Are They Ready for This?

The Reported Preparedness of Special Educators in Northeast Ohio

by

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ABSTRACT

The nationwide shortage of special educators is well documented. Preparedness is a key component of building self-efficacy and longevity in the PK-12 teaching field (Clark & Newberry, 2019; Darling-Hammond et al., 2002; Ingersol et al., 2012; Ondrasek et al., 2020). This qualitative study examined the preparedness of novice special education teachers to meet the Council for Exceptional Children's Initial Practice-Based Professional Preparation Standards, based on the instruction they received in their preservice teacher preparation programs. Through semi-structured interviews with fifteen novice special educators working in Northeast Ohio, the researcher identified in ten separate themes participants' levels of preparedness to enact the standards. Study participants rated and reported their highest areas of preparedness in research-based instructional strategies, diversity, and knowledge of the effects of disabilities. The lowest areas included behavior and emotional management, collaboration with paraprofessionals and related service providers, and professional responsibilities. In addition, the study described the methods or means by which participants eventually gained knowledge in their most underprepared areas. Mentorship within their individual districts was the primary method of study participants' eventual knowledge attainment. Lastly, the study inquired into most meaningful experiences that novice special education teachers encountered within their preservice programs. The experience overwhelmingly identified was student teaching/field placements. The results of this study imply that improvements are necessary in preservice special education teacher preparation programs to better prepare special educators for the field.

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CHAPTER I

INTRODUCTION

Special education in the U.S. has evolved significantly since the seminal *Brown vs. the Board of Education* ruling in 1954 (Lengyel & Vandbergeijk, 2021). With each piece of legislation passed (e.g., Education for All Handicapped Children Act, Individuals with Disabilities Education Act, Individuals with Disabilities Education Improvement Act, Every Student Succeeds Act, etc.) and every legal precedent set (e.g., *PARC v. the Commonwealth of Pennsylvania*, *Mills v. the Board of Education*, etc.), the roles and responsibilities of special education teachers have expanded. Special educators are required to fulfill extensive and multi-faceted roles. In addition to maintaining standard teaching responsibilities with some of the most difficult students, special educators must become experts in assessment, advocacy, intervention, building bridges between families and the school, facilitating team meetings, and crafting a plethora of legally binding documents (U.S. Bureau of Labor Statistics, 2022). These tasks require an immense amount of knowledge and skills. The burden of developing these attributes in special educators often falls on our nation's universities and teacher education programs.

Longevity amongst special educators is often a struggle. A nationwide shortage of licensed special educators has left many of our most vulnerable students without the appropriate interventions and specialized instruction necessary for accessing the same level of success as their non-disabled peers (Ondrasek et al., 2020). With an attrition rate nearly twice that of general education teachers, school districts have struggled to provide legally mandated levels of service (Buttner, 2021). To combat this crisis, many states have adopted alternative teacher licensure programs. Unfortunately, these programs have

done little to affect this growing problem and have created additional ones (The CEEDAR Center & The Center on Great Teachers and Leaders, 2020.). For example, special educators who enter the profession through alternative pathways have a higher rate of attrition (The CEEDAR Center & The Center on Great Teachers and Leaders, 2020.). Additionally, students taught by these alternatively licensed instructors fail to achieve at the same level of those who are served by traditionally trained special educators (Darling-Hammond, 2002; Feng & Sass, 2013; Fitchett & Heafner, 2018; Henry et al., 2014). These facts suggest that both the level and quality of preservice teacher education contributes to attrition rates and student achievement levels.

The preparedness of public school teachers, including those in special education roles, is a strong indicator of positive self-efficacy and longevity in the profession (Clark & Newberry, 2019; Darling-Hammond et al., 2002; Ingersoll et al., 2012; Ondrasek et al., 2020). Considering this evidence, it is essential that special educators receive high quality preservice training from their teacher education programs. Unfortunately, research has shown that special educators identified several key areas in which they felt their training was lacking (Beck & Desutter, 2020; Biggs et al., 2019; Klopfer et al., 2019; Sasson & Malkinson, 2021). The purpose of the proposed mixed-methods study is to examine how current Ohio special education teachers perceive their levels of preparedness to meet the Council for Exceptional Children's Initial teacher preparation standards based on the preservice teacher education that they received.

Statement of the Problem

Despite evidence (Clark & Newberry, 2019; Darling-Hammond et al., 2002; Ingersoll et al., 2012, Ondrasek et al., 2020) that established the importance of special

education preservice training in relation to student outcomes and teacher longevity, a recent review of literature by the researcher demonstrated that many special educators feel that their teacher preparation programs did not adequately prepare them for the challenges that they faced in the classroom. These areas of preparation included co-teaching and inclusive practices (Allday et al., 2013; Chitiyo & Brinda, 2018; Orr, 2009; Ricci et al., 2017; Sasson & Malkinson, 2021), behavior management (Flower et al., 2017; Freeman et al., 2014; Klopfer et al., 2019), collaborating with paraprofessionals (Biggs et al., 2019), working with families and other professionals to facilitate the IEP process (Accardo et al., 2020; Beck & Desutter, 2020; Brownell et al., 2005; Gavish et al., 2016; Sewell, 2012; Strassfield, 2019). Although research exists on some aspects of the preparation of special educators, it is not known how special education teachers in Ohio perceive the extent to which their preservice teacher education programs prepared them to meet the CEC's Initial Practice-Based Professional Preparation Standards (2020). Gaining insight into these areas may aid universities in designing coursework and experiences that adequately prepare their teaching candidates for the field.

Purpose Statement

This qualitative study had multiple purposes. The first was to examine how novice Ohio special education teachers perceive the extent to which their preservice teacher education programs prepared them to meet the CEC's Initial Practice-Based Professional Preparation Standards. The study then hoped to determine in which areas preservice programs are performing well and in which areas they need to make growth. The study also hoped to discover how novice teachers acquire essential information that they were not well-prepared for as a result of their licensure program. Lastly, this study

hoped to determine what elements of their preservice program novice special educators felt was the most meaningful. This information provides a barometer as to whether teachers in Ohio felt that their preservice programs adequately prepared them for success in the field and may provide universities with feedback about the best ways to structure these programs. Participants in this study answered a series of open-ended questions during a semi-structured interview. The questions were designed to give voice to the participants and allowed them to describe in depth the areas in which they felt most prepared by their licensure programs and what areas they felt they needed better training. For the areas that teachers felt poorly prepared when entering the field, participants were asked to describe the manner in which they subsequently received the knowledge and experiences necessary for meeting those standards.

Research Questions

The author of this study designed the following research questions to examine Ohio special education teachers' perceptions of how their preservice programs prepared them to meet the CEC's Initial Practice-Based Professional Preparation Standards (2020).

1. How do practicing special educators in Ohio describe their levels of preparedness to meet the CEC's Initial Practice-Based Professional Preparation Standards (2020) after having completed their preservice teacher education programs?
2. Which aspect(s) of their positions did special education teachers in Ohio feel most prepared when completing their preservice teacher education programs and entering the field?

3. What aspect(s) of their position did special education teachers in Ohio feel least prepared when completing their preservice teacher education programs and entering the field?
4. For the area(s) in which participants perceived themselves as unprepared, how was this standard of knowledge or practice eventually obtained (e.g., mentoring, job-imbedded professional development, etc.)?
5. What were the most meaningful and effective learning experiences that participants experienced during their preservice education program?

Overview of Methodology

To explore these questions, a qualitative methodology was utilized. Qualitative research was conducted via questions in a semi-structured interview to measure the extent to which the participants regarded their preparedness for meeting the CEC's Initial Practice-Based Professional Preparation Standards. The study's population consisted of currently practicing special education teachers in school districts throughout Northeast Ohio. Survey questions were developed based on the 2020 Council for Exceptional Children's (CEC) Initial Practice-Based Professional Preparation Standards. These standards outline the skill sets and knowledge that beginning special educators are expected to put into practice when stepping into the profession. The researcher asked participants to describe their level of preparation through a series of "how and how well" questions. These questions were designed to discover the level of preparedness that the universities' programs produced as well as what methodologies the programs utilized to produce this level.

Additionally, participants were asked to describe the most meaningful learning experiences that they had in their preservice programs and to describe how they acquired the requisite job-related skills and knowledge for areas not sufficiently addressed by their preservice programs. The researcher analyzed participants' responses using inductive coding to identify any emerging codes or themes. These themes helped to create a better picture of the participants' overall preservice experiences.

Rationale and Significance of the Study

The purpose of the proposed study was to examine Ohio special education teachers' perceptions of how their preservice programs prepared them to meet the CEC's Initial Practice-Based Professional Preparation Standards. In addition, this study sought to discover the most meaningful learning experiences for special educators and how they acquired essential knowledge not covered in their preservice training programs. The findings of this study will contribute to the already existent body of knowledge regarding the preparation of special educators.

Two similar studies have utilized the CEC's Initial Preparation Standards to determine special educators' levels of preparedness when entering the field. A study by Bruno et al. (2018) similarly explored special education teachers' perceptions on their classroom preparedness when entering the field. The study's authors created a survey based on a combination of the Council for Exceptional Children's (CEC) Initial Specialty Set for Individualized General Curriculum National Standards, the Virginia Standards for the Professional Practices of Special Education, and the Standards for the Virginia Standards for the Professional Practice for All Teachers. The participants of the study included both preservice and currently practicing special educators across the country

who completed both traditional and alternative licensure paths. The study's researchers concluded that the special education teachers were satisfied with their teacher education programs and felt that their respective programs provided adequate training toward meeting those professional preparation standards (Bruno et al., 2018). The findings of previous and subsequent studies contradict those of other researchers who have explored the preparation of special educators in many specific job-related domains (Accardo et al., 2020; Allday et al., 2013; Biggs et al., 2019; Flower et al., 2017).

A 2016 mixed methods study by Caniglia found that "the majority of SETs (special education teachers) perceived themselves to be prepared or well prepared and confident or very confident to implement the skills and knowledge associated with the 2012 CEC Initial Special Education Teacher Preparation Standards" (Caniglia, 2016, p. 141). This study utilized currently practicing teachers throughout the Northwest United States. The qualitative portion of the study determined that teacher education programs failed to provide adequate training in multiple areas. These included skills related to instructing and assessing students from culturally diverse backgrounds, general education content area knowledge and the use of instructional technology (Caniglia, 2016). The study also determined that special educators were less confident in working with paraprofessionals (Caniglia, 2016).

The Bruno et al. (2018) study stated that the sample included both inservice and preservice teachers and that this factor may have influenced the study's results. Preservice teachers, not having any experience in the field, may have limited views of the purpose of their preparation. This study sought to eliminate this variable by surveying only practicing special educators. The Caniglia study (2016) utilized participants with

differing levels of service time. This study focused on novice special educators with five or less years of experience. This may increase the accuracy of the participants' recollections of their preservice experiences.

The Bruno et al. (2018) study, which included a national sample of participants, was also limited in that the study was based upon a combination of standards, including those specific to the state of Virginia as a limitation as standards of practice vary from state to state. This study eliminated this limitation by basing the survey wholly on the 2020 CEC Initial Practice-Based Professional Preparation Standards as these are widely accepted national standards that are not specific to any particular state. Also, the study limited participation to inservice teachers within Ohio, which eliminated the geographic variances of the Bruno et al. (2018) study. Additionally, this study collected narrative data through a qualitative portion of the study to create a more robust picture of the preparedness of special educators in Ohio.

The purpose of this study was to examine Ohio special education teachers' perceptions of how their preservice programs prepared them to meet the CEC's Initial Practice-Based Professional Preparation Standards (2020). The study may provide information that designers of special education teacher preparation programs can use to modify their processes and practices. The improvements of those programs may lead to increased longevity in the teaching field for teachers and greater outcomes for students.

Assumptions

This study assumed that special educators have a multi-faceted role that includes traditional teaching responsibilities, specific knowledge of specialized instruction, assessment, and intervention for students with disabilities, and case management

responsibilities. Although these responsibilities can vary from year to year, school to school, and district to district, they typically include facilitating meetings, monitoring student performance across multiple content areas, and crafting legally-binding documents (U.S. Bureau of Labor and Statistics, 2022). The researcher assumes that success in special education positions requires specially designed, preservice instruction that addresses the specific needs of special educators beyond the training received by those teaching candidates in traditional general education pathways. Quality preservice instruction leads to a state of preparedness (Clark & Newberry, 2019). That is, special educators in the field feel that they experienced the necessary training to be effective.

Role of the Researcher

Within this study, the researcher was responsible for developing research questions that generated data related to the essential questions of the study. The researcher was also responsible for acquiring participants and conducting semi-structured interviews with qualified subjects and, after thematic analyses, utilizing their responses to generate the study's findings. The researcher synthesized these findings for the consumption of those reading the study.

Operational Definitions

In the following section, the researcher provides operational definitions of the study's keywords.

Accommodations: Within special education the term accommodation is used to refer to changes made to a learning environment that helps a student with a disability overcome specific learning barriers (e.g., extra time on tests, preferential classroom

seating, etc.). Even with the use of accommodations, students are expected to learn the same content as their non-disabled peers (Joyce et al., 2020).

Alternative licensure path/program: An alternative licensure path involves the acquisition of a teaching license without following the traditional education university degree path (Darling-Hammond, 2009).

Assistive technology: Assistive technology refers to any device, equipment, or software that aids a student with a disability in learning or communicating at school (McGovern, 2015).

Behavior Intervention Plan (BIP): A behavior intervention plan is an individually tailored plan designed to cease, reduce, and respond to behaviors that impede the learning of a student with a disability (ODE, 2017).

Co-teaching: Co-teaching is a classroom arrangement in which a general education teacher and a special education teacher assume equal roles within one classroom, teaching both special education students and their non-disabled peers (Weinberg et al., 2019).

Disability: A disability is any condition that falls into one of the categories listed within the Individuals with Disabilities Education Act (IDEA) that impairs a student's learning and requires the administration of specialized instruction for school success (ODE, 2017).

Due process: Due process is a formal process for resolving disputes between parents and districts about special education (ODE, 2017).

Evaluation Team Report (ETR): Every student suspected of a disability must receive an appropriate evaluation by a knowledgeable team of professionals in each area

of their suspected disability. If the student is found to qualify for special education services, this process must be repeated a minimum of every three years to assess a student's need for continued services and specialized instruction. The report that summarizes the results of this evaluation is known as the evaluation team report (ETR) (ODE, 2017).

Free and appropriate public education (FAPE): The public school system must provide each child with a disability an education that is appropriate to the student's unique needs at no cost to the parent (McGovern, 2015).

Functional Behavioral Assessment (FBA): A functional behavioral assessment is an evaluation conducted by members of the special education staff in order to determine the circumstances, antecedents, and other contributing factors associated with a behavior that impedes the learning of a student with a disability. The information gleaned from an FBA is utilized in the creation of a behavior intervention plan (BIP) (Lee, 2022).

Inclusion: Inclusion is the act of educating students with disabilities within the same classroom as their non-disabled peers (Osewalt, 2022).

Individualized Education Plan (IEP): An individualized education plan is the legally binding document that lays out the specialized instruction, supports, and services that a student with a disability needs in order to make progress in school (McGovern, 2015).

Intervention specialist: This term is used synonymously with special education teacher. Special education teachers are referred to as intervention specialists in the state of Ohio (The Outreach Center for Deafness and Blindness, 2022).

Least Restrictive Environment (LRE): Students with disabilities must be educated in the least restrictive environment. This means that as much as possible they must be educated with their non-disabled peers within the general education setting. An IEP team may determine that a student's needs surpass those accommodations that can be offered within the general education classroom and that a separate setting is more appropriate (McGovern, 2017).

Modifications: A modification is a change in what a student with a disability is expected to learn or demonstrate. It is important to note that modifications and accommodations are different (Joyce et al., 2020).

Paraprofessional: Paraprofessionals are school employees who provide instructional, behavioral, and other forms of support to students with disabilities in and out of the classroom. Synonyms include teacher's assistant, instructional aide, classroom assistant, or paraeducators (Biggs et al., 2019).

Preparedness: Within the context of this study preparedness refers to the extent to which a teacher has the requisite knowledge, skills, abilities, and attributes to engage in the endeavors necessary for the teaching occupation (El Paso Society for Human Resource Management, 2022).

Preservice teacher education program: A post-secondary program whose completion leads to the acquisition of a teaching license. Typically, these programs combine coursework and supervised classroom experiences to help a candidate prepare for a career in the education field (National Science Teaching Association, 2022).

Progress reporting: Within the context of this study, progress reporting refers to the regular, legally required reporting of progress on goals and objectives found within a student's individualized education plan (Etscheidt, 2006).

Special education teacher: A special education teacher is a specially trained and licensed professional who administers specialized instruction to students with exceptionalities in order to meet their unique needs (The Outreach Center for Deafness and Blindness, 2022).

Transition plan: A transition plan is a section of the IEP that lays out goals and activities that the district will assist with in order to help a student with a disability transition into adult success. These can include career related skills, post-secondary education, and functional life skills (Morin, 2022).

Organization of the Dissertation

The first chapter of this dissertation laid out the purpose, importance, and rationale of the study, the study's research questions that the researcher hoped to answer, and a brief description of the methodology that the researcher planned to utilize in conducting the study. In the first chapter, the researcher also defined key terms to aid the reader's comprehension of the subject. In the second chapter, the researcher presented current research to provide context for the proposed study and shared what is already known regarding special educator preparedness. In addition, chapter two included the theoretical framework on which the proposed study is based. In chapter three, the researcher described the proposed study's methodology, research design, and the procedures that the researcher employed. In chapter four, the researcher detailed the proposed study's analysis process and provided both written and graphic summaries of

the study's results. In chapter five, the researcher shared interpretations of the results and discussed relations to the existing body of research on special educator preparedness.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Serving as a special education teacher in a U.S. public school system can be a challenging endeavor for even the most dedicated educators (Berry, 2011). The demands of the position are extensive (Berry, 2011). Evidence of this can be found in the alarming national shortage of special education teachers. According to Buttner (2021), two-thirds of school districts nationally report that they are experiencing a shortage of teachers. The greatest position of need in these districts is special education teachers. Seventy-one percent of districts are reporting that they cannot find enough licensed special education teachers to fill their openings (Buttner). Of the 50 states, 47 are reporting a shortage of special education teachers (Buttner). The turnover rate for special educators is 12.3% (Buttner). This is nearly twice that of general education teachers (Buttner). This teacher shortage has given rise to many states offering alternative licensure paths to those wishing to enter the profession without going through a traditional education and licensing program.

Extensive research shows that this short-term fix may not be viable. Teachers from alternative licensure programs feel less prepared when entering the field and are less effective in securing student achievement (Darling-Hammond, 2002; Feng & Sass, 2013; Fitchett & Heafner, 2018; Henry et al., 2014). This solution may in fact be no solution at all as teachers from alternative licensure programs have a higher rate of attrition (The CEEDAR Center & The Center on Great Teachers and Leaders, 2020). Furthermore,

additional problems may arise from students being taught by ineffective teachers (The CEEDAR Center & The Center on Great Teachers and Leaders, 2020).

Improving the quality of special education teacher education may be a key strategy in combating this teacher shortage epidemic (The CEEDAR Center & The Center on Great Teachers and Leaders, 2020). Darling-Hammond et al. (2002) found that teachers who receive more extensive training enter the profession feeling well-prepared. The extent to which teachers feel well-prepared when entering the teaching field has a strong correlation with their sense of teaching efficacy, their sense of responsibility for student learning, and their plans to remain in teaching (Clark & Newberry, 2019; Darling-Hammond et al., 2002). Ingersoll et al. (2012) concluded that teachers who are better prepared in pedagogy are more likely to stay in the profession. While this finding was generalized to all teachers, it is especially true for special educators as discovered by Dunst and Bruder (2014). Dunst and Bruder (2014) found that special education teachers' perceptions of their preparedness are the most significant predictor of their self-efficacy. Special educators who enter the profession feeling well prepared are more likely to feel confident about their effectiveness (Dunst & Bruder, 2014).

Research recognizes that the quality of a teacher's preparation also has an impact on student achievement (Darling-Hammond, 2000b; Feng & Sass, 2013; Goldhaber et al., 2013; Hattie, 2018). The extensive research of Darling-Hammond (2000b) asserted that teacher preparation and certification are the strongest correlates of educational achievement. More recent studies showed that these findings ring true in special education. Students with disabilities taught by special education teachers with higher levels of training and education are more likely to have higher levels of achievement

(Feng & Sass, 2013). In keeping with these assertions, Goldhaber et al. (2013) discovered that there are statistically significant differences in the performance of students depending on what program the teacher attended. Hattie (2018) acknowledged that *initial teacher training programs* do have a positive effect-size of 0.12, but in his research the effect is relatively small. It might, however, be inferred that without quality preservice training the more effective knowledge, pedagogical skills, and dispositions would not be possible. For these reasons, it is essential that teacher education programs provide relevant training and experiences that prepare prospective special educators for success in their challenging field. Without proper training it stands to reason that the current teacher shortage will continue and that some of our most vulnerable students will fail to achieve.

Theoretical Framework

Andragogy

The world of teacher education hinges on adult learning. In juxtaposition to pedagogy, Malcolm Knowles' Theory of Andragogy is the art and science of educating adults (Knowles, 1978). Prior to the development of andragogy, the assumption was made that all learners developed the same way regardless of their age. The theory recognized that adults have different motivations for continuing their education beyond grade school. Effective teachers of adults are able to facilitate experiences that transform the learner to an active participant rather than passive recipient (Knowles, 1978). According to Merriam (2001), the Theory of Andragogy makes five assumptions about adult learners:

1. They have developed a firm self-awareness and are therefore able to direct their own learning.

2. They have a large variety of life experiences that provide resources and context for learning.
3. They have learning needs that are closely related to their social and professional roles.
4. They seek knowledge to directly apply to real-life problems.
5. They are motivated to learn by internal factors rather than external.

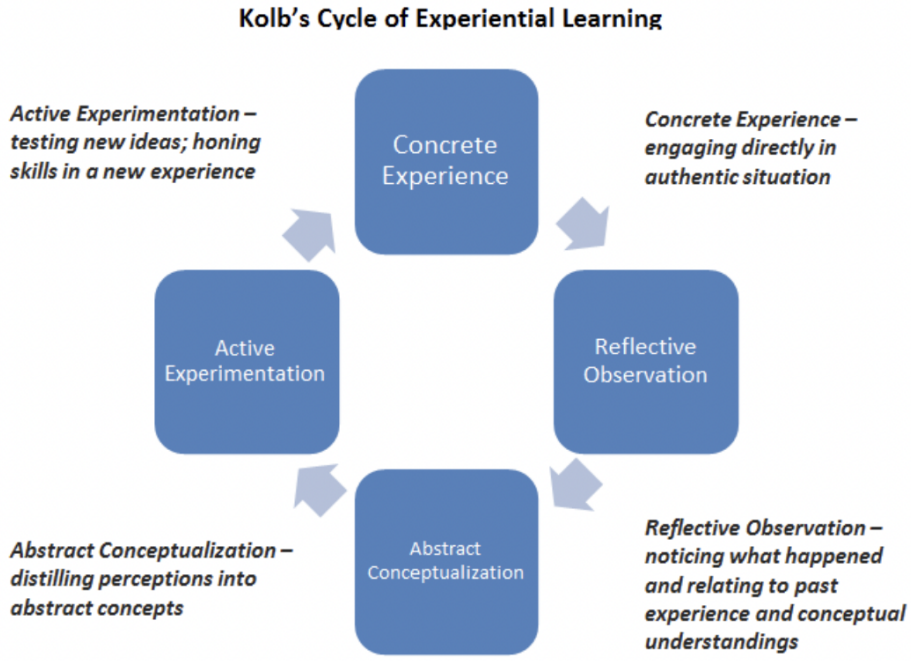
This theory relates directly to the preparation of special educators because it outlines the motivations and purposes of adult learning. In keeping with the characteristics outlined by the Theory of Andragogy, Watt and Richardson (2008) found that preservice teachers strive to learn the skills necessary for their profession because they are intrinsically motivated. Teachers frequently cite making a difference and the fact that they love working with children, as reasons for entering the field (Watt & Richardson, 2008). Drawing on the tenants of the Theory of Andragogy, teacher education programs should provide their students with relevant experiences that are directly applicable to their chosen career path. Adult learners should be endowed with skills that directly transfer to the impending position that each individual aspires to gain (Merriam, 2001). Recognizing the different nuances of adult education and maximizing the potential of its motivations, is essential to developing the professional human capital necessary for moving our society forward in the 21st century (Chan, 2010; Fullan & Hargreaves, 2013). The competencies for teaching students with disabilities are numerous and without proper instruction and facilitated experiences, many who enter the profession are destined to leave it (Ingersoll et al., 2012).

Kolb's Cycle of Experiential Learning

Experiential learning can be defined as a process whereby students actively engage in relevant, real-world activities that integrate learning objectives. The student augments their previous knowledge on the subject through reflecting on the experience (Boston University Center for Teaching and Learning, 2020). The process is outlined in the graphic below.

Figure 1

Kolb's Cycle of Experiential Learning



Note. From "Experiential Learning," by the Boston University of Teaching and Learning (n.d.),

In order to adequately prepare preservice teachers, it is essential that universities heavily integrate experiential learning. According to Kaufman (1996), it is difficult for teachers to create engaging constructivist environments within their own classrooms if they have not been educated that way themselves. Teachers are heavily influenced by their previous learning experiences. If their previous learning experiences only rely on

the passive reception of knowledge, they may not have the skills necessary to utilize a more active methodology. Unfortunately, teacher educators are often guilty of this failure. They are often products of traditional educational settings and teach prospective teachers in a manner that they would not want their students to employ in their own classrooms (Kaufman, 1996).

Teaching in general is best learned through actively engaging in the education of others and reflecting on successes and failures to hone one's craft. Classroom learning is necessary for providing context and a theoretical framework for the profession, but it is no substitute for actively participating in experiences that mirror real world job expectations. Clark et al. (2010) believed that the inclusion of experiential learning is one of the most promising avenues for adult instruction. The extent to which it is implemented, though, is suspect. He also makes it a point to mention that many adult learning programs focus heavily on the concrete experience portion of the cycle but can neglect the other components, including the reflection. It is within this reflection stage that much of the authentic learning takes place (Clark et al., 2010). Kolb's Cycle of Experiential learning should undergird any quality teacher preparation program, especially one that prepares special educators (Kaufman, 1996).

