. [T]	Health professional students from different disciplines should be educated to establish collaborative relationships with one another	1	2	3	4	5
8. [R]	I understand the roles of other health professionals within an interprofessional team	1	2	3	4	5
9. [O]	Patient/client-centeredness increases when care is delivered by an interprofessional team	1	2	3	4	5
10. [T]	During their education, health professional students should be involved in teamwork with students from different disciplines in order to understand their respective roles	1	2	3	4	5

Factors:

T = Interprofessional Teamwork and Team-based Practice

R = Roles/responsibilities for Collaborative Practice

O = Patient Outcomes from Collaborative Practice

Note. Permission to use this instrument was granted by Joseph A. Zorek, PharmD, BCGP Director, Linking Interprofessional Networks for Collaboration
Office of the Vice President for Academic, Faculty & Student Affairs
Associate Professor, School of Nursing
The University of Texas Health Science Center at San Antonio

Appendix I: IRB Approval Letter

ABILENE CHRISTIAN UNIVERSITY

Educating Students for Christian Service and Leadership Throughout the World

Office of Research and Sponsored Programs
320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103
325-674-2885



October 1, 2020

Jennifer Rogers, M.Ed.
Department of Educational Leadership
ACU PO Box 29008
Abilene Christian University

Dear Jenn,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled "Integrating Interprofessional Education into Teacher Preparation Curriculum: Reimagining Partnerships from the Inside Out",

(IRB# 20-141) is exempt from review under Federal Policy for the Protection of Human Subjects.

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D.
Director of Research and Sponsored Programs