The Theory of Fluid and Crystallized Intelligence

The Theory of Fluid and Crystallized Intelligence emerged to challenge previous theories that intelligence was a single defined trait (Catell, 1963). Intelligence was previously considered static and the product of genetics. As scientists and psychologists continued to attempt to qualify, quantify, and assess intelligence, they realized that it was difficult to separate someone's innate quality from their previous life experiences and

cultural background. Cattell's theory recognizes that there are at least two distinct types of intelligence, fluid (*gf*) and crystallized (*gc*). According to Nisbett (2013), crystallized intelligence refers to a person's store of knowledge about the world. This includes things such as information, acquired skills, vocabulary, and arithmetic. This knowledge is gained from learned skills, life experiences, and cultural influences (Nisbett, 2013). Fluid intelligence is an individual's innate ability to react to and solve novel problems (Nisbett, 2013).

While each type of intelligence is its own entity, there is a close working relationship between the two (Nisbett, 2013). When a new task or problem arises, one reasons their way to a solution utilizing their fluid intelligence. However, solving that problem may require recalling previously acquired information or experience. In this instance, crystallized intelligence is being applied (Perera, 2020). Fluid intelligence essentially feeds crystallized intelligence. When novel thinking is used to approach a situation, the strategies utilized and the knowledge gained become a part of that person's store of information about the world (Perera, 2020). In contrast to previous theories about intelligence, both *gf* and *gc* can be increased (Nisbett, 2013). Fluid intelligence may decrease with age, but crystallized intelligence continues to grow over a lifetime of experiences (Nisbett, 2013). The ability to increase one's intelligence is closely related to Dweck's Theory of Fixed and Growth Mindset. Evidence shows that a student's beliefs about their ability to improve and grow their fluid and crystallized intelligence can predict and boost student achievement (Dweck et al., 2014).

It is important to note that fluid and crystallized intelligence are only a piece of the learning puzzle. The father of the theory, Catell (1964) admits that while success in

school and on standardized intelligence tests can be a result of the application of the intelligences, motivation and personality also have significant influence over these types of performance.

Prior to licensure and entering the workforce, a preservice special education teacher has limited knowledge about what it really means to work daily in their role. They may possess some rudimentary knowledge gained from classroom instruction that they have received in their teacher education program, but essentially their crystallized intelligence may be incredibly limited. As a teacher gains experience and is forced to apply reason and problem-solving strategies to novel situations, their experience and information about the necessities for success in their role grows. The application of fluid intelligence begets an increase in crystallized intelligence specifically as it relates to their work. Preservice programs should provide prospective teachers with applicable experiences that model their eventual career path. As a special educator gains experience, they have a deeper pool of knowledge to pull from when presented with relatable experiences once they enter the field.

Teacher educators that facilitate the installation of beliefs about fluid and crystallized intelligence can also help teachers to be more effective once they enter the field. Cattell's belief that one can raise their level of intelligence over time can aid a teacher in instilling a growth mindset in their students (Cattell, 1963; Dweck et al., 2014). Teachers play an essential part in aiding students in developing a growth mindset (Dweck et al., 2014). This mindset can lead to increases in achievement (Dweck et al., 2014).

In order to better prepare special educators for entering the field, universities need to provide instruction that engages an adult's desire to learn (Merriam, 2001). They need

to provide experiences that are immediately relevant to the field and provide opportunities to reflect in order to hone their practices and crystallize the knowledge gained (Swennen, 2020). By improving these programs, universities can produce students that are not only prepared to enter the workforce but are also primed for success (Clark & Newberry, 2019; Darling-Hammond et al., 2002; Ingersoll et al., 2012; Ondrasek et al., 2020).

Historical Framework for Special Education

When compared to the overall history of formal education in this country, the education of students with disabilities is a relatively young concept. To fully understand the depth of knowledge necessary for success as a special educator, it is essential to understand the evolution of this institution. In the early years of public education, few students with disabilities had access to educational opportunities. They were often kept home by their families or were remanded to institutions where very little learning took place (Antony, 2012; Block et al., 2019).

As the rights of students with disabilities have grown, so has the role of the special educator. The ground-breaking 1954 *Brown vs. the Board of Education* ruling struck a significant blow for educational access, not just for minority students, but also for students with disabilities (Wehmeyer, 2022). Prior to this decision, it is estimated that seven million students with disabilities were being excluded from public education (Lengyel & Vandbergeijk, 2021). *Brown* destroyed the doctrine of separate but equal and gave advocates of the disabled a legal avenue for seeking change.

Changes in legislation and legal precedents regarding individuals with disabilities began coming fast and furious during the 1970s. In 1972, the *PARC (Pennsylvania*

Association for Retarded Citizens) v. the Commonwealth of Pennsylvania declared that the state had an obligation to provide a free and appropriate education to students with intellectual disabilities (Antony, 2012; Lengyel & Vanderbergeijk, 2021). That same year, *Mills v. the Board of Education* extended the obligation to educate disabled students who were suspended or expelled (Antony, 2012; Lengyel & Vanderbergeijk, 2021). The judge in this case ruled that free educational services or a private alternative must be provided to students, based on their individual needs, regardless of the cost to the local school district (Antony, 2012).

The Vocational Rehabilitation Act of 1973 became the first federal legislation to prohibit any publicly funded institution from discriminating against the disabled. This legislation was utilized to provide access to public buildings for the handicapped. Its Section 504 is still utilized in schools to implement accommodations for students with medical needs so that they can access the same educational opportunities as their non-disabled peers (Antony, 2012; Lengyel & Vanderbergeijk, 2021).

In 1975, the most significant piece of legislation regarding the education of students with disabilities was passed. The Education for All Handicapped Children Act (EHA) revolutionized the way in which our country handles the educational rights of students with disabilities (Wehmeyer, 2022). The framework laid out by EHA continues to govern special education and drives all of the procedures and job responsibilities of special educators (Block et al., 2019). According to Lengyel and Vanderbegeijk (2021), there are seven major principles outlined in the EHA that schools must follow:

1. All students have a right to a free and appropriate public education (FAPE).
2. All students have the right to be educated in the Least Restrictive

Environment (LRE).

3. All students have a right to an individual education program (IEP).
4. Schools must utilize non-discriminatory evaluation and assessment measures.
5. Parents must be involved in educational decisions.
6. Due process procedural safeguards must be in place in order to ensure fairness and compliance.
7. School districts are unable to reject students based on their disability.

This legislation drastically changed the role of educators working with students with special needs (Lengyel & Vanderbergeijk, 2021). Beyond focusing on simply teaching these students, plans needed to be developed, parents needed to be consulted, and determinations needed to be made for the individualization of programming (Lengyel & Vanderbergeijk, 2021). Also, special educators were tasked with the assessment of the appropriateness of curriculum and the inclusivity of the environment in which the student is to be educated (Ricci & Fingon, 2018; Sasson & Malkinson, 2021).

The individualized education plan (IEP) process became the major component of the special educator's role (Lengyel & Vanderbergeijk, 2021). Teachers were now required to collect assessment data to determine students' needs, write goals to address them, and then design specialized instruction in order to help the students achieve those goals (Lengyel & Vanderbergeijk, 2021). This also included determining what accommodations and settings are appropriate to help the student access their least restrictive environment (CEC, 2020). Progress monitoring strategies must then be utilized in order to assess whether the plan is effective and whether adjustments need to be made (CEC, 2020). Besides the paperwork aspect of the process, the special educator was

responsible for coordinating and facilitating meetings with parents and other relevant personnel to discuss all aspects of the student's education (Lengyel & Vanderbergeijk, 2021). This must be accomplished for all of the students assigned to the special educator's caseload and must be done while assuming most of the same duties of general education peers.

In 1988, *Honig v. Doe* again added to the responsibilities of the special educator. The case determined that students with disabilities could not be suspended or expelled for more than 10 days if the behavior in question was related to the student's disability (Lengyel & Vanderbergeijk, 2021). A suspension of this length constituted a change in educational placement that required an IEP meeting. This added layer of protection eventually led to the eventual codification of the manifestation determination process that special educators are largely responsible for orchestrating (Walker & Brigham, 2017). During this process, the special educator is responsible for coordinating a hearing that includes the student, parents, school administration, and a general education teacher (Walker & Brigham, 2017). At this meeting the team examines the student's individualized education plan (IEP) and evaluation team report (ETR) to make the determination as to whether the behavior that led to the suspension was caused by or significantly related to the student's disability (Walker & Brigham, 2017). If it was not, the student serves out the remainder of their suspension. If the team makes the determination that the behavior was a manifestation of the child's disability, then they return to school. In addition to coordinating this meeting and serving as a member of the team, the special educator is then responsible for drawing up a manifestation determination report and additional related documents to be shared with the parent and

placed in the student's file (Walker & Brigham, 2017).

In 1990, the EHA became the Individuals with Disabilities Education Act (IDEA). The reauthorization of this legislation changed the language of the document from handicapped to disabled and added Autism and Traumatic Brain Injury (TBI) to the list of disabilities protected under the act (Lengyel & Vanderbergeijk, 2021). It also added a requirement for districts to provide assistive technology when deemed necessary by the IEP team (Lengyel & Vanderbergeijk, 2021).. IDEA 1990 also mandated that special educators create transition plans as part of the IEP process for students over the age of 16 (Lengyel & Vanderbergeijk, 2021). These plans involve setting post-secondary education, employment, and independent living goals and providing activities that help prepare disabled students for adult life.

IDEA was again reauthorized in 1997. The changes this time focused on inclusion (Lengyel & Vanderbergeijk, 2021). While special education students have always been required to receive their services in the least restrictive environment, this legislation made it a greater point to ensure that students with disabilities were being included in general education as often as possible (Block et al., 2019). General education teachers became a required member of the IEP team, lending their curriculum expertise to the decision-making process. IEP teams were now required to justify the extent to which, and the specific reason for why, a student would be removed from any general education setting (Lengyel & Vanderbergeijk, 2021). This focus on inclusion changed the role and responsibilities of the special educator in several ways. Special education teachers were forced to shift their focus from simply educating their students within the confines of their classrooms to also accommodating them within the general education environment

(Antony, 2012). This placed a high premium on collaborative skills as special education teachers were now required to work closely alongside general educators. Thus began the shift from special educators to intervention specialists who focus on finding ways to advocate and adapt the general education environment for the success of their students.

Another focus of the 1997 IDEA reauthorization was behavior. This legislation formally laid out the aforementioned manifestation determination process for students with disabilities suspended or expelled for over 10 days. For students whose behavior was significantly related to their disability, districts were required to conduct Functional Behavioral Assessments (FBA) and create Behavior Intervention Plans (BIP) for students whose recurring behavior resulted in removal from school (Lengyel & Vanderbergeijk, 2021). This again added another significant requirement for the special educators. During the FBA/BIP process, the special educator typically works closely with the school psychologist to determine what antecedents lead or contributed to the student's negative behavior. A plan must then be created for limiting these causes so that the student is able to stay in school. Special educators now needed to become adept at assessing and monitoring behavior, as well as crafting documentation that puts behavior related interventions into place (CEC, 2020).

IDEA 1997 also required that all special education students, including those with severe disabilities, be included in state accountability measures (Lengyel & Vanderbergeijk, 2021). This added yet another layer of knowledge and accountability to the task of special education teachers who have to provide testing accommodations or follow guidelines for administering "alternative assessments." These required assessments often differ from state to state and from year to year. The special educator

now needed to be adept in test administration and in adapting to regular changes in the process and the assessment.

In 2001, one of the most significant pieces of legislation that influenced American public education was released. The Elementary and Secondary Schools Act (ESEA) was reauthorized as the No Child Left Behind Act (NCLB). This legislation required all 50 states to develop formal performance systems for improving the quality of teachers. This legislation had a significant impact on creating accountability measures for schools and raised the standards for teachers who wished to enter and remain in the profession. NCLB coined the phrase highly qualified teacher (HQT). While this term was designed to create a standard for teacher licensure and retention, it was left up to states to determine what a HQT looked like (Green et al., 2021).

In 2004, IDEA was again reauthorized, rebranded as the Individuals with Disabilities Education Improvement Act (IDEIA). A significant piece of this update was to align special education with the NCLB act (Green et al., 2021; Ricci & Fingon, 2018). Special educators were now required to meet the NCLB definition of a highly qualified special education teacher (NCLB, 2001). This federal definition required special education teachers to hold at least a bachelor's degree, be licensed by their state, and demonstrate core content knowledge in each of the core subjects they taught. While the first two qualifications were a given for most special education teachers, the content area requirement placed a large burden on those serving at the middle and high school levels. Most special education teachers are called upon to provide interventions, accommodations, and basic instruction in multiple content areas. While the federal government left it up to states to determine what the demonstration of content area

knowledge looked like, this created an added level of training, professional development, or certification for most intervention specialists at the secondary level. In many states this demonstration took the form of passing content area state licensure exams, taking additional college credit hours related to a subject, or attending specified numbers of professional development hours on a given content area (Green et al., 2021).

While the outcome of a highly qualified special education teacher sounds like a wonderful ideal, the additional demand of demonstrating high levels of content area knowledge put yet another burden on an already challenging position (Berry, 2011). When viewed in light of the already existing special education teacher shortage, this requirement exacerbated the crisis (Green et al., 2021). In 2015, NCLB was replaced with the Every Student Succeeds Act (ESSA). This legislation lifted the federal requirement for special educators to be highly qualified in the content areas that they teach. This legislation now allows individual states to determine what their requirements are for special education teachers regarding specific content area knowledge. This shift recognizes the fact that the primary focus of special educators' roles is intervention, support, and pedagogical expertise in educating exceptional learners, not mastery of specific content.

As the laws that govern special education have evolved, so have the job responsibilities and necessary competencies for special educators. Assessing students, crafting legally binding individualized education plans, creating and implementing plans for managing challenging behaviors, facilitating frequent meetings with parents, administrators, faculty and service providers, holding hearings related to discipline, and assisting with the transition to adulthood are all expectations of the special educator

(CEC, 2020). All of these responsibilities are in addition to the regular duties related to teaching and learning. It can be assumed that with this extreme amount of job responsibilities, a high-quality preparation program is essential to success and survival (Dunst & Bruder, 2014).

The Competencies of Quality Teachers

In order to establish what teacher education programs must train teachers to do, it is necessary to first establish what a quality teacher looks like. In the earliest days of public education, there were no formal regulations or qualifications for entering the teaching profession (Schneider, 2018). Communities hired individuals to teach in their community based on what they deemed important. In many cases this was reduced to the ability to keep order, a moral lifestyle, and education or training that surpassed those that they were assigned to teach (Schneider, 2018).

While great teaching may be a subjective concept, one working definition states that effective teaching is that which produces student achievement (Coe et al., 2014). As our society has evolved and our need for a more educated populace has increased, so should our standards for what was expected of a teacher. Last updated in 2011, the Council of Chief State School Officers (CCSSO) with their sponsored organization the Interstate Teacher Assessment and Support Consortium (InTASC) developed the Model Core Teaching Standards. These standards codified the commonly agreed-on qualities and competencies that exceptional teachers exhibit. These standards are divided into 10 domains.

Table 1

Knowledge and Skill Standards as Identified by InTASC

Learning Standard	Definition
Learner Development	The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.
Learning Differences	The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.
Learning Environments	The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
Content Knowledge	The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content.
Application of Content	The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
Assessment	The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.
Planning for Instruction	The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.
Instructional Strategies	The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.
Professional Learning and Ethical Practice	The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.
Leadership and Collaboration	The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

Table 1 illustrates all of the elements that make up effective teaching. Additional research supports these competencies. Holmes and Schumacker (2020) found that effective teachers whose students exhibited a high level of achievement engage in a specific set of observable practices. These abilities included providing emotional and instructional support, being able to engage students, and effective classroom management (Holmes & Schumacher, 2020). Ida (2017) discovered that of the most commonly identified teaching competencies, students chose *supporting learning* as the most important skill domain for teachers to possess. This includes providing personal attention to students, demonstrating a willingness to treat each student as an individual, and being inclusive of all students regardless of their ability or background (Ida, 2017). These same skills are essential even in the additional stress and changing environment of "Pandemic Era" education. Kim et al. (2021) discovered that the most essential qualities of a teacher are *caring for pupil wellbeing* and *dealing with uncertainty.* This evidence would suggest that in addition to strategies, content, and best practices, teachers need to develop dispositions and attitudes that lend themselves to caring for the emotional and psychological needs of their charges. It can be inferred that teacher education programs may benefit from assisting teachers in developing these qualities (Kim, 2021).

Effective teaching entails a myriad of best practices, skill competencies, professional responsibilities, and personal dispositions. In order to achieve success, a preservice program is essential in aiding a prospective teacher in honing these qualities (Darling-Hammond, 2014). Special educators have a similar set of responsibilities but also have additional responsibilities that require an even more developed repertoire.

Characteristics of Quality Special Educators

While the standards for quality teaching are stringent, special educators have an additional set of responsibilities (CEC, 2020). The U.S. Bureau of Labor Statistics (BLS) (2022) identified the following job responsibilities for special educators:

- Adapt general lessons to meet students' needs
- Develop Individualized Education Programs (IEPs) for each student
- Plan activities that are specific to each student's abilities
- Teach and mentor students as a class, in small groups, and one-on-one
- Implement IEPs, assess students' performance, and track their progress
- Update IEPs throughout the school year to reflect students' progress and goals
- Discuss students' progress with parents, other teachers, counselors, and administrators
- Supervise and mentor teacher assistants who work with students with disabilities
- Prepare and help students transition from grade to grade and from school to life outside of school
- Assess students' skills and determine their educational needs

When comparing the inTasc standards (2011) with the responsibilities laid out by the BLS (2022), a lot of overlap can be identified. Commonalities include teaching and assessing students, collaborating with other professionals, creating an inclusive environment for all students, and interacting with parents. In addition, special educators are responsible for crafting, implementing, and reporting progress on Individualized Education Plans (IEPs), helping students make transitions from grade to grade and school

to work, and supervising and mentoring teaching assistants (BLS, 2022). Not mentioned in the BLS lists are the construction of evaluation team reports (ETRs), facilitating the manifestation determination (MDR) process for suspended students, and advocating for students with administration and general education peers.

The foremost organization for students with disabilities, the Council for Exceptional Children (CEC) (2020), has created a very specific and comprehensive list for beginning special educators entering the profession. The CEC's Initial Practice-Based Professional Preparation Standards can be seen in Table 2.

Table 2

Council for Exceptional Children's Initial Practice-based Professional Preparation Standards

Standard	Component
Standard 1: Engaging in Professional Learning and Practice within Ethical Guidelines	**Component 1.1**: Candidates practice within ethical guidelines and legal policies and procedures. **Component 1.2:** Candidates advocate for improved outcomes for individuals with exceptionalities and their families while addressing the unique needs of those with diverse social, cultural, and linguistic backgrounds. **Component 1.3:** Candidates design and implement learning activities based on analysis of student learning; self-reflection; and professional standards, research and contemporary practices.
Standard 2: Understanding and Addressing Each Individual's Developmental and Learning Needs	**Component 2.1:** Candidates apply understanding of human growth and development to create developmentally appropriate and meaningful learning experiences that address individualized strengths and needs of students with exceptionalities.

	Component 2.2: Candidates use their knowledge and understanding of diverse factors that influence development and learning, including differences related to families, languages, cultures, and communities, and individual differences, including exceptionalities, to plan and implement learning experiences and environments.
Standard 3: Demonstrating Subject Matter Content and Specialized Curricular Knowledge	**Component 3.1:** Candidates apply their understanding of academic subject matter content of the general education curriculum to inform their programmatic and instructional decisions for individuals with exceptionalities.
	Component 3.2: Candidates augment the general education curriculum to address skills and strategies that students with disabilities need to access the core curriculum and function successfully within a variety of contexts as well as the continuum of placement options to assure specially designed instruction is developed and implemented to achieve mastery of curricular standards and individualized goals and objectives.
Standard 4: Using Assessment to Understand the Learning Environment for Data-based Decision Making	**Component 4.1:** Candidates collaboratively develop, select, administer, analyze, and interpret multiple methods of student learning, behavior, and the classroom environment to evaluate and support classroom and school-based systems of intervention for students with and without exceptionalities.
	Component 4.2: Candidates develop, select, administer, and interpret multiple, formal and informal, culturally and linguistically appropriate measures and procedures that area valid and reliable to contribute to eligibility determination for special education services.
	Component 4.3: Candidates assess, collaboratively analyze, interpret, and communicate students' progress toward measurable outcomes using technology as appropriate, to inform both short- and long-term planning, and making ongoing adjustments to instruction.
Standard 5: Supporting Learning Using Effective Instruction	**Component 5.1:** Candidates use findings from multiple assessments, including student self-assessment, that are responsive to cultural and linguistic diversity and specialized as needed, to identify what students know and are able to do. They

	then interpret the assessment data to appropriately plan. **Component 5.2:** Candidates use effective strategies to promote active student engagement, increase student motivation, increase opportunities to respond, and enhance self-regulation of student learning. **Component 5.3:** Candidates use explicit, systematic instruction to teach content, strategies, and skills to make clear what a learner needs to do or think about while learning. **Component 5.4:** Candidates use flexible grouping to support the use of instruction that is adapted to meet the needs of each individual and group. **Component 5.5:** Candidates organize and manage focused, intensive small group instruction to meet the learning needs of each individual. **Component 5.6:** Candidates plan and deliver specialized, individualized instruction that is used to meet the learning needs of each individual.
Standard Six: Supporting Social, Emotional, and Behavioral Growth	**Component 6.1:** Candidates use effective routines and procedures to create, safe, caring, respectful, and productive learning environments for individuals with exceptionalities. **Component 6.2:** Candidates use a range of preventive and responsive practices documented as effective to support individuals' social, emotional, and educational well-being. **Component 6.3:** Candidates systematically use data from a variety of sources to identify the purpose or function served by problem behavior to plan, implement, and evaluate behavioral interventions and social skills programs, including generalization to other environments.
Standard 7: Collaborating with Team Members	**Component 7.1**: Candidates utilize communication, group facilitation, and problem-solving strategies in a culturally responsive manner to lead effective meetings and share expertise and knowledge to build team capacity and jointly address students' instructional and behavioral needs.

	Component 7.2: Candidates collaborate, communicate, and coordinate with families, paraprofessionals, and other professionals within the educational setting to assess, plan, and implement effective programs and services that promote progress toward measurable outcomes for individuals with and without exceptionalities and their families.
	Component 7.3: Candidates collaborate, communicate and coordinate with professionals and agencies within the community to identify and access services, resources, and supports to meet the identified needs of individuals with exceptionalities and their families.
	Component 7.4: Candidates work with and mentor paraprofessionals in the paraprofessionals' role of. supporting the education of individuals with exceptionalities and their families

While these standards and responsibilities guide effective practice in the industry, specific studies have been conducted to identify the characteristics that are valued by a variety of professionals within the industry (Biggs, 2019; Brownell et al. 2010; Woolf, 2019). By identifying the most important qualities of successful special educators, preservice teaching programs can set goals for what they hope to produce in their students. The skills and competencies uncovered in these studies can be categorized using the framework set out by Biggs et al. (2019). This framework organizes competencies into three categories: *knowledge competencies, skill competencies, and dispositional competencies.*

Knowledge Competencies

Knowledge competencies outline the essential knowledge necessary to perform the job responsibilities laid out by the U.S. Bureau of Labor Statistics (2022) and to meet the standards of practice developed by the CEC (2015). Brownell et al. (2010) found that special educators needed well-integrated knowledge in a variety of domains. These

include knowledge of academic content and instructional strategies, awareness of specific problems that a student with a disability might experience in a given content, expertise in utilizing technology to circumvent learning deficits, and the use of interventions and assessment to better provide more intensive instruction (Brownell et al., 2010). According to Woolf (2019), intervention specialists must have integrated expertise. This includes broad knowledge of content areas, instructional strategies, and specialized instruction, the application of which promotes student achievement. In other words, special education teachers have to be knowledgeable about disabilities in general and the way in which they affect the learning process (Brownell et al., 2010; Woolf, 2019).

Each disability comes with its own set of needs, deficits, and triggers that influence the exceptional child. Special education teachers must understand research-based instructional and self-regulatory strategies that aid students in overcoming the challenges of their particular condition (Brownell et al., 2010; Kurth et al., 2021; Woolf, 2019). In addition, they must be able to individualize these strategies to the needs of each particular student. (Kurth et al., 2021). They need to be knowledgeable about their content area so that they can clearly articulate learning objectives and can apply their specialized pedagogical knowledge to specific disciplines (Brownell et al., 2010). Beyond simply knowing the concept, the special educator needs to know how to adapt general education standards to the abilities and unique needs of the students that he or she is serving. Knowledge of instructional technology is also essential (Brownell et al., 2010). Teachers need to be aware of what programs and tools are available and how to utilize them in order to aid students in overcoming their learning deficits.

Special educators need to be knowledgeable about the backgrounds of their students, their families, and the paraprofessionals with whom they collaborate (Biggs et al., 2019; Coots, 2007). This knowledge creates necessary context for building relationships and working together successfully. Parents desire special education teachers who listen to their needs, respect the individual choices of families to organize daily routines that balance their beliefs, resources, and needs and abilities, and understand that families vary greatly in how and how much they collaborate and participate in schooling activities (Coots, 2007; Koch, 2016). Special educators must develop an awareness and appreciation for the fact that parents have to manage their student's unique needs throughout all aspects of their lives, not just when they are in school (Koch, 2016).

Since special education teachers are responsible for generating a substantial amount of legally binding documents, it is essential that special educators are knowledgeable about the regulations and standards for crafting individualized education plans (IEPs). This includes being well versed in mandated timelines, being familiar with methods for accurately assessing students' needs, knowing how to craft relevant and meaningful goals, and generally following accepted practices (Woolf, 2019). Special educators also have to utilize this same knowledge of assessment to effectively contribute to evaluation team reports (ETRs) that determine the necessity of continuing services for students. Within their case management duties, special educators may be required to contribute to the manifestation determination (MD) process. This includes being able to identify the ways in which disabilities may affect student behavior. If pervasive, problematic behaviors occur, special educators have to be aware of research-based

behavior management strategies so that they can effectively contribute to behavior intervention plans (BIPs) (Lengyel & Vanderbergeijk, 2021).

Teaching is a vocation full of decisions. The added responsibilities of a special educator increase both the volume and the potential consequences of these decisions. A sufficient knowledge base is an essential asset for making procedural and pedagogical choices that lead to positive outcomes for students.

Skill Competencies

The second component of Biggs et al.'s (2019) framework is *skill competencies*. Knowledge is of little value without the ability to implement. Special educators need certain talents to be effective in their multifaceted role. Special education teachers need to be incredibly organized (Biggs et al.). Balancing typical teaching responsibilities with meeting the individual needs of challenging students, collaborating with parents, paraprofessionals, and other service providers, and managing documents is a daunting task. Without the ability to create systems to manage and organize these responsibilities, the job becomes challenging.

One of the most important components of special education is the application of collaborative skills. Intervention specialists need to be able to effectively communicate and build relationships with parents (Beck & Desutter, 2020; Biggs et al., 2019; Coots, 2007; Kurth et al., 2021). In keeping with the CEC standards and ethics number two and three (CEC, 2015a), collaboration with families is an essential skill for special educators. Since the initial passage of the ground-breaking 1975 Education for All Handicapped Children Act (EHA), parents of students with disabilities have been empowered to have a

significant role in the determination of the education that their students receive (Coots, 1997; Lengyel & Vanderbergeijk, 2021).

This legislation drastically changed the role of educators working with students with special needs. Beyond focusing on simply teaching these students, plans needed to be developed, parents needed to be consulted, and determinations needed to be made for the individualization of programming. In addition, teams are now tasked with the assessment of the inclusivity of the environment in which the student is to be educated. Beck and Desutter (2020) found that veteran special educators employ a variety of strategies for collaborating successfully with IEP teams. These strategies included holding pre-meeting team conversations, tabling issues unrelated to the meeting, listening to all team members, using an agenda, beginning with the positive, using "I" statements, and complementing parents as strategies and learned competencies that they developed over time for positive collaboration with parents (Beck & Desutter).

A variety of skills are necessary for navigating the intricacies of the role of a special educator. Without a specific and relevant repertoire, teachers can be ineffective. Being able to work effectively with others while delivering effective instruction is essential for ensuring that students maximize their potential and that all stakeholders are satisfied with the services being delivered.

Dispositional Competencies

While these studies, practice standards, strategies, and identified job responsibilities clearly and succinctly summarize the many responsibilities and competencies that embody quality teaching, research has also shown that there is also a necessary set of character traits that define who a special educator should be. In other

words, longevity and success in this role are aided by a very specific set of dispositions. Biggs et al. (2019) refers to these as *dispositional competencies.* Similarly, during her analysis Woolf (2019) also identified *dispositions towards children* as a necessary component for success in the field. One of these essential dispositions is flexibility. According to Woolf (2019) teachers must be able to stay calm while multitasking. She refers to a teacher's ability to remain composed while implementing multiple learning strategies at one time to meet the needs of diverse learners within the same space. Other studies recognize character traits that lend themselves well to success in the job. These include patience, warmth, empathy, enthusiasm, and dedication (Kurth, 2021; Prater-Jones, 2011; Watson et al., 2010; Woolf, 2019). These characteristics are like those identified as essential for the teaching professional in general.

According to Cancio et al. (2018), one of the major reasons for the large attrition rate of special education teachers is the amount of work-related stress present in their responsibilities. Teacher educators have the ability to aid in this area by providing information about work-related teacher stress and by providing specific coping skills to reduce burnout effectively (Cancio et al.).

There is an additional subset of skills required for special educators who deal with students with specific behavioral concerns (Prather-Jones, 2011). Successful special educators are flexible, enjoy variety, are intrinsically motivated, and must be able to separate their personal feelings and not take their students' struggles or behaviors personally (Prater-Jones). They must also be patient and willing to accept that their students may not progress at the same rate as their non-disabled peers. Teachers of

students with emotional and behavioral disabilities are more likely to leave the profession if they do not possess these qualities (Prater-Jones).

While there is an overlap in the findings of those who have attempted to qualify what makes a successful special educator, Urbach et al. (2015) discovered that not all competencies and attitudes are equal. When accounting for levels of student achievement, more accomplished special education teachers put an intense focus on their instructional practices and meeting academic needs. Less accomplished special educators tend to put more of their focus on relationship building and "protecting" their students (Urbach et al., 2015). Boe et al. (2007) had related findings. Special education training that focuses on pedagogy is more effective than education that focuses on increasing content area knowledge (Boe et al., 2007). Green et al. (2021) had similar findings when comparing the importance of special educator preparation components. According to that study, providing special education teachers with intensive training in pedagogy is ultimately more effective than instruction in specific content areas (Green et al., 2021). These findings refute the push for content area knowledge that emerged as a result of IDEIA 2004 and the requirement for highly qualified special educators (Green et al., 2021).

Due to the diverse and involved responsibilities of a special educator, a vast array of knowledge, skills, and dispositions are necessary for the position. It is the responsibility of teacher preparatory programs to provide specific knowledge and facilitate experiences that cultivate the skills and character traits necessary for success (Darling-Hammond, 2000a).

Characteristics of High Quality Teacher Education Programs

Universities prepare thousands of special educators each year across the country. The quality of teacher education programs is assessed in a multitude of ways by a variety of organizations. In a study conducted by public education advocate, Darling-Hammond (2000a) and sponsored by the American Association of Colleges for Teacher Education (AACTE), researchers reviewed teacher education programs nominated as exemplary by other teacher educators, professionals, and program graduates. Based on both quantitative and qualitative measures, the researchers discovered a series of qualities and characteristics that were consistent across the programs (Darling-Hammond, 2000a). The same year a similar study was conducted by the International Reading Association (IRA) (Koppich, 2000). Researchers chose eight universities recognized for their superior reading teacher education programs and interviewed the faculty to determine the set of factors that lead to their program's success (Koppich, 2000).

Brownell et al. (2005) synthesized the two aforementioned studies on successful teacher preparation programs into a list of shared qualities and used them as a framework to apply to special education teacher preparation programs. The review discovered that there are seven common qualities that make for superior teacher education programs. The examiners then identified renowned special educator training programs and found that there was a large overlap between the characteristics of both types of preservice programs (Brownell et al.). This demonstrates that great university programs are great university programs, regardless of what type of teacher they train.

In order for a teacher education program to be successful, it must contain a coherent vision. This vision should guide both coursework and field experiences. This

vision should provide faculty members with a common language for communicating with stakeholders within the program (Brownell et al., 2005; Darling-Hammond, 2000a; Darling-Hammond, 2014; Koppich, 2000). One of the core problems in education is variability. This includes variability in curriculum and in academic expectations (Mehta & Fine, 2015). This can lead to inequalities for students at any level. It can be inferred then that a coherent and consistent vision is essential for ensuring that preservice teachers receive quality education and training.

A successful program is able to effectively blend learning theories, subject area knowledge, and pedagogical practices and then provide opportunities for students to learn how to apply this learning to their classroom practice (Brownell, 2005; Darling-Hammond, 2000a; Darling-Hammond, 2014; Koppich, 2000). Faculty accomplish this goal by modeling active pedagogy and providing students with multiple opportunities to practice what they have learned in applicable settings (Brownell, 2005; Darling-Hammond, 2000a; Darling-Hammond, 2014; Koppich, 2000). This form of learning is essential for engaging the experiential learning cycle (Chan, 2010).

It has long been acknowledged that relevant field experiences are an essential part of teacher education (Swennen, 2020). Clinically rich practices and student teaching are programmatic elements that have a significant impact on generating positive teacher and student outcomes (Dunst et al., 2020). These field experiences must be carefully crafted and supervised to ensure that they are extensive and coincide with ongoing coursework. Students should be carefully matched with supervisors and cooperating teachers who work in unison to ensure that the knowledge taught in preservice classes can be put into practice (Brownell et al., 2005; Darling-Hammond, 2000a; Darling-Hammond, 2014;

Koppich, 2000). These experienced educators also need to be mindful of their charges' specific and general psychological needs to ensure that each prospective teacher is able to get the most out of their experience (Dreer, 2020). Specific feedback should be provided to aid the teaching candidate in improving their practices (Dunst et al., 2020). Programs that put a focus on helping teachers cope with the struggles of their first year in the classroom produce teachers who are more effective when entering the field (Boyd et al., 2009). In addition, there is a significant correlation between the self-efficacy of teachers entering the field and the perceptions of the support they received from their mentors during the student teaching experience (Moulding et al., 2014). This is essential as teacher self-efficacy can be linked to gains in student achievement (Lacks & Watson, 2018; Shahzad & Naureen, 2017).

To ensure quality teacher candidates, faculty must establish and monitor high standards and expectations (Brownell et al., 2005; Darling-Hammond, 2000a; Darling-Hammond, 2014; Koppich, 2000). Renowned universities utilize a variety of strategies to ensure that the bar is set high for their programs. This often includes stringent entrance and exit standards based on in-classroom teaching aptitude and screening procedures that ensure that preservice candidates are properly suited for the profession (Brownell et al., 2005; Darling-Hammond, 2000a; Koppich, 2000). By establishing these norms and standards, teacher education programs are able to establish reputations for excellence. Reputable programs are able to attract a better quality of candidates prior to any preservice education training. The quality of these individuals results in better outcomes in student achievement (Boyd et al. 2009).

Quality preparation programs provide direct instruction in the knowledge and competencies necessary for meeting the needs of a diverse population (Brownell et al., 2005; Darling-Hammond, 2000a; Darling-Hammond, 2014; Koppich, 2000). Coursework should present multiple viewpoints and field experiences should involve direct work with students from diverse backgrounds including students with disabilities (Brownell et al., 2005; Darling-Hammond, 2000a; Darling-Hammond, 2014; Koppich, 2000). Carefully arranged curriculum and the inclusion of varied field experiences help to circumvent the deficit mindset that many hold regarding vulnerable populations of students who are often subject to discrimination (Cochran-Smith & Dudley-Marling, 2012). This aids teachers in understanding the factors that directly impact ostracized groups and the role that education plays in social justice (Cochran-Smith & Dudley-Marling, 2012).

In renowned teacher preparation programs, faculty utilizes collaboration as a vehicle for building professional learning communities (Brownell et al., 2005; Darling-Hammond, 2000a; Darling-Hammond, 2014; Koppich, 2000). This includes active involvement from students, cooperating teachers, professors from colleges of education and from other disciplines, and other relevant stakeholders (Brownell et al., 2005; Darling-Hammond, 2000a; Darling-Hammond, 2014; Koppich, 2000). According to Hoaglund et al. (2014), providing preservice teachers with specific training and opportunities to work in authentic collaborative environments leads to positive outcomes in the dispositions of teaching candidates. These include increases in confidence in organizing and facilitating professional learning communities, increases in willingness to collaborate for consensus on group decisions, and an increase in willingness to admit a mistake in front of others (Hoaglund et al., 2014).

Thousands of universities nationwide offer teacher preparation programs, but there are features and characteristics that set exceptional teacher programs apart. Using these models as a basis for planning meaningful preservice education ultimately leads to positive outcomes for both teachers and students.

Current Research on Special Educator Preparedness

There are limited data available regarding special educators' views of their preservice training. Within the research that has been done, some general shortcomings and specific themes have arisen regarding significant gaps in the preparation of preservice special education teachers. Clark et al. (2010) believed that the inclusion of experiential learning is one of the most promising avenues for adult instruction. The extent to which it is implemented in teacher education programs, though, is suspect. He also makes it a point to mention that many adult learning programs focus heavily on the concrete experience portion of the cycle but can neglect the other components including the reflection. It is within this reflection stage that much of the authentic learning takes place (Clark et al., 2010). Kaufman (1996) echoed the need for the inclusion of more experiential learning in teacher preparation. He contended that it is impossible for teachers to employ constructivist pedagogy without being first taught using that style at the university level. Markelz et al. (2017) found that much of the training that occurs in the special education preparatory programs does not generalize to actual teaching settings and that universities often fail to utilize the specific generalization strategies that make this possible. In conjunction with a lack of generalization, special education programs often do not put enough of an emphasis on evidence-based teaching practices despite legal mandates to do so (Scheeler et al., 2016).

One of the major themes that emerges from the research is that many special educators feel that they are woefully unprepared for facilitating IEP meetings and collaborating with parents (Accardo et al., 2020; Beck & Desutter, 2020; Brownell et al., 2005; Strassfield, 2019). Beck and Desutter (2020) found that many special educators assert that they received no training in interacting with families or facilitating the IEP process in their training. Special educators that participated in their study referred to their experience in managing IEP meetings and collaborating with parents as "trial by fire", "just getting thrown in there", and "on-the-job training" (Beck & Desutter, 2020). The only teachers who claimed to have received instruction in this area were those who received inservice training within their district, and even then those were reported to be largely focused on the legal aspect of due process rather than the everyday collaboration with families necessary for effective collaboration (Beck & Sutter, 2020). Unfortunately, few teachers feel prepared for collaborating effectively with families (Accardo et al. 2020; Gavish et al., 2016; Sewell, 2012). This skill is often overlooked in teacher education programming; and if it is experienced, it is typically only in certain student teaching situations (Accardo et al., 2020). Strassfield (2019) suggested that teacher preparation programs need to remedy large gaps in special education teacher training by offering stand-alone courses that offer specific knowledge about parent and racial demographics, home-school collaboration, and specific instruction in culturally responsive ways to engage families.

Another missing component in special education teacher education relates to providing preparatory training in inclusion, co-teaching, and collaborating with general education teachers. The reauthorization of IDEA in 1997 placed inclusive practices at the

forefront of special education making co-teaching and collaboration between special educators and general educators an essential skill (Lengyel & Vanbergeijk, 2021). This skill, however, appears to be one often overlooked by preservice programs. One special educator in a study by Prather-Jones (2011) stated that working with general education teachers was one of the most difficult parts of her job.

According to Orr (2009), one of the largest barriers to inclusive educational practices is a lack of knowledge for how to work with exceptional children within the general education environment. While the general educators in the study stated that they received very little preservice training in working with students with disabilities, special educators also questioned their own knowledge on the subject and expressed disappointment in their lack of preparation (Orr, 2009). Chitiyo and Brinda (2018) found that amongst the general and special education teachers in their sample, only 44% reported that they learned about co-teaching during their teacher education programs. Those that did still report that they require more robust learning experiences in order to develop the confidence to successfully put co-teaching into practice (Chitiyo & Brinda, 2018). In keeping with these findings, Allday et al. (2013) discovered that very few programs offer courses specifically related to differentiating instruction for students with disabilities or collaboration between general and special education teachers. This lack of instruction is concerning considering the discovery that program supervisors whose students receive explicit instruction in co-teaching and collaborating with general educators, report significant gains in their students' confidence and competence in these areas (Ricci et al., 2017). Specific training in this area also raises teacher's self-efficacy

in relation to their pedagogical practice and facilitates a more positive view of the profession in general (Sasson & Malkinson, 2021).

Collaborating with paraprofessionals is another skill often overlooked in preservice teacher education (Biggs et al., 2019). Special education teachers feel that their training in this area is inadequate and that universities should remedy this by providing coursework and field service opportunities that give them practice in this area (Biggs et al., 2019). Based on interviews with practicing special educators and paraprofessionals, the study discovered that there is a specific skill set necessary for successful collaboration that should be a part of teacher education. These competencies include knowledge of appropriate roles, coaching, collaboration, organizational, and assertive communication skills, as well as dispositions of open-mindedness, patience, and respect (Biggs et al., 2019).

Despite evidence supporting the fact that preservice training can affect the skills and attitudes of those teachers who work directly with students who have behavioral difficulties, many teaching candidates are entering the industry without this essential knowledge (Flower et al., 2017; Klopfer et al., 2019). While most programs teach a general set of classroom management strategies in their coursework, these broad-based concepts are ineffective in supporting teachers when dealing with more intensive behavioral concerns (Flower et al., 2017). Freeman et al. (2014) discovered that while the majority of teacher education programs advertise programming that enhances classroom management skills, less than half of the programs they reviewed contained instruction in evidence-based classroom management strategies. In addition, specific instruction in conducting functional behavioral assessments was only present in 16% of secondary

programs and 9% of elementary (Freeman, 2014). This lack of instruction would suggest that special educators may be exceedingly unprepared for this legally mandated job function. The study concluded that there is a significant gap between the effective classroom management research base and what is typically taught in most preparation programs. As a result, many teachers enter the field unprepared to effectively deal with challenging behavior due to a lack of exposure to research-based strategies at the teacher education level (Freeman et al., 2014).

While there are clearly defined characteristics that make up quality general and special education teacher programs, there appear to be some commonly agreed upon gaps in what special educators feel prepared to do when entering the field. Research showed that many feel they need more training and exposure to collaborating with families, facilitating meetings, implementing research-based behavior management strategies, co-teaching, utilizing inclusive strategies, and working effectively with paraprofessionals. The research suggests that teacher education programs should put a renewed focus on these areas in order to improve the self-efficacy and, ultimately, the performance of the teachers that they produce.

Conclusion

Throughout the years the laws and procedures that govern special education have dramatically changed. As a result, the roles and responsibilities of special education teachers have also shifted significantly. The knowledge, skill, and dispositional competencies required to adequately perform the duties of the position are vast. Teacher education programs that prepare special education teachers have a duty to provide the necessary training to prepare preservice special educators for all aspects of the position.

Many find the preparation required for some specific areas of the job is lacking. In the face of a national shortage of special education teachers, it is essential that universities improve their preservice programs to provide experiences and coursework that prepare their students for all aspects of their future role.

CHAPTER III

METHODOLOGY

Introduction

As stated in chapter one, the purpose of this study was to explore the self-reported preparedness of special education teachers in Northeast Ohio to meet the Council for Exceptional Children's Initial Practice-Based Professional Preparation Standards (2020). In order to accomplish this, the following questions were central to accomplishing this task and guided the data collection.

1. How do practicing special educators in Ohio describe their levels of preparedness to meet the CEC's Initial Practice-Based Professional Preparation Standards after having completed their preservice teacher education programs?
2. Which aspect(s) of their positions did special education teachers in Ohio feel most prepared when completing their preservice teacher education programs?
3. What aspect(s) of their position did special education teachers in Ohio feel least prepared when completing their preservice teacher education programs?
4. For the area(s) in which participants perceived themselves as unprepared, how was this standard of knowledge or practice eventually obtained (e.g., mentoring, job-imbedded professional development, etc.)?
5. What were the most meaningful and effective learning experiences that participants experienced during their preservice education program?

This study adds to the currently existing body of research about the preparedness of special educators, specifically those in Northeast Ohio. Current research is conflicted about whether or not preservice programs are effectively preparing new special education teachers for the field. This study gives voice to currently practicing special educators so that these important experiences can inform the decisions of teacher educators and policy makers as they design and modify programs to meet the needs of future professionals.

Research Design

In order to answer the aforementioned research questions, this qualitative phenomenological study consisted of semi-structured interviews designed to give voice to currently practicing professionals. The study was designed to identify shared experiences and trends in current levels of teacher preparation. According to Merriam (2009), a phenomenological study is designed to explore the everyday life and social action of participants' lived experiences. The semi-structured interview allows the researcher to respond to the unfolding direction of the interview, to explore new ideas on the subject, and to experience the worldview of the participant (Merriam, 2009). Special education teachers are an essential part of our public school system, and their roles are multifaceted. Understanding the unique perspective of these professionals on the role that their preservice teacher education played in their preparation is essential for designing experiences that promote self-efficacy and longevity in the profession (Clark & Newberry, 2019; Darling-Hammond et al., 2002; Ingersoll et al., 2012).

Participants

The participants in this study were chosen using a combination of purposive convenience and snowball sampling. Trochim et al. (2016) described purposive sampling

as the process of seeking the participation of individuals who possess a specific set of characteristics. In order to gain a fresh perspective on the level of preparedness being produced by preservice teacher education programs, this study focused on currently practicing special education teachers with five or fewer years of teaching experience. Caniglia (2016) discovered that special educators with six or more years of service report higher levels of preparedness and confidence because of their professional experiences, not necessarily because of their preservice training. In addition, the further removed an individual becomes from an experience, the more likely they are to substitute personal bias for fading memories (Neuenschwander, 1978). The researcher hoped that by limiting the participants to those special educators who are still in the formative years of their career, a clearer picture could be provided of the level of preparedness that their respective teacher education programs yielded.

The study participants were limited to teachers licensed by the state of Ohio who were currently working as a special educator. While there are nuances in special education procedures and models between districts, special educators within the state are subject to the same professional teaching standards and are likely to have similar experiences within their daily work responsibilities. Since the majority of students in Ohio and throughout the country are educated within public school systems, this sample reflects the typical sample of the phenomenon of interest (Merriam, 2009).

Participants in the study were limited to teachers within the geographic region of Northeast Ohio. The researcher contacted peers within the special education community as well as local school administrators to identify potential participants who met the aforementioned criteria. Based on recommendations from these individuals, the

researcher contacted the potential subjects who expressed interest. The researcher then arranged a time, date, and location to share informed consent forms, allow questions, and to conduct an interview. After conducting interviews, the researcher utilized snowball sampling by asking those participants for recommendations of other individuals who might be willing to participate in the study. This sampling technique was utilized until enough interviews had been conducted that the collected data met the point of saturation.

The study included 15 participants from districts located in Northeast Ohio. The participants represented eight different school districts and seven different universities. All of these universities were located within Ohio. Participants ranged from their first to their fourth year of experience serving as special educators. The participants in this study represented all major levels of compensatory public-school education; this included four secondary teachers, three middle school teachers, six elementary teachers, and two preschool teachers. Two of the participants were male and the other 13 were female. The participants used a wide range of service delivery models based on the needs and preferences of their districts. In many instances a participant utilized a combination of delivery models over the course of their workday. These models included co-teaching, pushing into inclusive classrooms, pulling students out of general education classes for specialized instruction, cross-categorical resource room classes, self-contained classrooms, and peer modeled preschool settings.

The Ohio Department of Education (2019) recognizes eight school district typologies. Thirteen of the participants came from suburban districts with low student poverty and average student population size. One teacher represented a small-town district with low student poverty and a small student population. The remaining

participant works in a small-town district with high student poverty and an average student population size.

Role of the Researcher

Within this study, the researcher acted as the interviewer. The researcher's status as a currently practicing special educator provided him with insight as to many of the common experiences and job responsibilities of the subjects. It is the belief of the researcher that his status as an insider created a more comfortable environment for participants to share honestly as they were having a discussion with a peer who related well to their experiences.

Because of the researcher's experience as a special educator, he does possess some bias based on his experience with his own teacher education program. The researcher's undergraduate program consisted of an insufficient number of elementary general education methods courses and very general classes related to students with disabilities. Consequently, he was very unprepared for the field when he entered it. It was only through years of experience and the support of mentors and peers that he was able to progress in his career. The researcher hoped that teacher education programs have since adapted to the needs of currently practicing special educators and are providing better preparation than he himself received.

In order to mitigate the bias, the researcher utilized member checks. After the interviews were conducted, the categorized data and tentative interpretations were shared with the participants to ensure that their input was not being misconstrued and that the initial interpretations were plausible (Merriam, 2009).

Data Collection

A number of research categories were established prior to conducting the semi-structured interview process. These categories were based on the Council for Exceptional Children's (CEC) Initial Practice-Based Professional Preparation Standards (2020). According to the CEC, these seven standards define what an individual must know and be able to do in order to be successful when entering the field (CEC, 2020). The standards, their individual components, and the corresponding research categories for this study can be found in Appendix X. Ten initial research categories were established based on the seven CEC standards. These include:

1. Knowledge of Relevant Legislation
2. Collaboration
3. Differentiation
4. Diversity
5. Content Area Knowledge
6. Knowledge of the Effects of Disability
7. Research-based Instructional Strategies
8. Assessment
9. Behavior and Emotional Management Strategies
10. Professional Responsibilities

Additional research categories were developed to provide relevant data related to research questions four and five. These categories included:

11. Most Meaningful Experiences
12. Eventual Knowledge Attainment

While these initial research categories provided a basis for developing the guiding interview questions, the researcher allowed for the emergence of new categories based upon the participants' responses. While no entirely new categories emerged, subcategories formed under several of the original themes. Subcategories are present under the collaboration, content area knowledge, assessment, professional responsibilities, most meaningful experiences, and eventual knowledge attainment themes.

Data were collected by conducting semi-structured interviews with novice special educators from Northeast Ohio. In order to gather participants, the researcher contacted coworkers, peers, and special education administrators in various districts for leads regarding any persons who meet the aforementioned criteria and might be interested in participating in this study. Prior to approaching potential participants, the researcher obtained permission to work with human subjects through the university's Institutional Review Board (IRB). Once permission was obtained, email communications were sent to those identified candidates. In the email, the researcher explained that participation is being sought to conduct semi-structured interviews regarding special educator preparedness. The email sought consent to enlist their participation in these interviews. An estimate of the amount of time needed to be committed, the potential risks of participation, the benefits of the study, plans for confidentiality and security of records, and the researcher's contact information were also included. After having received this email, candidates who still expressed an interest in participating in the study were followed up with and asked to complete the informed consent forms. Informed consent forms were signed and then interviews were conducted via phone.

As each interview was conducted, the researcher asked each participant if they had knowledge of any other teachers willing to participate in the study. The researcher then reached out to any individuals who expressed interest in participation in the study. The potential participants were contacted by the researcher and times were arranged for informed consent and the conduction of the interview.

To ensure the inclusion of data from multiple sources, the researcher reached out to directors and peers from varying types of districts and schools. The process of contact, informed consent, and interview was repeated until the data produced by the interviews met the point of saturation. Interviews were recorded with the participants' consent and then later transcribed by the researcher for analysis.

Instruments

The guiding questions behind the semi-structured interview utilized in this study were developed by the researcher to provide data relevant to the study's identified research questions. The first section of the interview consisted of questions designed to gather basic demographic information. These ensured that the subject met the predetermined requirements for participation. These questions also allowed the researcher to select candidates from different types of districts. By including multiple sources of data, participant responses could be triangulated to ensure validity.

The second part of the interview consisted of questions specifically designed to gauge the participants' level of preparation for and experience with specific elements laid out by the CEC's Initial Practice-Based Professional Preparation Standards (2020). The specific interview questions and the corresponding standards can be found in Appendix X. The goal of these questions was to determine how the respective programs prepared

the participant in each domain and how effective the program was in providing the necessary knowledge and experience contained in each standard.

The questions in the third and final section of the semi-structured interview inquired about the overall quality, strengths, and weaknesses of the program that each participant went through in order to gain licensure. Participants were asked to describe the most effective learning experience that their program provided and what elements they would include in a perfect program. The subjects were also asked how they eventually gained essential knowledge that might not have been sufficiently addressed. These questions were specifically designed to provide data relevant to research questions four and five, respectively.

Data Analysis

Data in this study were analyzed using the constant comparative method. As each set of interview responses was collected, it was compared back to the other responses in the data set. This method allowed the researcher to categorize data based on similarities and differences between the participants and then group it based on similar dimensions (Merriam, 2009). The purpose of the study was to explore the level of preparedness reported by currently practicing special educators in Northeast Ohio. By comparing the reported experiences, opinions, and perspectives of the subjects, the data could be analyzed to identify themes and draw conclusions about the effectiveness of preservice special education programs. Since the participants in the study were all practicing special educators, it can be assumed that they have all met the requirements necessary for licensure by the state of Ohio. In order to gain said licensure, a teacher must complete an accredited preservice teacher education program. For these reasons, it can be surmised

that the participants have similar backgrounds and similar experiences in their post-secondary programs. Comparing each set of responses with those that have been previously documented allowed the researcher to identify those similarities and differences in order to group them into dimensions and eventually, emerging themes (Merriam, 2009).

The analysis process was ongoing as the researcher coded the data after transcription. The data were then consolidated and grouped according to the research categories. The acquired data were analyzed to identify similarities and differences between the participants' dialogue. The trends recognized in this analysis led to conclusions related to the original research questions.

Validity

In order to ensure internal validity, the researcher utilized triangulation through multiple sources of data. According to Merriam (2009), triangulation is a principal strategy for ensuring validity and reliability. One strategy for triangulation is the process of collecting interview data from individuals with different perspectives (Merriam, 2009). By including participants from different types of districts, different school levels (i.e., preschool, elementary, middle, secondary), different settings (i.e., co-taught settings, resource rooms, push-in, pull-out, peer model), and different teacher education preparatory programs within the sample set, the researcher ensured validity and reliability. The researcher also utilized member checks to ensure the collected data and initial conclusions truly represented the intended message of the participant.

Limitations

Due to the geographical limits of the study, it cannot be assumed that the conclusions drawn or inferences made in this study can necessarily be carried over to special educators outside the region of Northeast Ohio. Different states have different requirements for licensure and different standards for completion of preservice teacher education programming. While the most overarching laws that govern special education are through the federal government, state officials are able to nuance legislation to meet the needs of their own children.

Another limitation relates to the gender makeup of the study's sample. Of the fifteen participants, thirteen were female. This ratio of females to males is above the national mark. Currently, females make up 77% of the nation's teacher work force (NCES, 2023). This disparity could influence the generalizability of the study's results.

The standards on which this study was based were developed by the foremost organization in the world of special education, the Council for Exceptional Children. However, these are not the only standards against which effective teaching is measured. Some states have their own standards for special educators or general standards for the teaching profession. It is important to note that this study was limited to preparation for the CEC standards. While there is likely considerable overlap, it is possible that some universities design their programs to prepare their teaching candidates for a different set of standards.

Ethical Considerations

This study is based on the responses of human subjects and was approved by the Institutional Review Board (IRB) of Youngstown State University prior to conduction.

The IRB is responsible for reviewing and approving all research performed on human subjects. Prior to participation, subjects were provided, in writing, all necessary information including the purpose of the study, an estimate of the amount of time needed to be committed, the potential risks of participation, plans for confidentiality and security of records, the IRB approval number, and the researcher's contact information. Participants were also notified that they had the ability to remove themselves from the study at any time with no penalty or negative consequence. Voice recordings, transcripts, researcher notes, and any other relevant materials were kept securely in the researcher's password protected Google drive account.

A potentially harmful consequence of participation includes negative social interactions that might occur if a supervisor or staff member from a formerly attended university program is made aware of any comments made by the participants that could be construed as derogatory towards said supervisor, faculty, or university. In order to avoid this regrettable situation, the identity of the participant was kept confidential during transcription, analysis, and eventual publication. Within the confines of the study, participants were referred to using the type of school that they work at and by a number (e.g., participant one from a suburban elementary school, SE1). By protecting the identity of each subject, no harmful consequences should be experienced due to participation in the study.

Summary

The role of a special education teacher is complex and challenging. Success in this field requires a vast amount of specialized preparation. The purpose of this study was to discover the level of preparedness that universities are generating according to teachers

within Northeast Ohio. The following research questions were developed to add to and clarify the current research around this topic:

1. How do practicing special educators in Ohio describe their levels of preparedness to meet the CEC's Initial Practice-Based Professional Preparation Standards after having completed their preservice teacher education programs?
2. Which aspect(s) of their positions did special education teachers in Ohio feel most prepared when completing their preservice teacher education programs?
3. What aspect(s) of their position did special education teachers in Ohio feel least prepared when completing their preservice teacher education programs?
4. For the area(s) in which participants perceived themselves as unprepared, how was this standard of knowledge or practice eventually obtained (e.g., mentoring, job-imbedded professional development, etc.)?
5. What were the most meaningful and effective learning experiences that participants experienced during their preservice education program?

In order to gather the data necessary to answer these questions, the researcher conducted semi-structured interviews with currently practicing special educators within Northeast Ohio who are within their first five years of service. The guiding questions in the interview protocol were based on the seven initial preparation standards created by the Council for Exceptional Children (2020). This set of standards define what is expected of quality teaching candidates when they enter the field. The data in this phenomenological study were analyzed using the constant comparative method. This method allowed the researcher to search for trends as each newly gathered set of data

were compared to the previously gathered information and organized in relation to the 10 research categories identified by the researcher at the onset of the study.

The study was limited to participants practicing within the geographical region of Northeast Ohio. As such, conclusions drawn in this study cannot necessarily be applied to all special educators. In addition, due to the volume of special education teacher programs, it cannot be assumed that the conclusions drawn in this study can be generalized to all preparatory programs.

CHAPTER IV

FINDINGS AND INTERPRETATIONS

Introduction

This chapter presents the findings of the questions posed in chapter I. The study consisted of interviews conducted with novice special education teachers in Northeast Ohio and the analysis is based on their responses. The research questions include:

1. How do practicing special educators in Ohio describe their levels of preparedness to meet the CEC's Initial Practice-Based Professional Preparation Standards after having completed their preservice teacher education programs?
2. Which aspect(s) of their positions did special education teachers in Ohio feel most prepared when completing their preservice teacher education programs?
3. What aspect(s) of their position did special education teachers in Ohio feel least prepared when completing their preservice teacher education programs?
4. For the area(s) in which participants perceived themselves as unprepared, how was this standard of knowledge or practice eventually obtained (e.g., mentoring, job-imbedded professional development, etc.)?
5. What were the most meaningful and effective learning experiences that participants experienced during their preservice education program?

The purpose of this chapter is to present the study's findings. In conducting this study, the researcher utilized the Council for Exceptional Children's Initial Practice-Based Professional Preparation Standards (2020) (RQ 1, 2, and 3). Additionally, the research inquired into how special education teachers grew to eventually meet the

standards (RQ 4) and described the most meaningful and effective learning experiences of their teacher preparation programs (RQ5). Inductive coding was utilized to analyze the data and determine how the participants' answers described the phenomena as detail in predetermined categorization of the standards (See Appendix A).

These categories remained the same throughout the analysis. However, subcategories were added for the categories of assessment, content area knowledge, professional responsibilities, eventual knowledge attainment, and most meaningful experiences. to match the specificity of the participants' answers.

Participants

Participants in this study included 15 practicing special education teachers within Northeast Ohio who were within their first five years of practice. Sampling began based on convenience as the researcher reached out to colleagues in the field to network with potential participants who met the aforementioned criteria. Snowball sampling was then utilized as some participants were able to identify others who might be interested in participating in the study.

The sample consisted of 13 female and two male special educators. These special educators were drawn from eight different public-school districts throughout Northeast Ohio. The district included three different typologies as defined by the state of Ohio (Ohio Department of Education, 2019). The majority of these participants (13) worked in suburban districts with low student poverty and average student population size. One participant came from a small-town district with high student poverty and average student population size. The final participant came from a small-town district with low student poverty and a low student population size. The degrees and licensures earned by the

participants came from seven different universities all within the state of Ohio. The participants were representative of the different levels of public-school districts. Four of the participants worked at the secondary level, three worked at the middle school level, six worked at the elementary level, and two worked at the preschool level. The settings primarily served by the participants spanned all of the major settings typically present in special education within public schools. These settings included co-taught general education settings, cross-categorical resource room settings, self-contained units, and peer model preschool settings. For reporting purposes, participants were coded using the type of district they work in (suburban = S, small town = ST), the level of schools they work at (preschool = P, elementary = E, middle = M, high school = H), and then an ordinal number. For example, the first participant in a suburban elementary is referred to as SE1.

Findings

To address the first three research questions, the researcher utilized in the interview process the Council for Exceptional Children's seven Initial Practice-Based Professional Preparation Standards (CEC, 2020) to allow the participants the opportunity to describe their preparedness to meet the standards. These seven standards outline the necessary skills and practices that special educators should possess when entering the field. As described above, the researcher examined the standards and divided them into 10 categories, which provided the outline for data collection (RQs 1, 2, and 3), along with the study's two additional research questions (RQs 4 and 5). The researcher then used inductive hierarchical coding to identify participants' levels of preparation in each category. The researcher then labeled participants' levels of preparedness as "well

prepared", "somewhat prepared", or "not prepared". Respondents who were classified as "well prepared" spoke positively about their experience in a particular area and indicated that they were ready for that aspect of the position when they entered the field. Participants classified as "somewhat prepared" indicated that they were partially prepared in a specific area or stated that their program made an effort to prepare them, but there was room for improvement in the level of preparedness offered. Lastly, participants were coded as "not prepared" if their preservice program did not offer training in a particular area or that the training offered was so poor that the participant was unprepared when entering the workforce.

Category 1: Knowledge of Relevant Legislation

The first component of the Council for Exceptional Children's first initial practice-based preparation standard states that, "candidates practice within ethical guidelines and legal policies and procedures" (CEC, 2020, p. 1). Emerging from this standard is the category of Knowledge of Relevant Legislation. Throughout the history of special education, legislation has driven the responsibilities and practices of special educators (Lengyel & Vanderbergeijk, 2021). Knowledge of this legislation is essential as failing to follow legal guidelines can result in negative outcomes for students, families, district, and special educators themselves.

Of the 15 participants, eight reported that they were well prepared in this area based on the instruction they received in their preservice teacher education programs. Candidates who felt well prepared in this area largely cited having specific classes or coursework that required them to learn the relevant legal precedents that govern their profession. Candidates classified as well-prepared stated the following:

SP1: They prepared me very well. We had a whole legal course of all of IDEA.

SH3: I feel like they did pretty well with that. We went over it in our classes a lot, looked at examples, just all the different aspects of it.

SM2: We actually had a course that was IEP writing and just like all the legal things that go into that. I felt like they gave us a pretty good understanding of listen here are the kind of laws and legal things that we need to take a look at and here's how you address them.

SE4: Yeah, we had a whole class on all that stuff and a lot of quizzes. I know we took like our OAE and it had all that stuff.

SP2: Very well for that. I think we had to take a whole legal and policy course that's like very specific about the law.

STM1: We did a lot of mock IEPs, behavior plans, ETRs, different things where we would do case studies. So, I did feel prepared for that type of legality.

SE5: That I'm very well prepared for. Oh yes, they gave us all the materials that we needed. A lot of our classes, what the majority of our classes were about, the legalities with it. If you ask me, anything legally I can do.

SH4: So, I would say like the class itself that we had, like we had a class specifically dedicated to all the legal parts, the paperwork, all of that. It was a really helpful class.

Of the 15 participants, one reported that they were somewhat prepared in this area. While the candidate admits that this topic was covered in class, it was not done so in a way where he could retain the information. The participant stated:

SM1: Yeah, so we talked about it in classes. I don't think I was tested on it enough to be honest with you. That kind of stuff hurt me, I think a little bit initially on my interviews because I like I would learn it and then I don't think I necessarily put it to memory. Like I'm learning it like as every day goes on like so things I can and can't do. What's legal, what's not legal. I wouldn't say like amazing, but okay, definitely was taught it.

Of the 15 participants, six reported that they were not prepared in this area based on their preservice training. These participants cited a lack of focus on legalities and professional responsibilities. Some also cited touching on the subject but not receiving enough specific or applicable knowledge. Participants classified as “not prepared” stated the following:

SH1: Not a lot. I think that that's what I get so upset about because I think that during college, I probably wrote one goal. Yes, I remember going over like IDEA and going over those types of things and defining them, that kind of stuff, but there is nothing that like sticks out to me in my head about you know my teachers like telling me how important those regulations are for special ed.

SH2: Well, going into the OAE I really struggled because I feel like there was not preparation to kind of teach IDEA. We weren’t really pressing the importance of knowing it and when it might appear in the work force when you’re actually writing IEP’s or ETR’s. I really wish that I would have had a more in-depth experience. If we were looking at like you know compliance or if we were truly looking at IDEA, we didn’t really dive too deep into that.

SE1: It felt like I didn't know any of them until I had to study for my licensure exam. I really struggled with my licensure exam, special ed. to be specific because it's all laws like that I really had no idea about.

SE2: You know, I didn't really understand what the least restrictive environment was or a lot. I hadn't even seen an IEP before so a lot of the language and that lawful language you know I didn't even understand how it really applied so maybe I had an idea of what it was, but I didn't know how to apply the stuff. So, I think that was an area I really struggled when I came into my profession was understanding all the law stuff that I needed to know of, you know, following all the rules and making sure I had all the information correct.

SE3: I feel like the only thing that was really pushed in my undergrad was like IDEA and that was I feel like about it. We're currently going through an audit right now and I feel like I maybe had no idea of the complexity of things like that and internal monitoring, I had no idea about. So, I would not say they did the best because I really just feel like sometimes in my undergrad it was just memorizing like acronyms of certain things. Yeah, I would say not the best.

STE1: Honestly, I felt really underprepared for this part of it. So, like going into my first year of teaching, I felt like I had no idea what I was doing, and I was bugging my mentor teacher so much because I had so many questions about how it all worked and what I was supposed to do and all the things.

With only a little over half of the participants indicating that they were well-prepared in this area, it is evident that universities need to spend a greater amount of time focused on the acquisition of this knowledge. There appear to be inconsistencies in the

method and extent to which universities provide preservice education to their students in this area. Multiple candidates indicated that they had an introductory special education class or specific class dedicated to learning about the legislation that drives special education. These are practices that should be considered by all universities. Based on some of the participants' statements, the instruction that candidates receive should transcend simple memorization of acronyms or historical data but instead should focus on the real-world application of these laws and how they apply to the day-to-day operations of a district at-large and the implications of that for special educators.

This phenomenon may be attributed to the fact that many of the candidates were in dual licensure programs. Three of the programs and eight of the participants received dual licensure as a result of their programs. These participants stated that special education was an afterthought in their programs and that the emphasis was predominantly placed on the general education aspect of their education. These licensures allowed students to receive licensure in early childhood education as well as special education K-12. Purely special education programs oftentimes included classes specific to legislation. Dual licensure programs did not. In one program that four of the participants came from, students received the majority of their special education programming through online modules instead of direct instruction. Some candidates found this helpful, others did not. They also described a minimal focus on the preparation of documents as they were only given the opportunity to write IEP goals, not complete documents. While the modules discussed other legal documents, candidates had no opportunities to create them themselves. Two candidates from other universities stated that this lack of instruction hurt them when attempting to pass the state licensure exam. This demonstrates the

limitations of these programs. While it may be appealing to preservice teachers to receive multiple licensures from one program, many end up in special education positions because of the shortage of special education teachers in the field and the availability of these jobs (Buttner, 2021).

One candidate described an opposite experience with preparation of the legalities of special education. This candidate stated that all of the focus was on legalities. She regretted the fact that her program did not put an emphasis on actually working with students. While this is an important standard for the CEC (2020), it ignores many of the other standards that deal with directly dealing with students.

Category Two: Collaboration

Collaboration is an essential part of the role of a special educator as stated by the seventh standard of the CEC Initial Practice-Based Professional Preparation Standards (CEC, 2020). Component two of the seventh standard states:

> Candidates collaborate, communicate, and coordinate with families, paraprofessionals, and other professionals within the educational setting to assess, plan, and implement effective programs and services that promote progress toward measurable outcomes for individuals with and without exceptionalities and their families. (CEC, 2020, p. 3)

This theme is broken into multiple subcategories as there are several identified groups that special educators are required to collaborate with.

Category 2a: Families

The EHA (1975) requires that special educators include families within the decision-making process for their students (Lengyel & Vanderbergeijk, 2021).

Unfortunately, studies have shown that the current preparedness of special educators to conduct IEP meetings and collaborate with parents (Beck & Sutter, 2020). Of the 15 participants, only 10 directly addressed preparation for collaborating with families. Of the 10, four responded that they were well prepared. Participants primarily acquired these skills through specific classes that specifically focused on working with families or on collaborating with others. Other participants stated that they acquired these skills through their field placements/student teaching experiences. Three of the components of the CEC standards (2020) directly mention collaborating with families. For these reasons this is an essential area. The evidential statements of the candidates are as follows:

> **SH1:** So we, I forgot what the class was called, it was family studies, but we went to a lot of different places in the community around CITY such as the Salvation Army, a couple group homes for single moms that were homeless, we went to another homeless shelter, and then we learned how to incorporate you know different backgrounds, family types, all of that into literacy which was super nice and I feel is super helpful now. I really love the, you know, different lesson planning classes that UNIVERSITY provided me with and the family class and diversity class and stuff like that. I feel like that truly prepared me to be patient with my students and to understand what they need.
>
> **SH2:** They put together very good special education modules to kind of give us real world experience in how maybe we would approach a situation. Like how would we incorporate specially designed instruction for certain individuals with special needs. It was more along that line. How to communicate with parents of

students who have exceptional learning needs and how to provide those accommodations needed in the classroom.

SE2: We had a course that was specifically on collaboration with families, but it really homed in on like what an IEP team looks like and what a specialized team really looks like for a student. So, although it really did focus more on parents and that was really great, I think that it did give me a lot of language and experiences and a little bit of exposure to like the IEP process that kind of showed me how closely I would be working with other individuals.

STM1: We had a lot of times in our classes like in our small cohorts we would do mock IEP meetings. We practice strategies for communicating with parents and how to professionally communicate with parents.

Of the 10 participants who addressed this area, three described themselves as somewhat prepared. Their statements are as follows:

SE4: Even having like mock IEP or mock behavior situations like we do like parent phone calls, but it's not directed towards like things in the special education world or like what should you say to the parents leading up to a meeting? What are good things to ask the parents before a meeting?

SP2: As far as the like the preparation I have for like facilitating IEP meetings, that was a lot that I learned like through the fieldwork that I'm doing now. They kind of taught you how to collaborate with families within the IEP meeting and like ETR meeting as well like it's part of their evaluation. But I would say that it was not something that was necessarily prepared for. We were taught to use like, you know implement that and we practiced implementing that with families, like

application based. So, I would say that a lot of the experience that I have from that is something I kind of learned like through my work.

SH4: In my collaborations class, we discussed how important communication was with our families. We discussed different ways to communicate with families throughout the year (for example: welcome letter, class dojo or classroom management tool). I will say it was not checked how we were communicating with families during our student teaching, but we were given the tools to know where to start.

Three candidates indicated that they were not prepared in this area. Their statements are as follows:

SP1: If I'm going to be honest with you cut everything. So, like preparing them for those behaviors, preparing them for parents. Sorry, I'm also a respite care provider so I work for a family who uses those speech services in the school and so I kind of get it from sometimes that parent's perspective also because I do work with a child that has severe needs. Also, kind of tying in the parent's perspective because going into meetings parents do have these emotions because we are talking about their child and sometimes it's not great. So being able to connect with the families and have that understanding and we see them inside the classroom, but they see them outside the classroom.

SE1: They really never talked about how to deal with behaviors in the classroom, how to deal with like talking to parents with behaviors in the classroom that arise due to these abilities and disabilities that student have. I never learned about that in school. And I mean, parent communication is a huge

role in special ed. Parents was to know what's happening, want to know what's going on and I had like no parent contacts help I guess per say.

STE1: Interviewer: Did you have any opportunities to, you know, prior to getting into the classroom, did you have any opportunities to facilitate an IEP meeting or collaborate with families on setting up a meeting or those kinds of things?" STE1: "No."

Category 2b: Paraprofessionals

Component four of the collaboration standard states that "candidates work with and mentor paraprofessionals in the paraprofessionals' role of supporting the education of individuals with exceptionalities and their families" (CEC, 2020, p. 2). Collaborating effectively with paraprofessionals is an essential skill for most special educators (Biggs et al., 2019). Of the 15 participants, only five responded that they were well prepared. This is in keeping with previous research that identified this as an area that most special educators entering the profession are poorly prepared for (Biggs et al., 2019). The participants who did feel well prepared received either instruction in their preservice classrooms, experience with paraprofessionals in their field placements, or a combination of both. These participants made the following statements:

SP1: Really, really well.

SH3: I feel more comfortable communicating with paraprofessionals than I did with related service providers. But the paraprofessionals, the one unit I was in, they had three paraprofessionals in, so I got to see a lot of modeling from the teacher that was in there.

STE1: Pretty well. So again, in my field experience I was in a resource room, so we worked with paraprofessionals and speech and OT, so I felt like I had good relationships with my student teaching and that kind of led to now.

STM1: We did have a class talking a lot about just collaboration and communication, whether it was co-teaching or managing paraprofessionals and working with related services. So, I feel like they prepared me well for that.

SH4: So, they did a good job like especially working with paraprofessionals, making sure that like we are on the same page as I'm showing them that same respect as any other colleague in the building. They made it clear if you treat your paras well, things are going to go well because they're going to be there to support you in your classroom.

Of the 13 participants, 10 stated that they were not prepared for working with paraprofessionals. They made the following statements:

SH1: We didn't really have any experience on working with SLPs or OTs or parapros in college. Again, we were told that that would be part of our job description, but not really much instruction on how to do that.

SH2: They didn't really teach me anything about that until I got into the field."

SE1: "I did not get prepared at all for working with paras. That is, I have a para I work with right now that is older than me. She's been a para for as long as I've been alive, and now I'm like in charge and it's a huge battle that I'm having a hard time dealing with in the sense of I don't know how to speak to or give directions or what's my responsibility, what's not my responsibility. I mean, I don't even ever remember talking about paraprofessionals ever in college and then I was put

into the work world and I was given a para that I'm in charge of.

SE2: Now, I don't feel that I received any sort of information on adult management. I know that that sounds kind of crazy, but like learning as a special educator, you are case manager, as you said, and part of that case management also comes delegating to adults and I don't necessarily feel like I really knew how to collaborate with another adult in my classroom and how to explicitly almost teach the adults what I need them to do as well.

SE3: I would say not well. I mean I know that's a part of that, it was a part of special ed., but dealing with paraprofessionals like people that you have to oversee like that was never something that we really talked about, not that I remember anything. I would say the weaknesses are in like ETR readiness, progress monitoring readiness, dealing with like other like paraprofessionals or other professionals that you work with.

SM1: I guess the fact that I have to pause and think about it kind of tells me not that well. I am learning that in the field right now. Like I didn't fully understand what everyone else's jobs were that I had to work with. And what they didn't do well, were like how to write an IEP, how to deal with paraprofessionals.

SM2: Once again, it was probably mentioned, but not really talked about. I wish we had a like related services, paraprofessionals like how-to course of like listen you're going to be working with adults who are older than you who may have more experience than you, but you're the one in charge. How do you manage people like that?

SE4: I wouldn't say they really prepared us for this. One thing that I was like,

very like, not prepared for at all is kind of like I am the one that's not 'in charge' but like for the para of her schedule of when she gets her break, what should she be doing what assessments, what interventions, what do I want her to do when I'm not in the room. That was definitely a shock. Like I had no idea that I was going to have to tell her all that.

SP2: As far as paraprofessionals, that's not something that was really addressed in the coursework because you know they're a very essential part of the class, you know, the classroom. So that's something that was not really addressed in my coursework.

SE5: So, I found out that I was in charge of paras when I started with this position schedule, so I think that answers that part of the question.

Category 2c: Related Services

As previously stated in the CEC standards (CEC, 2020), collaborating with "other professionals" to ensure the success of students with disabilities is a necessary skill for special educators to possess. Working cooperatively with related service providers such as speech pathologists, occupational therapists, and physical therapists would fall under this category. All 15 participants addressed their preparation in this area. This is again an area where the study's participants appeared to be poorly prepared. Of the 15 participants, only five stated that they were well prepared for collaborating with related service providers. The ones who were well-prepared cited specific classes in collaboration, coursework that required them to plan for utilizing these services for students, or student teaching placements that provided them with these experiences. The four participants made the following statements:

SP1: Really, really well. For all of our lesson plans we had to tie in if a student was on an IEP how we would talk with the other teachers or the other related services or how to help the student so if I had a student who had an IEP and needed accommodations or modifications, I then had to go to that specialist and talk through it. So, that was something that I definitely benefited from, and I do it every day at DISTRICT, going from PT to OT discussing different things and getting different ideas. That's something that UNIVERSITY did very well.

SE2: But once I got into my field, I think that the real field experience was able to show me that. I think that was a vital piece of the learning to interact with the related providers, service providers.

STE1: Pretty well. So again, in my field experience I was in a resource room, so we worked with paraprofessionals and speech and OT, so I felt like I had good relationships with my student teaching and that kind of led to now.

SP2: We had some direct instruction about collaborating with colleagues, you know like speech language pathologist, but it wasn't like a main focus of any class that I took. Collaborating with like, you know, related service providers was something that was definitely addressed where we kind of talked about like how to like use their input, how do I like, you know, reach out to colleagues. There was definitely like some direct instruction about like you know what role each person plays and then how like we could have like you know collaboration between the two. That's something, yeah that was definitely covered.

STM1: We did have a class talking a lot about just collaboration and communication, whether it was co-teaching or managing paraprofessionals and

working with related services. So, I feel like they prepared me well for that.

Of the participants, one stated that they were somewhat prepared for work with related service providers. She stated the following:

> **SE5:** I knew that we worked well with OT and speech, some of the other providers within the school district. I did not know how closely we work together, but they did let us know that you will be working with other services to help the student attain the goal, to get where they need to be. I was prepared in that sense. I wouldn't say I was fully prepared, but I was prepared so it wasn't a shock.

Nine participants indicated that they were not well-prepared for collaboration with related service providers. They stated the following:

> **SH1:** We didn't really have any experience on working with SLPs or OTs or parapros in college. Again, we were told that that would be part of our job description, but not really much instruction on how to do that.
>
> **SH2:** I didn't really learn it until I got my first job. I didn't feel like I got all the resources that I needed until my first job.
>
> **SE1:** I had no idea that schools offered PT for students in school. Knew about speech, but for like OT and PT, I really was like had no idea.
>
> **SH2:** I feel more comfortable communicating with paraprofessionals than I did with related service providers, and even now I still get confused on like how to write that section of the IEP and what some of the things mean when they write them. Like when PT and OT go in and write things and how to like explain that to the parents.
>
> **SE3:** I would say the weaknesses are in like ETR readiness, progress monitoring

readiness, dealing with like other like paraprofessionals or other professionals that you work with.

SM1: I guess the fact that I have to pause and think about it kind of tells me not that well. I am learning that in the field right now. Like I didn't fully understand what everyone else's jobs were that I had to work with. It's definitely something I was taught, but if I had a 4.0 and I didn't take it away from the program, not to point fingers, I don't know if it was really taught that well because I didn't fully understand what like a guidance counselor does, what a speech therapist did. I knew there was speech, but I didn't know the other things they have to do, how they can also amend IEPs. I wasn't really fully aware of any of that so I would say not the best.

SM2: Once again, it was probably mentioned, but not really talked about. I wish we had a related services, paraprofessionals like how-to course of like listen you're going to be working with adults who are older than you who may have more experience than you, but you're the one in charge.

SE4: I wouldn't say they prepared us for this.

SH4: I will say I wish we would have learned just a little bit more about outside service providers, especially when you get into those moderate and intensive classrooms. There's so many more service providers that you could be working with. I feel like we grazed over the topic, but like that one was one that I wish that we could have spent a little more like time and detail on. Like these are the people that you're working with, and this is everything that or some of the things that you're going to be communicating with them, just in more detail, I guess.

Category 2d: Co-teaching

While not formally part of the CEC's collaboration standard, component 4.1 states that "candidates collaboratively develop, select, administer, analyze, and interpret multiple measures of student learning, behavior, and the classroom environment to evaluate and support classroom and school-based systems of intervention for students with and without exceptionalities." This standard highlights the special educator's role in not only working to develop the skills of students with disabilities, but also extends the interventionist's role to include those students without significant deficits. This role is often filled within inclusive and co-taught environments. Within the co-taught and inclusive environments, it is essential that general educators and special educators be able to effectively collaborate (Brendle et al., 2017). Effective co-teaching requires a specific set of skills that can be acquired through preservice training and professional development (Brendle et al., 2017). It also improves both the competency and confidence of students with disabilities who participate in the general education setting (Ricci et al., 2017). Previous research showed that this is an area that universities' have been lacking in (Chitiyo & Brinda, 2018; Orr, 2009; Prather-Jones, 2011).

Of the 15 participants, all of them spoke to their preservice preparation for co-teaching. Seven of the participants felt well-prepared for co-teaching and working in inclusive environments when they entered the field. Teachers who entered the field well-prepared cited classes with instruction specific to collaboration and specific co-teaching models. Others cited preparation as a result of their students teaching and field experiences. These sentiments are evidenced by the following statements:

SH1: I was placed in one field experience with someone who co-taught and I

didn't love it. So, I was like, 'Co-teaching is not going to be for me.' But we talked about a lot of different professional relationships, and I do think that they kind of were good in that aspect like you know how to be a good co-teacher, like different ways of collaborating. You know we did practice collaboration with different people in our classes.

SE1: I think they really homed in on co-teaching, I had a whole like unit on how to co-teach and strategies for co-teaching.

SE3: For co-teaching, I went to a lot of places that were co-taught for like my field placements and things like that, I think. They focused on that especially for mild to moderate because that's a lot of what we do. Yeah, for the co-teaching all of my field placement was co-teaching experience so I was not fully more self-contained I didn't get any of that, but inclusion, I mean that's all what my field experience placement was so I would say that we did a good job, or they did a good job.

SM1: Yeah, I think that's something they did well. I was able to do both so in my student teaching, I was set up with someone who cotaught in CITY so I was in a classroom for literally a whole semester with someone who was co-teaching with math and language arts.

SE4: Yeah, I would say this is something that they did pretty well at. We would constantly go over you know different co-teaching models. They got us, you know, experience at least like observing a like a mentor program. Maybe it's not a full day, but like an hour a day getting some experience seeing co-teaching, so I definitely had a pretty good idea of what it was getting the job and I actually feel

like now it's frustrating because we don't really follow the best co-teaching model. But I think, when it comes to college, they prepared us well for like what co-teaching is.

STM1: We, in our placements again, did a variety of classrooms so that we could ultimately see like where our passions fell, what we felt would be our strengths. So, in some of my placements, I was immersed in a co-taught classroom, in a small group, pull out/co-taught types of settings and then also just like a resource self-contained classroom. So, I do think I was prepared very well, understood their responsibilities of those areas which ultimately led me to choose that I wanted to be in a self-contained classroom.

SH4: I think they did a really good job at making sure that when we did our placements, because my certificate was mild to moderate and moderate to intensive, they made sure we had a placement that we were in some type of co-teaching situation. I think it was my collaborations class that we really like broke down all the co-teaching models and strategies.

Of the 15 participants, three participants emerged from their preservice programs somewhat prepared to co-teach. Statements from these individuals included:

SP1: They did an okay job. I know we had to co-teach and they definitely put a big emphasis and we had to go through all the motions. I just also think I'm in a different situation where not many people have to decide kind of if they're going in the 50/50 or they’re going into general education so that part is more challenging for me because it wasn't really explained well at college.

SH3: I feel like I got most of that from my field experiences just because I got to

do unit work and in inclusive, but we didn't really talk about strategies or how like those kinds of students would differ when we were in the classroom at Lake Erie. I just got to experience it first-hand.

SM2: So, I guess I did see an inclusion kind of setting probably sophomore year. I want to say, sorry, I got to do an observation and write a paper about that. I mean they definitely said, you know, least restrictive environment is best. So, wherever you can, you know, put your students where they should go. I think it's hard just now even trying to get kids from resource room into co-taught, but gen. ed. is very difficult to do.

Of the 15 participants, five reported that they were unprepared to co-teach. Their statements are as follows:

SH2: I kind of felt like we were learning about moderate to severe instead which didn't really fit my need because I knew I wanted to teach high school. I knew I wanted to do co-taught hence going for my English degree.

SE2: You know, I can speak only from a moderate to intensive perspective, and I don't think they did a lot of information or courses on that, pushing in.

STE1: Co-teaching I wish I would have gotten more instruction and like strategies to use while co-teaching and like how it can be done because it can look so different in different grades and environments.

SP2: So that's kind of something I feel like my program could have prepared us a little bit more for definitely.

SE5: Oh gosh. They didn't. I'm sorry.

Collaboration is an essential piece of special education due to the multiple needs of students with disabilities. Since a minimal number of candidates described themselves as poorly prepared to craft special education document, it would stand to reason that a minimal focus has also been placed on collaboration with the other professionals who might contribute or provide the services present in these documents.

Previous research has shown a lack of instruction for both special education and general education teachers (Allday et al, 2013, Chitiyo & Brinda, 2018, Prather-Jones, 2011). Specifically, Chitiyo and Brinda (2018) reported that only 44% of preservice special and general education teachers receive any type of training in co-teaching. With 66% of teachers in this study reporting some level of preparedness for co-teaching, it may suggest that universities are improving in this area.

Again, another reason for the aforementioned lack of focus could be the dual licensure programs. Programs who put a minimal focus on the special education aspects of these students' preparation may fail to provide this instruction due to the overall lack of focus on special education.

Lastly, an argument could be made that not all special educators collaborate with paraprofessionals or related service providers, or if they do it is not frequent for some populations of special education students. Teacher education preparation programs cannot be infinitely long, and this may be an area that programs have failed to focus on in an attempt to concentrate on more pressing instruction.

The fact that collaboration with parents was addressed by two thirds of the candidates may indicate that teacher education programs are making an effort to address this area due to its clear importance. Previous research indicates that collaboration with

parents is an area not effectively addressed by preservice programming (Accardo et al., 2020; Beck & Desutter, 2020; Brownell et al., 2005; Strassfield, 2019). The level of preparation described by the candidates may indicate that teacher education programs have since recognized the need to provide instruction in this area and are making an effort to improve previous shortcomings.

The reason that little more than half of the participants mentioned this may be because there was not a specific question related to this topic. It was the hope of the researcher that this theme would emerge in other questions. Two of the programs described in the participants' answers offered preservice teachers the opportunity to work in programs that allowed them to work directly with families in need. These programs allowed opportunities that provide a great deal of hands-on experience that covered a large portion of the CEC standards (2020). Due to the effectiveness of such programs, this is a strategy that could aid other universities in preparing their students. Another candidate mentioned that they had a class specifically related to collaborating with parents. This again may be another strategy that universities should utilize.

Regarding the level of preparation described by the candidates to co-teach, the positive responses may indicate that universities have recognized the need to provide instruction in this area as many school districts have increased their use of co-teaching models within their classrooms. Additionally, the increase in co-teaching in public schools may provide for more robust experiences in student teaching placements. Student teaching is an experience heavily relied upon by universities to prepare their students.

Category 3: Differentiation

While the word “differentiation” is not specifically mentioned in the CEC standards (2020), this aspect can be inferred throughout all of the instructional aspects of the standards as addressing the specific needs of students is frequently addressed. Researchers have shown that exceptional instructional skills, including differentiation, are essential knowledge competencies for teachers (Brownell, 2010; Kurth, 2021; Woolf, 2019). Eight of the 15 participants specifically mentioned differentiation in their responses. In 2013, Allday et al. found that universities are offering a minimal number of classes on differentiation or co-teaching.

Of the nine participants that specifically utilized the term “differentiation” in their responses, six described themselves as well prepared in this area. While this is a small sample size, the answers given by the participants contradict previous research on this topic (Allday et al., 2013). The candidates’ statements are as follows:

> **SH1:** And you know I feel like they really went hard at the UDL and multiple means of learning, representations of that differentiation.
>
> **SE2:** I would say for core content academics we did receive, I can't remember that obviously the names of all my classes, but it was some sort of differentiation of math and differentiation of reading and stuff like that. So, I think that they showed us a lot more of like how to differentiate and how to tier your work and they would have us do a lot of make and takes. You would you know do the activity right there and make something that you could bring back to your field experience and try out which I really did like. I liked being able to have real resources and you know the teacher almost modeling how we would teach the kids how to make it and then we get to then use it later so that was really

awesome. We had used one ETR to like apply it and kind of use information from it to write a differentiated lesson plan.

SE3: In our lessons plans we had to group students based off of assessments that we were given and we also had to do that for assignments like we were given different assessments and then we were told to differentiate the groups and what kind of assignments would you do with those different groups and like based on the assessment that you were given.

STE1: I felt like I was familiar with like the inclusion aspect and how best to meet the needs and make sure my kids in their least restrictive environment. I thought very well and I think it helps that I'm dual licensure so that gen. ed. Aspect. I took a lot of classes and math, and you know social studies and science and ELA and all of that. So, I felt like I got a lot of instruction of like what to expect at different grade levels and ways to differentiate that instruction of like what to expect at different grade levels and ways to differentiate that instruction to make sure I'm meeting all the kids needs and then I got to practice teaching it a lot with gen. ed. licensure, so I felt really good about that.

SP2: There was only one course and it really focused on more like, you know providing like certain you know, accommodations, modifications, providing interventions for the student with disabilities. For special education they spent a fair amount of time on that about how like you know modify, we had to modify like your instruction so it meets like the needs of all students.

SH4: I feel like they did a pretty good job because a lot of my classes, like we had the intro to special ed. classes where we learned about the different

categories, and then because they had us do so many different placements. I got to work with a very wide range of students, so I got a lot of hands-on work to learn about the different ways to help different kids. The differentiation piece that like gives students the opportunity to show what they know, not how they know it, just they can actually give you like this is the information that I know.

Of the nine candidates that specifically mentioned differentiation in their responses, two indicated that they were somewhat prepared in this area. Their statements are as follow:

SH2: We did discuss you know how to co-teach, different methods of co-teaching, methods and how provide accommodations and differentiation in the classroom, but it was not as detailed as the resource room. Another thing that probably just flew over my head at the time, but it wasn't pressing from our professor. She had us record lessons and then kind of break them down separately and discuss, write about it, talk about it and why the data we were looking for was needed and how we can use that data to kind of gear where students are at. That really helped in our differentiation.

SE1: I mean my program they always had like we had to write these million page lesson plans and there was always like a section to like add in like a diverse or like differentiate section and like they really like homed in on that. They never really like was like, this is a great example of it or that I can remember.

Only one candidate indicated that they were unprepared for differentiating lessons. This candidate stated that:

SE5: They just gave us like a lot of historical background, not so much how to

work with the students per se. I guess it was already implied that you knew what to do.

Differentiation is an essential skill necessary for success as a special educator (Brownell, 2010; Kurth, 2021; Woolf, 2019). The fact that only one participant indicated that they were unprepared for providing differentiation in their instruction indicates that this is an area that is being well-covered by preservice programs. The fact that so few candidates mentioned differentiation may be attributed to the fact that again the researcher did not ask a question specific to this topic. He again assumed that it would be mentioned throughout responses as there were multiple questions on the survey related to instructional strategies. Since preparation for research-based instructional strategies was specifically asked about in a question, it may be inferred that candidates did not specifically mention this word due to the fact that differentiation can be included in this area. It could also be attributed to a lack of knowledge or understanding of this topic's importance. This cannot be assumed, however, as the majority of those who did respond described themselves as well prepared. These statements again contradict previous research which states that teachers are insufficiently trained in this area (Allday et al., 2013).

Category 4: Diversity

The CEC standards (2020) require that candidates not only are sensitive to the individual needs to students as a result of their disabilities but are also cognizant and responsive to unique needs and perspectives present my students' cultural and socioeconomic backgrounds. The second component of the first CEC standard states that "candidates advocate for improved outcomes for individuals with exceptionalities and

their families while addressing the unique needs of those with diverse social, cultural, and linguistic backgrounds" (CEC, 2020, p. 1). In addition, the second component of the second CEC standard states that "candidates use their knowledge and understanding of diverse factors that influence development and learning, including differences related to families, languages, cultures, and communities, and individual differences, including exceptionalities, to plan and implement learning experiences and environments" (CEC, 2020, p. 2). The acquisition of the knowledge and skills that allow educators to work with students of all walks of life is essential in aiding students towards positive outcomes (Strassfield 2019). Strassfield (2019) suggested that candidates should receive specific classes solely dedicated to understanding diversity.

All 15 of the study's participants addressed their respective universities' levels of preparation for addressing the needs of students from diverse backgrounds. Eight participants described themselves as well-prepared by their programs in this area. Comments included:

> **SH1:** So we, I forgot what the class was called, it was family studies, but we went to a lot of different places in the community around CITY such as the Salvation Army a couple group homes for single moms that were homeless, we went to another homeless shelter, and then we learned how to incorporate you know different backgrounds, family types, all of that into literacy which was super nice and I feel is super helpful now. Just kind of understanding especially at a teen level kind of you know maybe why they're acting that way or you know have a little more compassion you know seeing those types of things. And there were a couple tutoring opportunities that they placed us in within that school district and

there was one too where the kids came after school, and it was that, I think it was the Salvation Army or one of the shelters came and got extra support afterschool so that was super great to learn about and kind of experience.

SH2: I would say they did a fairly good job. I was originally dual licensure with ELA 8-12 and then also intervention specialist K-12. So, I had to do maybe over 400 hours of field teaching until I reached my student teaching. So, I had a lot of experiences. I went all over COUNTY, several different school districts. I started at Perry for intervention specialist with 1st and 2nd graders and then after that experience I went to SCHOOL. Yeah, it was a very good experience. I actually learned a lot there. That was 6-12. I then went into my ELA section where I worked at SCHOOL with 12th graders and then I went to CITY, back to middle school for 7th and 8th grade. So yeah, I bounced around. I got to see all different grade levels and then student teaching. So, I had several hours put in which really helped me out a lot because I feel like the experiential learning piece was more of what I needed.

SE3: I would say they did a pretty decent job. When we did our fields, they made sure we went to different types of schools and things like that. We have a lot of extracurricular programs as well that we were involved with my classes and stuff like that, so I would say that they did a pretty good job of showing us and explaining to us the different cultures and social economic statuses of students.

SM1: Yeah, I think they prepared me really well. They did have courses at UNIVERSITY that were strictly about diversity. I did, you know, research projects, we even did a project where we had to go out into different communities

and just explore them. So, I think, yeah, I mean I think they prepared us well just having literally courses on diversity. So that's all we talked about for a whole semester. So yeah, pretty well.

STE1: I would say pretty well. UNIVERSITY got me in different classrooms very early and it was a lot of diverse settings, so I feel like I got exposure to a lot of different areas and places and all that kind of stuff and we also had a course or two about, you know, like just kids from diverse backgrounds and how that can affect them in the classroom so I felt decently prepared for that aspect of it.

SP2: I think they prepared me fairly well. It was definitely a focus of our coursework.

STM1: We had to take, I think, it was two or three courses specifically built around diversity and in addition to that, all of my placements throughout my time, whether it was a regular field placement or student teaching were in different settings. So I did get to experience some of the inner-city CITY urban schools at all grade levels as well as suburban, rural, and then we got to kind of pick like where we wanted to student teach like what type of area.

SH4: I think they did a really great job. I had four total placements while I was at UNIVERSITY, so I was at four different schools. The one school I taught at was a really small farm town school. The whole district was like 1,200 kids, and it was all in one building, and then I also student taught at two different CITY schools, so I really got the full range while I was there. So, I had like a cultural diversity class that I took. It was like a cultural diversity and education and the class that I

took, the previous particular professor I had taught it a little different than some of my friends. It was more historical-based work.

Four of the study's participants indicated that they were somewhat prepared for addressing diversity based upon their preservice training. Evidential statements include:

SP1: I was online for COVID so my diverse experience was an online simulator course so that very much didn't prepare me, but the teachers did prepare me in the aspect of making sure I could incorporate different cultures and religions and backgrounds. They definitely put an importance on making sure all of our lesson plans were diverse.

SH3: They prepared me well with the field experience, not so much classwork I feel like. So, I did my field experience in a very wealthy district and then a very poor district. So, I got to see a lot of different aspects from there, but their classwork it's basically just modules that everyone went through. There wasn't much diversity in them.

SM2: So, I definitely remember there being a diversity course that I took. It was only, you know, one semester. But we had a field experience where we were each given a different city in Ohio that we had to research, kind of like their background, you know, what their school district was like, how many people lived there, some demographical stuff. And I remember that class, that class was pretty good. Whether or not it prepared me, I don't think it did the best job, but I wouldn't say it did a bad job.

SE4: I would say they gave us a good understanding of like what diversity is and where we might see it and how it affects students. When it comes to maybe how

to teach them, I would say that maybe that was a little lacking, just the exposure and actual like experience of scenarios or situations.

Only three participants reported that were unprepared for working with students from diverse backgrounds. The participants stated the following:

SE1: They never really like was like, this is a great example of it or that I can remember. I also know I had to take like diversity classes in education and it was a disaster. So, feel like it wasn't like helpful in that sense and I'm not sure where it's gone since then.

SE2: You know I'm really thinking, and I don't really feel like they did a lot with the diversity and cultural aspect. But I don't necessarily feel that they really kind of looked at the standards and really like some real practices and strategies that you could use in your classroom to help you when you do have those large cultural differences in your classroom.

SE5: This particular program, it didn't. They just gave us a like a lot of historical background, not so much how to work with the students per se.

With only three participants indicating that they were unprepared in this area, this appears to be a topic well-covered by most universities. This is encouraging considering the recurring focus of effectively addressing diversity within the CEC standards (2020). Many participants indicated that they took classes specific to the topic of diversity within their programs. This confirmed Strassfield's (2010) suggestion that this is best practice for teacher education preparation programs. Others indicated that their universities required that they do field experiences in districts with very different demographics. These field experiences provided candidates with firsthand experiences in working with

students with diverse cultural and socioeconomic backgrounds. Candidates described these experiences as significant in helping them to grow as special educators and better understand the needs of students from different backgrounds. These responses indicated that these experiences that universities are providing are effective in delivering quality preparation in this essential area.

Two of the three participants who expressed a lack of preparation in the area of diversity consistently reiterated the overall poor quality of their programs on a whole. This appears to indicate that these experiences were anomalies specific to these participants, or these universities should reexamine the entire structure and quality of the instruction that they are offering their preservice students.

Category 5: Content Area Knowledge

Component 3.1 of the CEC standards (2020), states that **"**candidates apply their understanding of academic subject matter content of the general curriculum to inform their programmatic and instructional decisions for individuals with exceptionalities" (CEC, 2020, p. 2). In addition, component 3.2 states:

> candidates augment the general education curriculum to address skills and strategies that students with disabilities need to access the core curriculum and function successfully within a variety of contexts as well as the continuum of placement options to assure specially designed instruction is developed and implemented to achieve mastery of curricular standards and individualized goals and objectives. (CEC, 2020, p. 2)

To effectively educate students, special education teachers must be knowledgeable about their content areas (CEC, 2020). Many special education licenses in the state of Ohio

span kindergarten through 12th grade. This large range means that special educators must be knowledgeable about a variety of content areas at virtually all grade levels. Subcategories for this area included the four-core subject areas; reading/language arts, math, social studies, and science. Fourteen of the 15 participants described their level of content area knowledge as provided by their preservice programs, but not all participants referenced the four subject areas. Others made general statements about their overall level of content area preparation.

Category 5a: Reading/Language Arts

In special education preparation, literacy is typically a large and important component. Intervention specialists are often called upon to aid students who struggle with their reading decoding, reading comprehension, and writing expression. These skills are specifically assessed by school psychologists when determining whether a child possesses a disability. Of the 14 participants that specifically spoke to reading and language arts preparation, six reported that they were well prepared in this content area. These participants cited specific classes dedicated to phonics and literacy instruction as their main mode of skill acquisition. This status of being well prepared is evidence by the following statements:

> **SE1:** I took about a million reading classes. Every year I had a reading class of some sort, phonics, reading. They talked about new ways; they talked about old ways.
>
> **SE2:** I would say for my core content academics we did receive, I can't remember obviously the names of all my classes, but it was some sort of differentiation of math and differentiation of reading and stuff like that. So, I think that they showed

us a lot more of like how to differentiate and how to tier your work and they would have us do a lot of make and takes. You would you know do the activity right there and make something that you could bring back to your field experience and try out which I really did like.

SM2: So this part I actually think, especially the research-based, I think we did great on. I remember there was a whole section that we did on just phonics and phonological awareness. That was a whole class just teaching kids how to read. I think that was absolutely amazing. But yeah, I would say reading was probably the best that they did.

SE4: I would say, like, very well and I don't know if it's different for me in this case because I'm also like gen. ed. certified and have like the four or five endorsements. So especially like for those four or five classes, we focused heavily on content. Yeah, I feel like they did a nice job going through standards, specific grade levels, content.

STE1: I thought very well, and I think it helps that I'm dual licensure so that gen. ed. aspect. I took a lot of classes in math, and you know social studies and science and ELA and all of that. So, I felt like I got a lot of instruction of like what to expect at different grade levels and ways to differentiate that instruction of like what to expect at different grade levels and ways to differentiate that instruction to make sure I'm meeting all the kids needs and then I got to practice teaching it a lot with gen. ed. licensure, so I felt really good about that. Again, very good with like getting me prepared to teach the content and how differentiate it and meet my students' needs. So, I think those areas they did really, really well in.

STM1: So, I would say that it's kind of mixed. I felt very well prepared for ELA and math, not as prepared for social studies and science.

Two of the participants described themselves in a way that indicated that they were somewhat prepared. These special educators made the following statements:

SE3: But for phonics and ELA, I think they did a good job. I worked, I guess I may have told you this in the beginning, I worked at a high school for three weeks when I got my intervention specialist license, and I was in like a lot of co-teaching, but I had a self-contained English class, and I was completely lost. Like, I had no idea what I was doing, so I really relied on the people around me to help. But I would have had no idea how to even, like, do anything without the people around me.

SH4: So, I would say in terms of content on language arts and reading, we hit really hard. The one thing that I wish would have been a little different is UNIVERSITY offered like an elementary reading, a middle, and a high school reading and I took elementary reading because that was the one that was available. They didn't always offer the other ones for special educators all the time. So, like my reading course wasn't really dedicated towards high school which is what I wanted to teach, but I did a lot of reading intervention so I felt very prepared in that aspect, but not necessarily like high school content standards.

Six participants described their preservice program in a way that indicated that they were unprepared for reading and language arts instruction. The participants made the following statements:

SH1: But I do feel like I taught myself a lot about the content that I was teaching. In college it was very phonics based and you know elementary reading and I remember making like a reading guide. I never even touched algebra, or you know writing a five-paragraph essay like do every single day now. Again, I think it was super elementary based and I wish that colleges would kind of show special ed. teachers what it's like K through 12 like our license is supposed to be in. And just kind of like going back to that is since I was a dual major, I don't know if that's why I felt like it was mostly elementary based. I feel like you know in special ed. we can teach K-12. I don't know what your experience was in college I felt like it was super elementary based.

SH2: They didn't have you know how to co-teach math and really focus on those standards or co-teach English and focus on those standards. Yeah, the majority of it came from my MBA. Even in the English portions like learning to write and stuff like that.

SH3: I feel like I learned nothing that had to do with high school. Most of it was geared towards elementary school, but I do have dual certification and early childhood too so that might be why, but I did not learn anything about high school at all, none of the content area knowledge.

SM1: And then language arts, I took a language arts class my freshman year. That's about it so really nothing.

SP2: As far as that course (curriculum course), like if I was somebody who would not had that background experience with general education curriculum, like from

my bachelor's degree, I felt like it would have been kind of lacking. As far as my special education program, I feel that they could have prepared us more for that.

SE5: They didn’t, and I feel bad because I feel like I'm just putting them down. I feel like a lot of the coursework that we had was implied that you already had this background knowledge, that you already had experience in the classroom, and that you knew that. They didn't teach you any of that and it wasn't fair.

Category 5b: Math

Math instruction is another essential area of content knowledge for special educators. As with reading and writing, math computation and problem-solving are additional areas where students can qualify for specialized instruction. Fourteen of the fifteen 15 participants addressed their preparation for math content instruction. Of these 14 five made statements that identified themselves as well prepared. These participants indicated that they gained their knowledge through direct classroom instruction within their preservice classes. Their statements regarding this area are as follows:

SE2: I would say for my core content academics we did receive, I can't remember obviously the names of all my classes, but it was some sort of differentiation of math and differentiation of reading and stuff like that. So, I think that they showed us a lot more of like how to differentiate and how to tier your work and they would have us do a lot of make and takes. You would you know do the activity right there and make something that you could bring back to your field experience and try out which I really did like.

SM2: So, this part I actually think, especially the research based, I think we did great on. As for the more specific content areas, so in my graduating class there

were only three people going into special ed. so they kind of lumped us in with the middle school, so we learned more kind of like middle school topics. So, like the math wasn't necessarily like 1 + 1, but it was a little more advanced than that and then science was the same way, yes, social studies, yeah.

SE4: I would say, like, very well and I don't know if it's different for me in this case because I'm also like gen. ed. certified and have like the four or five endorsements. So especially like for those four or five classes, we focused heavily on content. Yeah, I feel like they did a nice job going through standards, specific grade levels, content.

STE1: I thought very well, and I think it helps that I'm dual licensure so that gen. ed. aspect. I took a lot of classes in math, and you know social studies and science and ELA and all of that. So, I felt like I got a lot of instruction of like what to expect at different grade levels and ways to differentiate that instruction of like what to expect at different grade levels and ways to differentiate that instruction to make sure I'm meeting all the kids needs and then I got to practice teaching it a lot with gen. ed. licensure, so I felt really good about that. Again, very good with like getting me prepared to teach the content and how differentiate it and meet my students' needs. So, I think those areas they did really, really well in.

STM1: So, I would say that it's kind of mixed. I felt very well prepared for ELA and math, not as prepared for social studies and science.

One participant indicated that they were somewhat prepared for content area math instruction. That individual made the following statement:

SH4: Math was hit a little bit, had to take a couple classes there.

Of the 14 participants, eight indicated that they were unprepared for math instruction. These teachers stated the following:

> **SH1:** But I do feel like I taught myself a lot about the content that I was teaching. In college it was very phonics based and you know elementary reading and I remember making like a reading guide. I never even touched algebra, or you know writing a five-paragraph essay like do every single day now. Again, I think it was super elementary based and I wish that colleges would kind of show special ed. teachers what it's like K through 12 like our license is supposed to be in.
>
> **SH2:** They didn't really have anything for math which I'm co-teaching now. They didn't have you know how to co-teach math and really focus on those standards or co-teach English and focus on those standards. And then on the classroom side, primarily all four years that I was at UNIVERSITYI wasn't doing my general ed. Like my general classes like math, social studies, English. I was more content specific because I had already graduated from UNIVERSITY with an Associate's. I got my MBA from UNIVERSITY right after I graduated. That's kind of why I had a little delay into teaching. I'm only two years in. So, for my Data Science, I'm using a lot of what I learned in my MBA from UNIVERSITY, but I didn't learn any of those skills in my undergrad. If I was to go teach Data Science to a bunch of seniors and I didn't have an MBA, I would honestly of had no clue how to work Excel spreadsheets, how to teach different functions, and how to set up algebraic problems within those spreadsheets to really pull to get high quality data out of students and how they can interpret data. UNIVERSITY was a great

experience and like all around education support for me, but in terms of the education department, it wasn't as knowledgeable as I had hoped.

SE1: I couldn't really tell you anything I really like got out of that. But also, that class was really like middle school, high school driven. I felt it really wasn't for younger kids and I'm fourth grade now, so it's like difficult.

SH3: I feel like I learned nothing that had to do with high school. Most of it was geared towards elementary school, but I do have dual certification and early childhood too so that might be why, but I did not learn anything about high school at all, none of the content area knowledge.

SE3: I'm actually like a special case because I didn't have to do the math credit that everybody else has to take so I'm not sure how that one went, and it possibly could have been helpful for me to understand it a little bit more and understanding the foundations of the mathematics.

SM1: And then content, like in terms of math, so I took two math classes, and they were both elementary and middle childhood, but then my degree's K to 12, so I never learned like high school math you know what I mean? So, there was never a class on algebra or like any higher level. It ended at like 5th grade so for the degree to be K to 12, I don't really understand how I'm certified in that and took no courses on it, Like I could have gotten the job in the high school math inclusion class and had no education besides, like when I was in high school. I mean, that's literally what I got.

SP2: So, we did have to take an inclusive early childhood curriculum class. As far as that course, like if I was somebody who would not had that background

experience with general education curriculum, like from my bachelor's degree, I felt like it would have been kind of lacking. As far as my special education program, I feel that they could have prepared us more for that.

SE5: They didn't, and I feel bad because I feel like I'm just putting them down. I feel like a lot of the coursework that we had was implied that you already had this background knowledge, that you already had experience in the classroom, and that you knew that. They didn't teach you any of that and it wasn't fair.

Category 5c: Science and Social Studies

While science and social studies are not a subject where students can be identified with a specific learning disability, many intervention specialists are called upon to teach the content area within resource rooms, self-contained units, academic assistance and tutoring periods, or co-teaching/inclusive environments. For these reasons, this content area knowledge may be a necessity for special educators. Twelve of the 15 participants spoke to their preparation in science and social studies. Across interviews participants tended to address science and social studies together or make general statements about all content areas when addressing preparation.

Of the 12 participants, three indicated that they were well prepared for content area instruction in science and social studies. Their statements are as follows:

SM2: So, this part I actually think, especially the research based, I think we did great on. As for the more specific content areas, so in my graduating class there were only three people going into special ed. so they kind of lumped us in with the middle school, so we learned more kind of like middle school topics. So, like

the math wasn't necessarily like 1 + 1, but it was a little more advanced than that and then science was the same way, yes, social studies, yeah.

SE4: I would say, like, very well and I don't know if it's different for me in this case because I'm also like gen. ed. certified and have like the four or five endorsements. So especially like for those four or five classes, we focused heavily on content. Yeah, I feel like they did a nice job going through standards, specific grade levels, content.

STE1: I thought very well, and I think it helps that I'm dual licensure so that gen. ed. aspect. I took a lot of classes in math, and you know social studies and science and ELA and all of that. So, I felt like I got a lot of instruction of like what to expect at different grade levels and ways to differentiate that instruction of like what to expect at different grade levels and ways to differentiate that instruction to make sure I'm meeting all the kids needs and then I got to practice teaching it a lot with gen. ed. licensure, so I felt really good about that. Again, very good with like getting me prepared to teach the content and how differentiate it and meet my students' needs. So, I think those areas they did really, really well in.

Out of the 12 participants, nine of them indicated that they were not well prepared in the content areas of science and social studies. This conclusion is evidenced by the following statements:

SH1: But I do feel like I taught myself a lot about the content that I was teaching. In college it was very phonics based and you know elementary reading and I remember making like a reading guide. I never even touched algebra, or you know writing a five-paragraph essay like do every single day now. Again, I think

it was super elementary based and I wish that colleges would kind of show special ed. teachers what it's like K through 12 like our license is supposed to be in.

SH2: And then on the classroom side, primarily all four years that I was at UNIVERSITY I wasn't doing my general ed. Like my general classes like math, social studies, English. I was more content specific because I had already graduated from UNIVERSITY with an Associate's.

SE1: Science, I got nothing. Social studies, you got nothing, like nothing to help me with that content area and I feel like now that I'm actually like teaching and in these classrooms, I'm learning as the kids are learning.

SH3: I feel like I learned nothing that had to do with high school. Most of it was geared towards elementary school, but I do have dual certification and early childhood too so that might be why, but I did not learn anything about high school at all, none of the content area knowledge.

SM1: So, in terms of science, I took one science class, I think my senior year, maybe it was my junior year. And then history was part of our curriculum, so I did take history classes for social studies, but wasn't really like middle school social studies. It was like world history.

SP2: As far as that course, like if I was somebody who would not had that background experience with general education curriculum, like from my bachelor's degree, I felt like it would have been kind of lacking. As far as my special education program, I feel that they could have prepared us more for that.

STM1: So, I would say that it's kind of mixed. I felt very well prepared for ELA and math, not as prepared for social studies and science.

SE5: They didn’t, and I feel bad because I feel like I'm just putting them down. I feel like a lot of the coursework that we had was implied that you already had this background knowledge, that you already had experience in the classroom, and that you knew that. They didn't teach you any of that and it wasn't fair.

SH4: I really didn't learn any content for science and social studies.

Throughout many of the participants’ responses, multiple themes arose. Many candidates indicated that the focus of content area instruction within their program was reading. This is sensible considering that reading is an area in which students can be diagnosed with specific learning disabilities. Other content subjects such as math, social studies, and science appear to have taken a backseat to reading instruction. For those candidates that were unprepared for content area instruction in reading, multiple participants indicated that they received instruction in how to teach reading fluency or phonics but did not receive any specific instruction in the Ohio content standards in English/Language Arts. This focus on standards in language arts should go hand-in-hand with teaching reading conventions as a special educator is responsible for not only overcoming deficits but providing instruction that meets the standards being taught to the students’ non-disabled peers.

Another recurring theme was the limitations of dual licensure programs. Multiple participants who received their training in this type of program indicated that their program provided them with both the licensure necessary for early elementary students in general education settings and special education students from kindergarten to 12th grade. While this practice may make it easier for prospective educators to be employable, the depth and breadth of the knowledge necessary for two very different licenses may

leave holes in the content necessary to effectively perform in both positions. Multiple participants indicated that they felt unprepared to sufficiently deliver content area instruction because their curricular focus in school was on early childhood content and their eventual employment placed them in middle or high schools. This can create a significant challenge for special educators. As one participant stated, “I'm learning as the kids are learning.” This negates the positional necessity that teachers are experts in their content.

While science and social studies are not areas in which students can be diagnosed with disabilities, knowledge in this area is important as many special educators are asked to offer these classes within resource room or co-taught settings. It is possible that universities have shown an unwillingness to require classes in this area due to the lack of diagnoses in these areas, instead providing a more laser-like focus on reading skills.

Category 6: Knowledge of the Effects of Disability

Possessing knowledge of the effects of different disabilities is essential for special educators as it is a necessary component for fulfilling multiple elements of the CEC standards (2020). This understanding is necessary for being able to effectively assess, instruct, place, and differentiate for students with exceptionalities as these decisions are largely based upon how their student’s disability affects their learning needs (CEC, 2020). The component 2.1 of the CEC standard states that “candidates apply understanding of human growth and development to create developmentally appropriate and meaningful learning experiences that address individualized strengths and needs of students with exceptionalities” (CEC, 2020, p. 1). In addition, the second component of the third CEC standard states:

> candidates augment the general education curriculum to address skills and strategies that students with disabilities need to access the core curriculum and function successfully within a variety of contexts as well as the continuum of placement options to assure specially designed instruction is developed and implemented to achieve mastery of curricular standards and individualized goals and objectives. (CEC, 2020, p. 2)

While all students are unique, there is need for special educators to possess a general understanding of how different disabilities affect their students (Brownell et al., 2010; Woolf, 2019). The acquisition of this type of knowledge requires that preservice programs provide direct instruction in the potential characteristics and needs of the students that prospective special educators might encounter.

Fourteen of the 15 interview participants referred to their preparation regarding knowledge of the effects of disability. Seven of the 14 participants indicated that they were well prepared in this area. Their statements are as follows:

> **SE2:** Yes, I actually think UNIVERSITY did a really amazing job with this. We took a class I can't remember what course it was, but it was a part of our, you know, mandatory courses for either. I'm moderate to intensive, but it was all mild to intensive special ed. students. We're receiving I believe it was like some sort of like demographics of children with disabilities or the characteristics of children with disabilities, quite literally how you phrased the question.
>
> **SE3:** So for one of my classes, we had to make portfolios of the 13 categories of different like disabilities. So, we had to research each one, give strategies that could help each one like the common characteristics and things like that. So, it

was a really good opportunity and then also we had to find community people that would help with those different categories of disabilities. So that was a good way to like kind of reach out to this community and see it in that light of what their opportunities are. So, I would say that they did a pretty good job of showing us like the commonalities and then also just the different categories and understanding each one and how they are so different.

SM1: Like they did the best they could. I think they got us out in the field as much as they possibly could. So, like I student taught for a whole semester in DISTRICT so I got to hands on like see everything that goes down in schools. I'm out since my freshmen year in schools like DISTRICT. I got to go to a school in DISTRICT, SCHOOL. I taught online school in DISTRICT. I got to see a wide range of students that are special ed. ranging from kids with, you know, severe autism and kids with just ADHD, kids with just behavior, OHI, nothing really that I didn't see before getting into the field, so I think that really helped me.

SM2: So, they definitely did a lot of general stuff. You know, it was generally you see these kinds of things, generally you see these things and as I got further along into my college career, you know, we started to get a little more specific. So, I feel like that kind of a gave me a goods heads up of what to expect, especially behaviorally and yeah some academically.

STE1: Again, decently well. Like, I feel like the first couple intro courses kind of talked about like the basics of each disability and kind of like how it can present itself, but I also feel like that’s more something I learned in my field experiences and just seeing it in action and that was more of like a hands-on thing for me.

STM1: I had several courses that just pretty much highlighted like the general, not necessarily stereotypes, but the common things that you see about amongst disabilities. So, I do feel like I was pretty well prepared in this area.

SH4: I feel like they did a pretty good job because a lot of my classes, like we had the intro to special ed. classes where we learned about the different categories, and then because they had us do so many different placements, I got to work with a very wide range of students, so I got a lot of hands-on work to learn about the different ways to help different kids.

Of the 14 participants who spoke to this category, five were somewhat prepared in this area. This is evidenced by the following statements:

SH1: I think we learned about a bunch of them, but not very in-depth. But I do remember kind of a basic intro to exceptionalities class. I feel like I'm kind of in the middle with that one.

SH2: Everyone who was in the education department had to take an intro to exceptional needs class where we kind of touched base on 13 different disabilities. Then we had to do a class when you got into, I think it was like Intro to Special Education where we got to work with a select group of individuals. Like getting into the field and seeing it was a lot more beneficial for me than reading it out of a textbook and being like here's appropriate responses, here's different accommodations that I can provide to help this student access curriculum. But I think it was fairly good. If I had other perspectives from different professors, I feel like that would have been more beneficial for me because just learning from the same person who would bring in the same IEP for

every class, I wasn't really looking at more than just one or two disabilities. So, I could have used a little more exposure upon getting into the field.

SE4: Yeah, I feel like when it comes to cognitive and more like the learning disability side, I feel like they prepared us very well for that. More what I feel like we were not prepared for as much when it comes to behaviors like different reinforcement strategies. All in that realm and area like how to talk to students with like that type of language, classroom functioning, different strategies you might use there like you see a lot with like students that have autism, ADHD. So, I feel like academic wise I feel a lot more prepared than handling behaviors and everyday functioning.

SP2: So, I took two classes, kind of taught you know, focused on that. I did take an entire course on autism spectrum disorder theory and diagnosis. So, I did feel pretty prepared to like work with individuals with ASD. As far as the other course I took, I believe it was called Foundations and Early Childhood Services where, you know, it was kind of like reading a textbook about like this is what you know, different, you know this is what different disabilities, you know, that you might come across in your work. These are some characteristics, and these are some implications about how you could work with those individuals, but it was much more like textbook based, so it was a lot of like reading and not a lot of like direct instruction from the professor. So that's kind of how like it was far as like I had one coursework that was very in-depth on like one very specific, you know, disability and that I felt like, you know, because there's a very wide range of people that you work with in the field. So, I thought like that as far as like the

other disabilities that you might come across, I felt like there was a little less, less than intense.

SE5: So, I don't think that it prepared me very well for as far as like the instructional aspects of it, but the group work that we did, the collaboration with the other students that were in the program that prepared me for it.

Of the 14 participants, two were unprepared in this area by their preservice program. Their statements are as follows:

SP1: I would say not very well. For me, the main focus was during my intervention block because I am intervention and gen. ed. So, my block was definitely more focused on what the documents were and what they are, not anything really within the disabilities themselves.

SE1: We got the basics of the basics. There was no class on how to deal with behaviors that arise, or different things that you could see in different children. It just was like very like, “Oh, don't forget dyslexia's a thing,” and we're like, “yeah, we know that, but like, how do you identify it? What do you do to help with it?” It's the next step further.

Evidenced by the fact that only two participants indicated that they were not prepared in this area, knowledge of the effects of disability appears to be a strength for preservice special education programs. Multiple programs gave students the opportunity to explore different disability categories and the symptoms or characteristics that typically accompany them. Some participants indicated that they were thoroughly prepared for some types of disabilities, most commonly autism but were less prepared in other areas. Many participants got to experience working with students with different

types of disabilities through a variety of different types of field experiences. Others stated that their universities required them to create profiles or portfolios of different types of disabilities and how to best instruct students with these difficulties. These appear to be best practices that universities should continue to implement to aid prospective teachers in acquiring this knowledge.

Category 7: Research-based Instructional Strategies

The fifth standard of the CEC's Initial Practice-Based Professional Preparation Standards covers the strategies utilized in effective instruction. While there are six components to this standard, these components cross research categories. In relation to the research-based instructional strategies category, component 5.2 states that, "candidates use effective strategies to promote active student engagement, increase student motivation, increase opportunities to respond, and enhance self-regulation of student learning" (CEC, 2020, p. 3). Component 5.3 states that "candidates use explicit, systematic instruction to teach content, strategies, and skills to make clear what a learner needs to do or think about while learning" (CEC, 2020, p. 3). Utilizing effective instructional strategies that are grounded in best practice research, aids in providing higher levels of student comprehension and achievement (Brownell et al., 2010; Kurth, 2021; Woolf, 2019). Previous research by Scheeler et al. (2016) found that teachers are being poorly prepared for utilizing these types of strategies.

Over the course of the interviews, 12 of the 15 participants spoke of their preparation to use research-based instructional strategies. Of these 12, eight were well-prepared in this area. This conclusion is evidenced by the following statements:

SH1: Instructional strategies, I remember we took a couple classes on that, and I feel like that was really helpful and you know they really went hard at the UDL and multiple means on learning, representations of that, differentiation. So, I feel like I was super prepared for that.

SH2: So, the research-based instructional strategies we learned a lot through those modules, and we had to put together like different lesson plans to kind of gear that.

SP1: Amazing. So, I think UNIVERSITY'S strengths were definitely making sure I knew how to research and use research to back my teaching.

SM1: So just to throw on the good side, research-based instructional strategies, that is what they probably did the best at UNIVERSITY. We were taught about Marzano, all that. Like that stuff was drilled into our brains I'd say for like four years.

SM2: So, this part I actually think, especially the research based, I think we did great on.

SE4: Research-based I would say also very well. I feel like we always were having to make connections so bringing it back to the research and now talking about different theories, researchers, so I thought this was one area that they did a really nice job on.

STM1: Again, it was a lot of ELA and math focused, but we did have a lot of classes specifically talking about instructional strategies.

SH4: Throughout all of my content courses, we were given different tools to use for research-based instructional strategies. We talked about how to find credible

content to use, what is not appropriate to use, and I even had resources I could use right off the bat when I started teaching.

Two participants indicated that they were somewhat prepared in this area. They stated the following:

SH3: I think it prepared me better for using research-based instructional strategies than it did content knowledge. We did learn a couple research-based strategies, but not many. Most of that I learned in my field experiences from teacher I worked with.

SP2: For special education they spent a fair amount of time on that about how like you know modify, we had to modify like your instruction, so it meets like the needs of all students. As far as general education instruction that was kind of more on the back burner.

Two of the participants indicated that they were not prepared for using research-based instructional strategies. These participants stated the following:

SE5: No, they did not.

SE2: For research-based strategies, I would say that they did give us a good amount of instruction on that, however, I don't know if it was explicitly taught as like these are real research-based strategies. Here's the research that was done and this is why it works and why you can use it in the classroom. There were almost more formalities of jumping through hoops, kind of like getting, just getting you to understand that there are all of these technologies or there are all of these resources, but like not as much on how to use them or even these strategies I

would say. So yeah, I do feel like there was a decent amount of instruction on this, but overall, I don't know if I really knew how to apply it to its fullest.

With only two participants indicated that they were unprepared in this area, it can be inferred that this is another area of strength for universities. As the importance of educational research and evidenced-based practices have moved towards the forefront of education in general, it would appear that special education preparation programs have evolved effectively with this shift. The use of data and of strategies shown effective by research, underpins many of the standards present in the CEC preparation standards (2020). This signals that universities are right to continue to make this an area of focus. Multiple participants indicated that their programs made sure that candidates were able to tie their lesson plans back to research-based strategies. Others mentioned that they received direct instruction in some popular research-based frameworks for providing this type of teaching. These included the universal design for learning model (UDL) and the work of Robert Marzano (Marzano et al., 2001). It can be said that the findings of this study have contradicted the findings of Scheeler (2016) and may demonstrate that universities have made gains in these areas.

Category 8: Assessment

The ability to effectively assess students is another critical skill for special educators. It is through this evaluation process that the needs of a student are identified, and a plan can be put into place. Assessment is again one of the integrated knowledge competencies named by researchers as essential for special educators (Brownell et al., 2010; Woolf, 2019). Based on the answers provided by the study's participants as well as the individual components of the CEC's fourth standard, four subcategories related to

assessment emerged. These included administration, assistive technology, accommodations, and data-driven decision making.

Category 8a: Administration

CEC component 4.1 states that "Candidates collaboratively develop, select, administer, analyze, and interpret multiple measures of student learning, behavior, and the classroom environment to evaluate and support classroom and school-based systems of intervention for students with and without exceptionalities" (CEC, 2020, p. 2).

All 15 of the participants spoke to their preparation for administering assessments to their students. Six of the participants felt that they were well-prepared for administering assessments to their students. Their evidential statements are as follows:

> **SE2:** So I had an assistive technology course and a course on assessment and they were both, I think, great courses. So, I'm trying to think a little bit deeper about them. I think that for assessment it was really wonderful because it wasn't just about, you know, here are the state tests and here's how you're going to assess. I feel like for me assessment, when I thought of it going into college, it was like standardized assessments. But they made it very clear you're taking formative assessments every hour. You're taking formative assessments every day. It gave me a really clear explanation of how frequently special educators are assessing and taking that data, which was really wonderful.
>
> **SM1:** Very well. In our lesson plans we had to talk about formative and summative assessments, everything like different ways we're doing that, and the teachers were pretty hard on us about using different kinds of assessments. And in

my student teaching, when they came to evaluate me, I had to show proof of all that.

STE1: So, I feel like decently well within informal and informal assessments. I feel like it was drilled into my brain like these are so many different ways that you can do formal, and these are ways you can do informal.

SP2: The assessment course I'm taking right now covers like four or five very common assessments used in early childhood education, special education and we're getting like a really in depth of how to administer those. So, for that area, I would say it's preparing use fairly well.

STM1: I would say assessment, I feel very well prepared for. There was like an education library where we were able to check out all different types of assessments to practice in our field placements with students. It's also scoring those and all that. So, I did feel very prepared to do that in my current placement.

SH4: So, I would say assessment wise, I had a whole course towards the end of my college career that was dedicated to assessments specifically like just the different kinds that they use during like the ETR process to make sure that like they're getting the property evaluation on students and also assessment that we could use during class. So, assessment wise I felt very prepared and that was awesome.

Of the 15 participants who responded, three indicated that they were somewhat prepared for administering assessments. Their statements are as follows:

SH1: I do remember, you know, giving at my tutoring class that I took, again this was kind of like a gen. ed. class that the elementary school kids had to take, but I

remember giving them like fluency tests and stuff like that, but nothing like the WISC or a KTEA or filling out a Connor's or anything like that like I give. I fill out a Connor's and a BASC out on the daily, but I don't really ever remember doing that in college.

SP1: Hit or miss. Definitely did a lot with formative and summative assessment, but I really wish that UNIVERSITY would dive deeper in than just summative and formative and would really dive into Dibbels and MAP and all that stuff.

SM2: So we definitely always talked about formative and summative assessments. I will say UNIVERSITY definitely didn't have a whole lot of special ed. courses in the sense that we were kind of lumped in with a lot of the gen. ed. teachers, so like, there was a special ed. 101 and then, you know we just kind of learned about assessments and stuff from like a teaching class.

Of the 15 novice special educators, six indicated that they were not prepared for administering assessments. Their statements included:

SH2: We had to put together different assessments like technologies on standardized tests like what we would use for what students. To be honest going into education and state testing I was like 'this is so foreign to me'. It was one specific course that was on like standardized assessments. I forget the name of the course, but when I got into my first year teaching last year and we did state testing I had to do state testing and gifted testing, monitoring and providing accommodations to my students. I don't think I got properly trained in college.

SE1: They didn't really talk about giving assessments necessarily like not over prompting. I feel like now that I'm in the field, I hear so much about prompting,

and I never really heard about prompting. So, it's little stuff like that, that I know, but we never talked about it in school. Every class I took was just very broad and very like, okay, this is what it would be and then like move on and it was very like all general ed., driven I felt. I didn't even know there was assessments. I thought you were just supposed to be like fourth graders are supposed to do this, let's work on this kind of thing. I didn't get any of that in college.

SH3: I feel like the assessments that I mainly learned how to use mainly just focused on reading and it was reading for the younger grades, not so much for the older grades. We focused a lot on the tests that school psychologists use which don't really apply to me.

SE3: The part that I feel like maybe they didn't do the best thing, that assessment piece. We talked about the different kinds of assessments, but it wasn't and so it's just a little more. Like when I was in my undergrad, I feel like the only thing that assessment was to me was just a test, but like now it can be a lot. It's a lot different now than it was then like I feel if that makes sense.

SE4: This is something where I probably wish they would have covered more, spent more time on. I don't really remember doing much practice like administering assessments or talking about different like universal assessment, screeners. It wasn't really until this year, like over the summer where I got trained by different people in the building so I wish they would have covered that more."

SE5: "They told us about different types of assessments. They touched base on what is it these assessments are used for, ETR, and that's about it.

Category 8b: Assistive Technology

IDEA 1990 required districts to provide any form of assistive technology that is deemed necessary by an IEP team (Lengyel & Vanderbergeijk, 2021). Since that is the case, it is essential that special educators are knowledgeable about the technology that students have available and will be utilizing in order to meet their educational goals (Woolf, 2019). Component 4.3 of the CEC standards (2020), states that "candidates assess, collaboratively analyze, interpret, and communicate students' progress toward measurable outcomes using technology as appropriate, to inform both short- and long-term planning, and make ongoing adjustments to instruction." The use of assistive technology can be essential for many special educators as it can allow students to overcome their challenges to communicate or to demonstrate their skills (Woolf, 2019). Fourteen of the 15 participants spoke about their preparedness for using assistive technology.

Of these 14, six indicated that they were well-prepared for utilizing assistive technology. They stated the following:

> **SP1:** I did take a class on assistive technology and how to use that in the classroom which I found was very helpful.
>
> **SE2:** So I had an assistive technology course and a course on assessment and they were both, I think, great courses. And then in regard to assistive technology, I really, really liked that course. I think it was wonderful and that was the course that I actually also got to look at an ETR and they had us pull out things that we would try and offer accommodations or modifications or assistive technology to that student that we got the ETR for, so it was very interesting. We got to dive deep into some newer technologies that coming out. It gave me a better

understanding that assistive technology does just mean tech. So, I do think that I did get a lot of instruction on that.

SE3: I remember there was one day that we really focused on assistive technology and we all like had to do different tasks, like once we all had to wear like oven mitts and like try to write and things like that and then we used the assistive technology and it kind of helped us do things better like than it would normally like without this assistive technology. So assistive technology I feel like we had a background assessment.

SM1: Yeah, we had to make like these tech toolbox things. Like, so we had a lot of, I say two, I took two or three technology courses for educational technology at UNIVERSITY. That's something they definitely are really big on, and they have like, people that really know what they're talking about teaching those classes. But I definitely learned a bunch of different sources and resources to use with regard to technology.

STM1: We did have a class that talked about it and where we were actually able to practice on the devices as well.

SH4: I took an assistive technology course, so we got to use that. The professor was awesome and having a whole semester dedicated to assistive tech in the classroom was really awesome.

Of the 14 participants, one indicated that they were somewhat prepared. They stated the following:

SH3: We talked a little bit about assistive technology. We had to do a project on it. Honestly, I don't remember much about it, so apparently it didn't really stick with me.

Seven participants indicated that they were not prepared for utilizing assistive technology. They stated the following:

SH2: We ended up doing a project and I remember mine was about 26 pages long. We had to put together different assessments like technologies on standardized tests like what we would use for what students and how we would like have to label the students with such and such disabilities, but that was like our final project in our class and to be honest going into education and state testing I was like “This is so foreign to me”. I didn’t feel ready. I can barely even recall what we had done at that time.

SE1: I took three classes on how to use an iPad in the classroom, and my school doesn't even use iPads and I'm just like, great I just wasted three classes doing this and not even have iPad.

SM2: Wasn't really talked about a whole lot.

SE4: Yeah, I remember in college like learning what it was, like using it, but I probably wish they would have covered that more as well.

STE1: We do like a lot of text to speech and speech to text that kind of thing. When asked where she learned those things (field experience, college, job) she stated, “in my job.”

SP2: We did not have any preparedness kind of working with assistive technology.

SE5: Assistive technology, they didn't teach you about that.

Category 8c: Accommodations

Beyond the use of assistive technology, special educators must be able to find ways to "level the playing field" for their students. This can take place through the appropriate utilization of accommodations that help students with disabilities overcome their circumstances to demonstrate their true knowledge of curricular materials. Special educators have a legal obligation to provide these accommodations on both standardized or high-stakes testing, as well as every day within the classroom (Antony, 2012; Green et al., 2021; Lengyel & Vanderbergeijk, 2021; Ricci & Fingon, 2018). Thirteen of the 15 participants in this study referred to their preparation to deliver accommodations for their students. Of these 13, five felt they were well prepared in this area. Their statements are as follows:

> **SE2:** I really, really liked that course. I think it was wonderful and that was the course that I actually also got to look at an ETR and they had us pull out things that we would try and offer accommodations or modification or assistive technology to that student that we got the ETR for, so it was very interesting.
>
> **SE3:** And then accommodations, they did a good job teaching us what accommodations were and what accommodations were available to us and just like creating kind of a bank of what like accommodations kids could use and for what subject area or like across the board for different subjects.
>
> **SP2:** We've talked about some accommodations, like I said, so like preschool education, a lot of it, the assessment besides like standardized assessments we do through observation. So, we have talked a lot about kind of like how to observe,

like what to look for, how to set up environments where we're going to like observe the skills we're going to be seeing.

STM1: Accommodations I do feel like I was prepared well. Just how to really integrate them into the classroom, as well as best accommodations for the different disabilities and different strengths and weaknesses for students. I do feel very well prepared for that from classroom instruction.

SH4: So, a lot of it was focusing on like what is going to help the different types of students. Are you lessening the number of questions? Are you allowing them to write a paper instead of take a test like a multiple choice test? That differentiation piece that like gives students the opportunity to show what they know, not how they know it, just they can actually give you like this is the information that I know.

There were no participants who indicated that they were somewhat prepared. Eight of the participants indicated that they were not prepared in this area. Their statements are as follows:

SH1: Yeah, I don't remember ever giving an assessment and you know them telling me like "have this accommodation." Like you need to make sure that they have those accommodations. I don't remember that so much.

SH2: At DISTRICT we're getting that ball rolling and where certain kids are going to be placed, what accommodations they are going to need and we're going over it as a team which is really nice. We didn't really do that in college. I didn't feel like it was a focal point.

SE1: I feel like they talked a lot about accommodations and giving accommodations for students. They didn't really go into like, “oh, here's a specific one.” “They didn't really talk about giving assessments necessarily like not over prompting. I feel like now that I'm in the field, I hear so much about prompting, and I never really heard about prompting. So, it's little stuff like that, that I know, but we never talked about it in school. Every class I took was just very broad and very like, okay, this is what it would be and then like move on and it was very like all general ed. driven I felt.

SH3: Accommodations we learned about a lot about, not so much useful ones that would work for students, but mainly the difference between SDI and what accommodations are.

SM2: Wasn't really talked about a whole lot.

SE4: Yeah, I wish they would have covered this more too. And even like just going over what accommodations are available for students, what are we even allowed to you know write on an IEP that they can get. So, they were kind of lacking in that area.

STE1: Okay, so for that I feel like my struggle was more like with the state and district-wide testing like I didn't know what to expect for that and like how to implement their accommodations with that sort of thing, but it's kind of clicking now.

SE5: No.

Standard four of the CEC standards is entitled “Using assessment to understand the learning environment for data-based decision making.” This over-arching theme

encompasses all aforementioned components of the assessment standard. In addition, this use of assessment in data is also an essential component of effective instruction (CEC, 2020) Component 5.1 states that "candidates use findings from multiple assessments, including student self-assessment, that are responsive to cultural and linguistic diversity and specialized as needed, to identify what students know and are able to do. They then interpret the assessment data to appropriately plan" (CEC, 2020, p. 2) Three other components in the CEC (2020) involve specific strategies such flexible grouping, small group instruction, and specialized instruction to meet the needs of specific students. The emphasis placed on this domain by the CEC (2020) demonstrates its importance. Researchers have determined that the ability to use data to drive instruction is an essential knowledge competency for special educators (Brownell et al., 2010; Woolf, 2019).

Fourteen of the 15 participants addressed their preparedness for data driven decision making within their interviews. Of these 14, seven were well prepared in this area when entering the field. They stated the following:

> **SH1:** But assessment to drive like groupings or my lesson or stuff of that nature, I feel like very prepared for.
>
> **SH2:** I actually felt this was pretty well covered. Debriefing our lesson was huge. The PROFESSOR had us record lessons and then kind of break them down separately and discuss, write about it, talk about it, why the data we were looking for was needed, and how we can use that data to kind of gear where students are at.
>
> **SE3:** In our lessons plans we had to group students based off of assessments that we were given, and we also had to do that for assignments like we were given

different assessments; and then we were told to differentiate the groups and what kind of assignments would you do with those different groups and like based on the assessment that you were given.

SM2: But we got to have an experience where I went into a school and went to a classroom, found a student with either an academic or behavior problem and I created a plan for it. So, I collected the data, I implemented the plan, and I got the results and then I could adjust it kind of depending on any results.

SE4: I feel like pretty well. I mean they would like constantly give us different data to analyze working with small groups, what would you do in this data? How would you group them? What do they need more of? I think we did a lot of reflection on that.

STE1: I feel like it prepared me really well with like using like the state tests and the district wide test and being able to like look at the data and seeing like, oh, they're in this percentile they need to work on this. I should probably do this. A lot of my special ed. classes prepared me for that really well.

SH4: I think they did a really nice job. I had a couple professors that they really were like, you have to keep data. This is why you have to keep data, and my one class, they showed us like different ways of like keeping track of data."

One of the participants indicated that they were somewhat prepared for data-driven decision making. They stated:

SP2: I think that's something where our program could have had more like an area of growth. It was definitely covered about like how to like take that data, how to like use that as far as like data-based decision making. It's part of like

something that's like referenced, but I didn't feel like we had like direct instruction or explicit instruction about like you know, here's what to look for when it's, here's how to tell she is making progress and what it looks like when students are not making progress. I felt like that could have been like, we could have like some more instruction there because if definitely comes up a lot.

Six of the participants indicated that they were not prepared in this area. They stated the following:

SE1: I'm going to be honest, I did not have anything on data. That is all of these first-year teacher like meetings and like everything you say that data-driven, data-driven, data-driven and I just I'm like I don't' know how to collect data. I don't know what to do to collect or what to give to collect data.

SH3: We never looked at results from tests or like assessments and did stuff academically.

SE2: Sure, I don't think I got a lot of this. I can't think of a course that I can tie this to at all.

SM1: I think that definitely something that hurt me at interviews as well. Like if we're being honest. We were taught it, but I don't know how well we were taught it. I did have a 4.0 GPA and graduated from there and couldn't even talk about it in interviews.

STM1: I would say that's an area that I was not very well prepared in compared to everything else.

SE5: Okay, so UNIVERSITY did not.

With 60% of participants indicating some level of preparation for administering assessment, it would appear that some universities are providing instruction in this area, and some are not. The novice teachers who felt unprepared often mentioned a lack of knowledge in the administration of specific tests. These included high-stakes state testing and assessments used in IEPs and ETRs to measure student competency. Universities may consider collaborating with local school districts to determine which tests are commonly utilized and provide specific training in these assessments to their prospective teachers.

More than half of the participants indicated that they were unprepared for administering accommodations to their students. Providing accommodations is one of the most basic functions of the special educator. This includes accommodations for both the classroom and for standardized assessments. Multiple teachers indicated that they were taught about what accommodations were but were not provided with any specific ones that they could utilize with students. Others indicated that this area was simply not covered, and they experienced confusion when asked to provide accommodations to their students come testing time. One candidate stated that she had to research allowable accommodations herself just to be able to work with her students. Again, there is no explanation for why universities would not offer extensive training in this area as it is basic to the eventual work of prospective teachers. In addition, failing to provide the accommodations outlined by an IEP or failing to include reasonable accommodations when crafting an IEP can result in eventual litigation against the district. Furthermore, a lack of accommodations on state testing may decrease the scores that students with disabilities receive on these assessments. Such failure can result in poor marks on the

district's state report cards. The stakes are simply too high for universities to fail in this area.

Data-driven instruction has become a major focus in schools over the course of the last decade. It is not enough for schools to teach with old "tried and true" methods without providing a rationale or considering how effective these strategies really are. Universities consider methods that give prospective schoolteachers the opportunity to utilize data in their planning.

One unprepared candidate indicated that the lack of instruction in this area hurt him in job interviews. This is worrisome considering the necessity for employment for graduating candidates. Two other candidates indicated that their preparation was limited due to the overall lack of the quality of the program they were enrolled in. The other three simply indicated that the use of data was not a focus. Again, programs need to adapt with the changing landscape of schools to ensure that their candidates are well-prepared in this area.

Category 9: Behavioral and Emotional Management

Many students with disabilities have struggles beyond physical limitations or learning struggles. One commonly identified area of disability occurs when a student's consistent behavioral or emotional struggles impact their learning and oftentimes the learning of others. To effectively aid these students, special educators require a specific set of strategies and skills that research shows are often missed in preservice teacher training (Flower et al., 2017; Freeman, 2014; Klopfer et al., 2019).

Standard six of the CEC preparation standards (2020) deals solely with supporting social, emotional, and behavioral growth in students. Component 6.1 states that

“Candidates use effective routines and procedures to create safe, caring, respectful, and productive learning environments for individuals with exceptionalities.” Component 6.2 states that “candidates use a range of preventive and responsive practices documented as effective to support individuals’ social, emotional, and educational well-being.” Finally, component 6.3 states that “candidates systematically use data from a variety of sources to identify the purpose or function served by problem behavior to plan, implement, and evaluate behavioral interventions and social skills programs, including generalization to other environments.

All 15 participants spoke to their preparation with managing and supporting students with disabilities’ behavioral and emotional needs. Of these 15, only two indicated that they were well-prepared in this area. Their statements are as follows:

> **SE3:** We were able to go in there and see because it was more social, emotional, and behavior driven like diagnosis in there, so we were able to see that and see if firsthand, but I thought that was very helpful and nice.
>
> **SH4:** So, a couple of the classes that I took like I took several like school psychology classes and then also they had special educators take a classroom management class and I think those classes were really helpful because it kind of helped. The psychology classes helped us understand like, why a school child might be making the choices that they're making and also like the classroom management classes, that was really helpful because we had so many times of like these are behaviors that you're seeing.

Four participants indicated that they felt somewhat prepared in this area. This status is indicated by the following statements:

SH1: Again, going back to that one class where we looked at all the different experiences kids might be doing at home. We had a lot of guest speakers you know, mental health speakers, different teachers come in and talk about their experiences. So, I felt pretty good about that, but I don't know really until you're in it how well you can be prepared for especially emotional challenges. But behavior-wise we were you know given a lot of instruction in it. I just don't know. I wish there were more chances to use like those behavior techniques in a school setting before going out into the world and being like you know here's this strategy. Like I have this strategy in my toolbox, but how do I administer this strategy?

SH3: They did good I did feel like on the psychology aspect. We did not go over so much like crisis intervention plans, like toolbox strategies that you could try to with students to see what would work with them.

SM1: Behavior and emotional? We talked about it, but most of my classes were geared towards content like diversity. There were conversations about it. I'd say they definitely talked about it, was like a priority. So, like I wouldn't say amazing, but it was definitely something that they valued, and it was important.

SE5: They did not teach you how to reach a student or what techniques you can use to reach a student who has a learning disability or who is autistic or who has a behavior plan. My mentor from college, my instructor for my last course, he did a wonderful job with that. I feel that UNIVERSITY would have had me better prepared if they discussed behavior problems.

Nine participants shared that they were unprepared for dealing with the behavioral and emotional needs of their students. Their evidential statements include:

SH2: Nothing was really done as an individual. If someone told me today, “I need you to get the ball rolling on an FBA or on a BIP, I would be a little lost.

SP1: Not very well. UNIVERSITY touched on behaviors, but never really went into it like what should a teacher do and how should you react. So, it was something that was lightly touched on, but it wasn't like really discussed or anything like that.

SE1: The one thing I would say like I've really noticed like my first-year teaching that I was not ready for is behaviors with like aggression. There was no class on how to deal with behaviors that arise. They never really talked about behaviors in the classroom. Like I said before, behavior-wise I got nothing.

SE2: But until I had gotten to my job, I really had no exposure to more like broad behavioral program or things you know consistency that we can set into place. I definitely had been exposed to like first/then charts and some other like smaller strategies that you can use in the moment, but I don't feel that I received a lot of like overall classroom management like how to teach coping skills or like how to understand behavior in order to manage it. And I'm saying all this based on stuff that I've learned now in the field; I did not learn that in college.

SM2: Almost not at all. I would basically go into this I would say totally blind. So, I don’t feel like I was prepared at all for behaviors like there was no like behavior management or like what to do when a kid screams, “F you!’’You know, like, right? Nothing about that.

SE4: More what I feel like we were not prepared for as much when it comes to behaviors like different reinforcement strategies. I feel like academic wise I feel a lot more prepared than handling behaviors and everyday functioning. I feel like the whole world of behavior was missed in college.

STE1: I have struggled with this a lot this year. I wish I had gotten more instruction and like strategies to use when a kid is in crisis.

SP2: So, I would say that's something I really wish they had spent more time on.

STM1: We did have some specific classes with how to modify behaviors. The preservice teaching it was very basic behavior modification type of things, but it hasn't necessarily been the most helpful given our current circumstances. I do think a big thing that I would change about what I had is really focusing a lot on the social emotional aspects of teaching.

The extremely poor ratings indicated by the participants make this the area that teachers are least prepared for this domain when entering the field. This result is in keeping with previous research that indicates that teachers are not ready for behaviors when entering the working world (Flower et al., 2017, Prather-Jones (2011). Prather-Jones (2011) stated that there is a specific set of skills necessary for helping students to manage these areas. It would appear that preservice programs are failing to provide the knowledge competencies or the dispositional competencies necessary for success. This lack of preparation is reinforced by many of the statements made by participants in this study. According to Freeman et al. (2014), many teacher education programs advertise classroom management skills but often provide only a cursory look at general whole group skills. The poor ratings seem to enforce his conclusions.

Multiple participants stated that this was the area that they struggle with the most and includes skills that they are still trying to develop. This is also in keeping with the professional responsibilities related to behavior. Many candidates stated that they were unprepared for conducting manifestation hearing or creating behavior plans. More concerning is the fact that multiple participants did not even know what a manifestation hearing was. Foreman and Markson (2022) found that only 16% of secondary and 9% of elementary teachers had received any instruction in participating in functional behavior assessments. As this is the document that coincides with behavior intervention plans, teachers need some level of competency in this area. Simply put, this should be a significantly greater topic covered in preservice programs.

Category 10: Professional Responsibilities

The responsibilities of the special educator have long been driven by legal precedents (Antony, 2012; Green et al., 2021; Lengyel & Vanderbergeijk, 2021; Ricci & Fingon, 2018). The crafting and implementation of legally binding documents makes up a significant portion of special education teachers' work. The aforementioned component 1.1 of the CEC standards (2020) requires that special educators follow ethical and legal policies and procedures. Within each interview, participants were asked about their preparation to complete the major documents often required for students with disabilities. The participants' responses were then organized into subcategories based on these documents.

Category 10a: IEP Writing

The IEP is the most commonly produced document by special educators. It is legally required that a plan be developed for each student who qualifies for special

education services. These plans are very detailed and have several required sections as laid about by federal mandates. Special educators are typically charged with crafting these documents for each student who is assigned to their caseload. The documents lay out the current performance, required areas of need, the accommodations and modifications being offered, any specialized services needed, goals, criteria for measuring those goals, state testing information, and a plan to help the student transition to life after compulsory schooling.

Effectively writing an IEP requires specialized knowledge about the legal requirements of the document, as well as intimate knowledge about the student's needs, the ability to collect and record data, and the ability to measure and report progress. As this is an element that is crucial to the special educator's position, a priority should be placed on helping special educators to develop this set of specialized skills before leaving their preservice program (CEC, 2020).

All 15 of the participants discussed the preparation for writing IEPs that they received within their preservice programs. Of these 15 participants, five indicated that they were well prepared for writing IEPs. Their responses are as follows:

> **SE3:** I would say writing IEP goals we did very well. We had the opportunity of working with a program and we were able to see their specific IEPs. So, one, we knew the students and we could maybe base our observation and just knowledge of writing another IEP goal for that student.
>
> **SM2:** We actually had a course that was IEP writing and just like all the legal things that go into that.

SP2: I would say fairly well. We did have a class specifically about writing IEPs that went very in depth.

STM1: We did a lot of mock IEPs, behavior plans, ETRs, different things where we would do case studies. So, I did feel prepared for that type of legality.

SH4: So like I said, we had the one class that was dedicated to all the paperwork. We did an ETR as a class. We did an IEP as a class and one of my other classes I learned how to write an FBA. So, I feel prepared that I learned how to do all of it.

Of the 15 participants who addressed their preparedness for writing IEPs, one felt that they were somewhat prepared for writing an IEP. This participant felt that their program prepared them for actually writing the document but not for everything else that goes along with the IEP process. Their evidential statement is as follows:

SE4: Yeah, so when it comes to like writing the IEP, I feel like they prepared me very well for that. But when it comes to like the process like I didn't even know what like what the PR01 was over. Like they need to record the attempts of contacting the parent, parent invites. So, like all the other steps that go into an IEP meeting were totally missed and thank God for my mentor.

Nine subjects indicated that they were not prepared for writing an IEP. Multiple participants indicated that they had left college without ever having written one and in one case, without ever seeing one. Other candidates indicated that they had been taught to write goals that they might use in an IEP but were not exposed to any other sections. Their statements are as follows:

SH1: Yeah, I think not enough, not enough at all. In only one of my classes did we look at IEPs and we wrote like I don't know four or five goals based on a

profile they gave us, but I didn't really ever see or get the chance to write any IEPs before leaving the college. I think that the kids in these programs need to go through every single section. You need to do this in the future planning, and you need to do you know go from section one to 14 and you know cover all of your bases. So that is how I feel about that and that is what makes me so mad.

SH2: I'm going to be honest; I don't think they prepared me well enough. We did a lot of IEP goal writing in groups where certain individuals would take charge and would have different ideas for goals which was very tough. That's something I wish we would have done more with. You know, maybe write a mock IEP instead of just looking at section 6 and section 7.

SP1: I would say not very well. I remember we never technically got taught how to write an IEP. Yeah, and then the weaknesses were not knowing how to write an IEP, sorry UNIVERSITY.

SE1: So, with that too, like the paperwork of IEPs and ETRs and PR01s. Like I didn't know about any of that. I wrote one IEP when I was in college and I wrote one ETR when I was in college, and that was it. And that was like, okay, here you go, this is what it is. And it this is like my whole job is writing IEPs and ETRs now, and I had one that was it. And they were just like okay, good job you wrote one. Yeah, just like more IEP writing help. There should be so much more help writing IEPs because it's just so difficult.

SH3: We didn't do anything with IEPs or progress reports in college in our classrooms. We did group IEP goal writing and that was about it.

SE2: I hadn't even seen an IEP before so a lot of the language and that lawful language you know I didn't even understand how it really applied so maybe I had an idea of what it was but I didn't know how to apply that stuff.

SM1: That is somewhere where I do not feel as prepared really, to be honest. I got a little bit of like I wrote one IEP in my student teaching. I wrote an IEP in an online class at UNIVERSITY where I was just kind of given an A for doing it. Like I don't even think it was very good. Like I don't think my goals are very measurable. I mean, they might have been. I didn't fully understand what I was really even doing.

STE1: Again, I would say not well for this one too. I felt like, because my first IEP meeting was in the first two weeks of school, and I felt like I had no idea how to run the meeting. I didn't know what to talk about. We practiced writing IEPs a little bit, but they were on like fake students so like being in the real situation with a kid right in front of me, I was like, I don't know how to write this. I felt so unprepared for that as well because I just felt like I had no idea what I was doing with that.

SE5: I did not know how to write an IEP. I had no clue how to write it. I was not prepared in how to collect the data that I need. There was no course in regard to writing an IEP, the progress reports, the behavior intervention plans. In reference to mentor, He did as much as he could do to help me to be prepared for now, but I don't even think he knew that they didn't teach us how to write IEPs or anything like that, I don't think I was very prepared.

Category 10b: ETR Writing

The Evaluation Team Report (ETR) is the first document and evaluation that must be completed for a student to qualify for special education services and receive an appropriate education in the least restrictive environment (Lengyel & Vanderbergeijk, 2021). This process is conducted by a team of individuals that typically includes a school psychologist, a special education teacher, related services providers, general education teachers, guidance counselors, parents, and the student themselves. The special education teacher plays a large role and is responsible for conducting and writing a portion of the evaluation team report. These data are then used to share with parents and other team members in order to make a determination about the best placement and services for a student.

Fourteen participants spoke of their preparedness for writing participating in ETRs. Of these participants only three indicated that they were well prepared in this area. Their statements are as follows:

> **STM1:** We did a lot of mock IEPs, behavior plans, ETRs, different things where we would do case studies. So, I did feel prepared for that type of legality. So, I did feel very prepared to do that in my current placement. When we do ETRs, we do the academic testing ourselves and that was not an area of concern.
>
> **SH4:** So, like I said, we had the one class that was dedicated to all the paperwork. We did an ETR as a class. We did an IEP as a class and one of my other classes I learned how to write an FBA. So, I feel prepared that I learned how to do all of it.

The other 11 participants indicated that they were not prepared in this area. Their statements are as follows:

SP2: I'm currently taking an assessment and evaluation class this quarter of this semester that really goes in depth about like you know how to perform the evaluations and also how to like write the reports needed for that. My program did have two very specific classes about like the ETR process and also like the IEP progress.

SH1: But again, I don't really like I remember you know reading IEPs and ETRs and stuff like that, but I wish I got more experience with 'here's an ETR, you need to go write an IEP based on this ETR. You know what I mean?

SH2: When I graduated, I had no clue. ETRs were completely foreign to me. The school psych at SCHOOL has actually taught me a lot more in breaking down the tests and what I should be looking for and why it's important to me as intervention specialist. Those are the things that we didn't have, a school psych come into our class and do a presentation. We didn't have someone break down an ETR from a different perspective other than my professor.

SP1: I had no idea how to like look at the ETR and establish like what goal I have to create based on what was evaluated because I'm getting a lot of initial IEPs. It is definitely something huge and that is something that missed for me that I did miss at school.

SE1: So with that too, like the paperwork of IEPs and ETRs and PR01s. Like I didn't know about any of that. I wrote one IEP when I was in college and I wrote one ETR when I was in college, and that was it. And that was like, okay, here you go, this is what it is. And it this is like my whole job is writing IEPs and ETRs now, and I had one that was it. And they were just like okay, good job you wrote

one. And even from like the ETR standpoint, like I wrote a whole ETR, which I never do in my field. And I didn't really know, like I just, I just had one last week and I was like, I didn't really know what I'm supposed to do in the ETR. And so now I'm going to people like, 'What am I supposed to write? What am I supposed to do? Because we didn't learn about that in college. So, I did not feel prepared for all the laws that go along with it. I know it now pretty well because you hear it so often sure, but I did not know when I was in college.

SH3: We looked at a couple ETRs. I would have much rather learned how to write an IEP or even how to pull apart an ETR and apply it to what I need, but we didn't do any of that.

SE2: Yeah, so I did not get like an IEP class. That was not a part of UNIVERSITY'S curriculum for special ed. So, I had not had a lot of exposure to an IEP or ETR or a lot of those larger documents that the that special educators work on. I had no real instruction in regard to all the sections of the IEP and all those other documents that we have to take part in.

SE3: ETRs, I feel like I really had no idea about when I first came into the district or first got my full-time job. I do remember looking at ETRs in the class, but I don't remember fully understanding what my part of an ETR was.

SM1: ETR's our school psychologists do that as well. Like I still really don't know how to write an ETR. We were taught it, but I don't know how much I was really like asked to write an ETR or a behavior plan.

SM2: Very little. ETRs, I'm sure it was mentioned, but never really learned.

SE4: No. No, no.

SE5: I was not prepared for it. I was not prepared in how to collect the data that I need. I knew what data I needed but I wasn't sure how to collect that data and how I will record my findings.

Category 10c: Manifestation Determination Reviews

In 1988, the *Honig v. Doe* ruling limited the extent to which districts can suspend students with disabilities and initiated the manifestation determination process to review the relationship between a student's offending behavior and the effects of their disability (Lengyel & Vanderbergeijk, 2021). This process was formalized in the reauthorization of IDEA in 1997 (Lengyel & Vanderbergeijk). While exact procedures may vary from district to district, the intervention specialist plays an essential role in the manifestation process. These responsibilities can involve coordinating meetings, writing up reports, and sharing their expertise in both the effects of disability and in the individual needs of the student involved.

Nine participants described their level of preparation in participating in manifestation reviews. As two of the participants were preschool teachers, this particular document and process is not particularly relevant to them as preschool students are not typically suspended from school. Manifestation determination reviews are more likely to occur at the middle and secondary levels of schooling and within districts or amongst student populations that have high suspension rates (Leung-Gagne al., 2022). This may explain the missing responses from some of the participants.

All ten of the participants indicated that they were unprepared in this area. Multiple participants indicated that they did not know what a manifestation determination

was or that they were generally unprepared for multiple types of essential special education documents. The participants' statements are as follows:

SH1: I just don't really feel like they gave me any help in that area at all really, which is like pretty sad.

SM1: I'm going to be honest, I don't think they prepared me well enough.

SE2: Yeah, so I did not get like an IEP class. That was not a part of UNIVERSITY'S curriculum for special ed., so I had not had a lot of exposure to an IEP or ETR or a lot of those larger documents that the that special educators work on. I had no real instruction in regard to all the sections of the IEP and all those other documents that we have to take part in.

SM1: Yeah, I don't think I've ever done a manifestation hearing. So, I mean, I loved my time there, but I would say not well because I don't even know what a manifestation hearing is.

SM2: Oh, the manifestation determination I think you mentioned. I'll be quite honest with you, I didn't even know what that was until I got into this job right here with sixth grade. I had no idea.

SE4: No, no. No and my caseload this year is like extremely heavy on behaviors, and I work very closely with our, like our ESR teacher, our BCBA and everyone has been like so helpful and I'm constantly learning so much but yeah, I just feel like the whole world of behavior was really missed in college.

STE1: Not with any of those.

STM1: We didn't do mock manifestations. I have had to do a few of those, so that was something that I had to learn while being a practicing teacher.

SE5: I don't know, like you said, the manifestation. I don't even know what that is.

SH4: I did not learn a ton about manifestation hearings.

Category 10d: Behavior Intervention Plans

IDEA 1997 requires that students with consistent or extreme behavioral concerns receive both a functional behavioral assessment (FBA) and a behavior intervention plan. In many districts these evaluations are carried out by a school psychologist or an outside professional whose main focus is behavior. However, the intervention specialist is an essential component to this process. The special educator is responsible for collecting data and both contributing to and carrying out the BIP. A lack of preparation in this area can deny students their mandated rights and may lead to increased behaviors that impact the learning of others.

Thirteen of the 15 participants addressed their level of preparedness in regard to behavior plans. Of these participants, only three indicated that they were well prepared in this area. Their responses are as follows:

SE2: After we spoke, I realized that I had completely forgotten my Applied Behavior Analysis classes. These classes were awesome! The professor was very involved, and it provided an opportunity for us to take a real student from our field experiences and perform an FBA and then write a BIP. This actually was so helpful for me when I ended up with a pretty difficult student my first year of teaching.

STM1: We did a lot of mock IEPs, behavior plans, ETRs, different things where we would do case studies. So, I did feel prepared for that type of legality.

SH4: So like I said, we had the one class that was dedicated to all the paperwork. We did an ETR as a class. We did an IEP as a class and one of my other classes I learned how to write an FBA. So, I feel prepared that I learned how to do all of it.

There were no participants who were somewhat prepared in this area. Ten participants indicated that they were not prepared in this area. Their responses are as follows:

SH1: We learned that in one of our classes. We learned about like behavior intervention plans. I remember once doing a module too about behavior and like having to write like what the trigger was and what they could do to fix it. You know like those kinds of things, but again didn't really have any idea on how to write like a behavior plan.

SH2: Everything was done in groups. Nothing was done as an individual. If someone told me today, "I need you to get the ball rolling on an FBA or a BIP," I would be a little lost.

SE1: The one thing I would say like I've really noticed like my first-year teaching that I was not ready for is behaviors with like aggression. There was no class on how to deal with behaviors that arise. They never really talked about behaviors in the classroom. Like I said before, behavior-wise I got nothing.

SH3: We had nothing to do with behavior intervention plans.

SE3: And then for behavior plans as well, like again, we've looked at them, but in our district, we don't fully write the behavior plans. We have a BCBA that's in our

district that's outsourced. But again, I didn't really know what BCBA was, what they did, how to collect the data for behavior plan.

SM1: I did not know how to write, still really have not written a behavior plan. because our psychologists do that stuff.

SM2: I wasn't prepared for that at all.

SE4: No, no. No and my caseload this year is like extremely heavy on behaviors, and I work very closely with our like our ESR teacher, our BCBA and everyone has been like so helpful and I'm constantly learning so much but yeah, I just feel like the whole world of behavior was really missed in college.

STE1: Not with any of those.

SE5: There was no course in regard to writing an IEP, the progress reports, the behavior intervention plans.

Category 10e: Progress Reports

Since IDEA (1997), special educators have been required to collect data on the progress of special education students on meeting their IEP goals and then report this progress to each student's family. These progress reports are required to be submitted to parents at least as often as a district reports its regular grades. It is essential that special educators know how to collect data and report progress as they are required to do so multiple times per year for each of the students on their caseloads. As this is a regularly occurring process and a legal imperative, it is essential that preservice special education programs provide prospective teachers with this knowledge.

All 15 participants addressed their preparation for progress reporting when entering the teaching profession. Of these 15 only two reported that they were well prepared for completing this process. There responses are as follows:

SH2: So, I had several hours put in which really helped me out a lot because I feel like the experiential learning piece was more of what I needed. Just getting my hands wet and really learning what IEP meetings looked like, ETR meetings, how to do progress reports. That's where I learned.

STM1: Progress reports we also did practice.

Two of the participants reported that they were somewhat prepared for reporting progress. They stated the following:

SE3: And then the last thing for progress monitoring. Undergrad showed us the things that you can use like on Samegoal that the program that a lot of IEPs are written on. But progress monitoring I feel like it's different for each intervention specialist, because I mean all of us are also individuals like it has to work for you and your classroom and I don't think I was showed a lot of different ways to collect data or like different data sheets. I think it was just very cut and dry like this is what you ought to do and all that stuff.

SM2: Progress reports, there was some about data collection, but not a whole lot on, you know, what is expected in progress reports. Just that they're kind of part of the IEP, just kind of part of that.

Of the 15 participants ten of the participants indicated that they were not prepared for completing progress reports. This makes an overwhelming majority and is a bit

disappointing considering the amount of time that intervention specialists have to devote to this element once in the field. The participants' responses are as follows:

SH1: I don't feel like progress reporting was touched on much in college. I mean I knew I was going to have to do it, but I didn't really understand what it looked like and I'm not really sure if they were relying on you know our field experiences to show us that, but I didn't really get much information about that.

SP1: I have progress reports coming up and I don't even know how to do those yet.

SE1: I didn't know what a progress report was before I started at all.

SH3: We didn't do anything with IEPs or progress reports in college in our classrooms. I would have liked to learn how to write an IEP, how to write progress reports. I didn't even know what a PR01 was used for before this year.

SE2: Yeah, so I did not get like an IEP class. That was not a part of UNIVERSITY'S curriculum for special ed. so I had not had a lot of exposure to an IEP or ETR or a lot of those larger documents that the that special educators work on. I had no real instruction in regards to all the sections of the IEP and all those other documents.

SM1: They need to teach you how to actually collect data, how to do progress monitoring, how to write a progress report. Like I didn't know any of that stuff was going into my job.

SE4: And then like with progress reports, like definitely did not cover any of that and like even the best ways to collect data you know, looking at the different

forms, ways to collect data, what you're going to use the data for. I feel like that was very minimal.

STE1: Not with any of those.

SP2: It's part of like something that's like referenced, but I didn't feel like we had like direct instruction or like explicit instruction about like you know, here's what to look for when it's, here's how to tell she is making progress. This is what it looks like when a student is not making progress and here's like you know here's the decisions that could be made like versus on these two things. I felt like that could have been like we could have like some more instruction there because it definitely comes up a lot, you know, in the working in the field.

SE5: There was no course in regards to writing an IEP, the progress reports, the behavior intervention plans. You need to know how to write these progress reports and how frequent you should consider a trial. You know, stuff like that. they didn't' teach us.

SH4: We hit on it. I wouldn't say that we spent a ton of time talking about it. Definitely not as much emphasis was put on it.

Since completing necessary legal documents is a significant part of most special educator's work life, the lack of preparation in these areas is extremely concerning. The IEP is the most basic document that special educators are responsible for completing for the students on their caseloads. To hear that nine of 15 participants were unprepared in this area shows a significant deficit in the instruction received at the preservice level. Four participants indicated that they had the opportunity to write goals but did not have

the opportunity to complete an entire document. Since there are 15 sections to an IEP in the state of Ohio, this demonstrates a huge learning gap.

The ETR is one of the first documents that needs to be completed when determining that a student is in need of special education services. While these are partially completed by the school psychologist, the special educator is also an essential part of the process. The special educator is responsible for completing their own evaluation that lays out what needs they have seen a child exhibit within their classroom. Additionally, a special educator needs to be able to interpret the results of this document to ensure that the IEP matches the services necessary for the student. It may be that the lack of preparation in this area is because programs assume this knowledge is more applicable to school psychologists than to intervention specialists. They are wrong in this assumption.

The results were similar for the other categories. With all ten of the participants indicating that they were not effectively prepared for manifestation hearing and 10 out of 13 indicating that they were not prepared for behavior intervention plans, it is no surprise that novice teachers bemoan their lack of behavior and emotional management competencies. Research showed that most universities advertise classroom management training but fail to offer the nuanced, research-based practices that aid special educators in managing behavioral challenges (Freeman et al., 2014). A possible explanation for the lack of knowledge in this area could be because the participants were all from small town or suburban districts. Suspension rates are much higher in urban districts, and this may attribute to the participants' lack of current knowledge in this subject (Leung-Gagne et al., 2022). An explanation for two of the missing participants' responses can be attributed

to the fact that they were preschool students and their students do not receive the suspensions that trigger the manifestation process. Another possible explanation for the lack of responses could be the lack of knowledge itself. While some candidates were willing to share that they didn't know what this process was, others might have been embarrassed to show their ignorance in this area. However, it has been shown that students with disabilities are more likely to be suspended than their non-disabled peers (Foreman & Markson, 2022). For that reason, there is no excuse for universities to not offer training in this area.

Progress reports must be completed by special educators as often as the school reports grades for all students. As such, these documents must be prepared and shared with parents a minimum of four times per year. This can be a time-consuming process especially if a special educator has not been trained in this area. Failing to complete these documents well can lead to possible litigation from parents who feel their students are not making progress and that the district is therefore failing to provide a free and appropriate education. As such, there is no reasonable explanation for universities not making these legal documents a priority.

Those participants who indicated that they were well prepared for their professional and legal responsibilities were often enrolled in classes that were specific to the paperwork aspect of their position. Others stated that they were given opportunities to prepare mock documents to aid in their preparation. It can be inferred that these are best practices that all universities should implement in an effort to aid their candidates. As with other areas of preparation, another possible explanation for the poor preparation in these domains could be the pervasive use of dual licensure programs. As the teachers

stated there was often minimal focus on the special education portion of their education and instead focused on the basic skills necessary for all educators.

Most Effective Areas of Preparation by Teacher Education Programs (RQ 2)

One of the areas that preservice programs are providing specific training in is dealing with diversity. With 80% of candidates stating that they had some level of preparation in this area, it would appear that teacher education programs have recognized the changing landscape of education and are attempting to provide the necessary knowledge competencies for dealing with students from diverse backgrounds. As previously stated, Strassfield (2019) suggested that teacher education programs provide candidates with a specific course that communicates strategies for dealing with diverse populations of students. Based on the participants' answers, direct instruction through specialized classes is now being offered in many colleges. Other candidates mentioned field and student teaching experiences that required them to work in multiple types of settings. The ability to see and experience urban, rural, and suburban settings provides candidates with the ability to hone their skills and identify their preferred teaching environment when entering the field.

Research-based instructional strategies appear to be another area of strength for universities. With 67% of participants reporting that they were well-prepared and 17% reporting that they were somewhat prepared, universities appear to be making gains. Previous research from Scheeler et al. (2016) demonstrated that not enough teachers were regularly receiving this type of instruction. Teachers who described themselves as prepared in this area stated that they were required to create expansive lesson plans that included research-based strategies. Others received direct instruction in commonly

recognized evidence-based systems such as Universal Design for Learning (UDL) and Marzano strategies. Universities should continue these practices as they appear to be successful.

Knowledge of the effects of disability was another area where participants felt their programs sufficiently prepared them. Fifty percent of participants felt well-prepared, while another 36% felt somewhat prepared. Candidates in this area participated in online modules or received direct instruction in the different types of disabilities and how they affect students. Another candidate described a portfolio that they had to construct that demonstrated how they would differentiate instruction for students with a specific condition.

Most Lacking Areas in Special Education Preparation (RQ 3)

Based upon the participants' reported levels of preparation, addressing students' social and emotional concerns appears to be the area that is most lacking. This was evidenced by 67% of participants indicating that they were unprepared in this area. Participants reported that they were poorly prepared for the legal documents that correspond directly with behavior, manifestation determination reviews and behavior intervention plans. None of the candidates reported being prepared for manifestations and 77% indicated that they were unprepared for behavior intervention plans. The possible explanations for these extremely low numbers have been previously discussed. These explanations include the grade levels taught by the participants, the limitations of dual licensure programs, and inaccurate assumptions made by the universities about the responsibilities of special educators. As previously stated, the lack of training that

teachers receive in this area supports previous research knowledge (Flower et al., 2017; Foreman & Marks, 2022; Freeman, 2014; Klopfer et al., 2019).

The lack of preparation for MDs and BIPs is part of a greater trend where prospective special educators are not being sufficiently prepared for their professional responsibilities. With 60% feeling unprepared for IEPs, 79% unprepared for ETRs, 0% prepared for manifestation hearings, 23% unprepared for BIPs, and 74% unprepared for progress report writing, it can be inferred that preservice programs are skipping one of the largest components of a special educator's job. The lack of preparation of BIPS and MDs might be explained by the characteristics of the participants themselves. The limited number of class offerings by dual licensure programs might also contribute to these numbers. Outside of those reasons, there is no reasonable explanation for universities failing to offer preparation in these areas.

Eventual Knowledge Attainment (RQ 4)

Research question number four inquires how participants have attained the necessary skills and knowledge to meet the requirements for the CEC standards (2020) outside of what they received in their preservice special education programs. Component 1.3 of the CEC standards (2020) states that "candidates design and implement professional learning activities based on an analysis of student learning; self-reflection; and professional standards, research and contemporary practices." All 15 participants addressed this area during their interviews. From their responses emerged four different themes.

Personal Experiences

Four of the interviewees indicated that their personal experiences outside of their teacher education programs prepared them for being an effective special educator. Two of the participants had been on IEPs themselves during their formative years and as such had a high level of relevant experience that helped them in their positions. The other two candidates indicated that their homelives and the locations of their upbringings had helped them better understand their communities and therefore be more effective in their roles. The participants' statements are as follows:

> **SP1:** I remember we never technically got taught how to write an IEP. The one class that we did have she kind of just let us go on our own and write an IEP and I remember a class there of 20 kids and no one knew what to do with this assignment and I was an IEP student. I had an IEP all throughout college. I had my IEP and I remember sitting at my own meetings and so we knew how to somewhat go through the IEP document when we had the assignment because of what I had in front of me.
>
> **SE1:** I grew up in special ed. I'm dyslexic. I'm like, severely dyslexic myself. And so, I kind of knew a lot of special ed. Like before I even started my program. I had spent like all of from middle school to high school, like in a classroom, like helping out and I knew this was what I was going to do so I had like a lot of prior knowledge before I even like started at UNIVERSITY just from my personal experiences and just like wanted to like research.
>
> **SM1:** I was born and raised in CITY, so I got a taste of being around a lot of diversity I'd say.

SP2: I still think a lot of my experience that I have of the application that I have comes from my personal experience and my own personal background. I used to live in the same community that I now work for.

Self-Study

Four teachers indicated that they attained knowledge through self-study. These teachers lacked knowledge in a specific area and took it upon themselves to acquire this necessary information through their own research.

SH1: But I do feel like I taught myself a lot about the content that I was teaching. In college it was very phonics based and you know elementary reading and I remember making like a reading guide. I never even touched algebra, or you know writing a five-paragraph essay like I do every single day now. Again, I think it was super elementary based and I wish that colleges would kind of show special ed. teachers what it's like K through 12 like our license is supposed to be in.

SM2: I kind of had to find those resources on my own. I wish we had a like related services, paraprofessional like how-to course.

SE1: Like there's so many like research, like the zones. I use my zones, the zones of regulation, in my classroom all the time. But that was all me looking it up and going "I love this, I want to use this." I feel like a lot of this right now for me is trial and error of 'okay, this isn't really working, okay let's go to Google. They didn't really give me like a list of stuff. And I mean, like, yeah, I learn a lot of stuff online as it is now too, just because I want to know so much about it and I'm like looking into it. Yeah, Google is my best friend.

SE5: So, I've been doing like a lot of research to find out about testing accommodations. Which ones are legal and which ones are illegal, what are the qualifications for this student? What do I have to do to see if they're qualified for these accommodations. Right, I go onto the ODE website, and I'll look up accommodations and then there's like a checklist that you look at for certain types of accommodations, like to be able to use the calculator, to be able to get read aloud. So, I go on there and I make sure that all my students meet those accommodations, meet that criteria. If they don't, then I'm like, 'okay what else can I do to help them? I signed up for the CEC. They have a program. I'm signed up for them. I signed up for other programs to write IEPs.

Previous Degree Programs

Four participants indicated that previous degree programs in which they graduated had provided them with competencies that were necessary for success in the world of special education. These programs were not necessarily related to education as one candidate indicated that it was his MBA program that taught him how to write and therefore offer instruction to his students.

SH2: And then on the classroom side, primarily all four years that I was at UNIVERSITY I wasn't doing my general ed. Like my general classes like math, social studies, English. I was more content specific because I had already graduated from UNIVERSITY with an Associate's. I got my MBA from UNIVERSITY right after I graduated. That's kind of why I had a little delay into teaching. I'm only two years in. So, for my Data Science, I'm using a lot of what I learned in my MBA from UNIVERSITY, but I didn't learn any of those skills in

mu undergrad. If I was to go teach Data Science to a bunch of seniors and I didn't have an MBA, I would honestly of had no clue how to work Excel spreadsheets, how to teach different functions, and how to set up algebraic problems within those spreadsheets to really pull to get high quality data out of students and how they can interpret data. UNIVERSITY was a great experience and like all around education support for me, but in terms of the education department, it wasn't as knowledgeable as I had hoped. Yeah, the majority of it came from my MBA. Even in the English portions like learning how to write and stuff like that. That's where a lot of focus had to be.

SE3: Before I went into special education, I thought I wanted to be a high school math teacher so I took calculus in my undergrad so that counted for a math credit when I moved over to special education.

SP2: I was a general education teacher before I started my special education coursework, so that's where a lot of my like experience comes from.

SE5: Okay, so UNIVERSITY did not, but PREVIOUS UNIVERSITY, oh my gosh. We did so much. We did like a deep dive in the data and talked about different types of scenarios and how that would affect us and what we needed to do to help our students.

District Professional Development

Three teachers indicated that they received effective professional development after completing their special education programs. Darling-Hammond et al. (2017) found that thoughtful and targeted professional development can help increase teacher

effectiveness. Districts frequently offer professional development days as a way of providing this instruction.

> **SH1:** I just went through a co-teaching PD with my school, so they were just kind of taking pairs and you know giving us more training on co-teaching and stuff, but one of like the things she said was making like differentiated resources and stuff like that.
>
> **SH3:** We're under an audit right now so I feel like that's helping a lot too because they're trying to get everybody on the same page and doing the right thing. That's what we did most of today in our professional development. So, I feel like even though the audit's a pain in the butt, it is helping a lot knowing what ODE wants and what they're looking for when it comes to paperwork and stuff.
>
> **STM1:** I openly communicated with my co-teacher or my partner teacher, my special education director, just areas that I needed more support in, and everyone was willing to help and kind of give input and advice on how to do things, show examples and professional development through my school district as well.

Mentorship by Colleagues

Mentorship by teachers within the new teacher's districts was by far the most frequently addressed form of eventual knowledge attainment discussed by candidates. Fourteen of the 15 participants listed some kind of mentoring or assistance from coworkers as the main way that they gained missing knowledge regarding their position. Formal mentoring programs have been shown to be very effective in providing teacher knowledge and self-efficacy (Schwan et al., 2020). Many candidates, however, discussed unofficial mentorship. They were befriended by more veteran teachers and taught about

the daily functions of their districts. Multiple candidates indicated that these relationships were paramount in helping them survive their early years in the profession. The participants' statements are as follows:

> **SH1:** So, then I got there, and I got put in a room with someone else. She's around my age and we became best friends, but if I didn't have her and I tell her this every single day, if I didn't have her, I don't know where I would have been. I would have figured it out some way, but she took me under her wing and outlined how to write an IEP and outlined like how I should run my supplemental and stuff like that. So, you know because these kids aren't getting these super important parts of special education, finding someone who knows an awful lot about it is super helpful.
>
> **SH2:** Last year I worked right across the hall from PT and OT. That's where, post-graduation I was really able to start learning about the different services that they provide. We actually did when working with digraphs my OT would help my students spell digraph words so working on pencil grip and muscular movements of that. She would also give me different ideas and kind of like stimulus ideas for my student with high functioning autism. That was great. She was a great support. And then my speech therapist, she would work with my students with like digraph words like rolling off the tongue. She taught me the importance of working in like different games with the students related to those words. So, I would say that I really didn't learn it until I got my first job. My first job was at ELEMENTARY SCHOOL. I would say it was the greatest experience because it truly taught me how to teach. I didn't feel like I got all the resources I needed until I got my first

job. The school psych at SCHOOL has actually taught me a lot more in breaking down the tests and what I should be looking for and why it's important to me as an intervention specialist. Those are the things that we didn't have, a school psych come into our class and do a presentation. We didn't have someone break down an ETR from a different perspective other than my professor. I gained that knowledge by asking peers within the field. So just sitting down with other intervention specialists on my team that may have had my caseload in the past, collecting their thoughts. So that's kind of what I think helped me mostly just reaching out and when I need help as an adult, I ask for it and I wish I could go back and ask it as an undergrad.

SP1: Through my colleagues. At SCHOOL DISTRICT, the head intervention specialist along with other preschool teachers have been amazing about walking me through things. If I have a question, I ask the question. Answering the questions and looking over IEPs and making sure I filled them in correctly, so definitely my colleagues have been picking up my slack as they say.

SE1: I mean reaching out to my mentor teacher from student teaching, I talked with her all the time on stuff. I go to previous teachers that I've worked with before I was even in college that when I was in middle school and high school, my home school special ed. Teachers, like my high school special ed. Teachers. I go to them for a lot of stuff because I have a relationship with them already and they answer my questions. And frankly, all my co-workers at SCHOOL DISTRICT. I go to them for everything."

SE2: Yes, oh my gosh, I could talk about this part for hours. I think that every educator needs a dedicated mentor. Now I know everyone goes through the RESA process, that resident educator summative assessment. I just finished mine and I luckily was able to have the same mentor for the first two years and then she went on to become my facilitator and I don't know where I would be without her.

SH3: I had coworkers who helped me. I'm still trying to learn some of it.

SE3: Through the people that I work with and we had a, I don't know what her title is, a readiness coach, a supervisor, a supporter, I'm not sure, but my first year of teaching we met probably at least once a month, at least if not bi-weekly to write PR-01s, to write IEPs, to write a good ETR, things like that. I mean I'm still learning to this day, and I have been in many different positions already in my four years. So just beginning the experience and the teachers like your veteran teachers that really help you when seeing them in action really has helped me grow as a teacher.

SM1: From people. I have a mentor at my school. She's the head of the special education department and her and another lady, they've both been working there for 30 plus years. They just kind of took me under their wing.

SM2: I was incredibly lucky. I just was in a resource room with a special ed. teacher who was a little older than me, but she had tons of experience and I honestly learned so much from her. Yeah, so we had worked there for a few years, so she was bringing all of that experience with her and she just kind of really clicked together and just like personality wise, you know educational wise, we just did great.

SE4: Definitely leaning on people with more experience. I meet weekly with my mentor and she's really good. She just makes me feel comfortable and not that like I'm an idiot for asking all these things. So, through her and our ESR teacher has been really good and just very involved and then like our student service coordinator checking in with her.

STE1: So, like going into my first year of teaching, I felt like I had no idea what I was doing and I was bugging my mentor teacher so much because I had so many questions about how it all worked and what I was supposed to do and all the things. I felt like I was down in my mentor teacher's room just for like the first month of school. I just, hands-on learning, bouncing off my colleagues and asking questions on the job.

SP2: I will say some of my confidence now also comes from like, you know, in my life confidence and like, you know, the laws and procedures also come just like the experience that I've had working with like professionals at the school that I work for now. I like learning from them.

STM1: I openly communicated with my co-teacher or my partner teacher, my special education director, just areas that I needed more support in and everyone was willing to help and kind of give input and advice on how to do things, show examples and professional development through my school district as well.

SE5: I've talked to people. My district and also outside of my district that are intervention specialist. Otherwise, I probably would have been gone a long time ago too.

SH4: A lot of it has just been collaborating with my new coworkers. I, like I said, I work with a really awesome department who have been very open to sharing resources and telling me "this is why we do it in this order." I think I got very, very lucky with kind of who I stepped in to work with.

The Most Meaningful Experience in Preservice Teacher Training (RQ 5)

Research question five asks what novice special educators describe as their most meaningful learning experience in their preservice program. Three themes emerged from the participants' responses. These include student teaching/field experiences, relationships with specific professors, and specific courses.

Student Teaching/Field Experiences

A central theme arose around student teaching/field experiences as a means of purveying essential knowledge. It has been shown that student teaching and field experiences are a prime way to allow candidates the opportunities to see what teaching really looks like (Swennen, 2020). It was mentioned by many candidates as both a meaningful experience and a way to acquire knowledge missing by classwork. As evidenced by the participants' responses it would appear that this should be a high priority by universities. Twelve of the 15 mentioned their student teaching/field experiences.

SH1: So, I think the most meaningful and the most thing I took away was gaining all those field experiences and being like in the classroom using you know the lessons that I wrote and reflecting upon that.

SH2: Yeah, like I mean I did over 400 hours (field experience) and by fourth one at DISTRICT, I mean I enjoyed it, but I was tired. I've been all over COUNTY, like now I know where I want to teach.

SH3: Probably my student teaching. I was with really good teachers who showed me a little bit about the paperwork, not so much all of it. So that is what I feel like helped me the most and I got the most out of.

SE2: Wow I can't pick one. Like I said, I loved that collaboration with parents (during student teaching). I think that was incredible.

SE3: Working with my cooperating teacher (during student teaching).

SM1: Can I say student teaching? When it came down to it, that was when it became real and it was like actually my job.

SM2: Honestly, I think it was my student teaching or clinical practice, whatever they call it now.

STE1: I think my field coordinator taking the time to make sure I had experiences in different setting like rural, urban, suburban, just making sure that I got like all the pieces and parts to know.

SE4: Oh, most meaningful. I would say, this is hard to pinpoint one thing. I think we got a lot out of being placed like in DISTRICT. It was very eye-opening. I think they can tell you a lot about like we touched on diversity and kid's backgrounds, but until you see it, I don't think it really means as much.

SM2: Honestly, I think it was my student teaching or clinical practice, whatever they call it now.

STM1: It was by far my student teaching placement.

SH4: Honestly, I'd say that thing that I probably learned the most from is when I had to teach online for COVID.

Meaningful Relationships with University Staff

Teacher/student relationships are essential in education. Based on six participants' answers, this fact carries over into postsecondary education. Research shows that positive relationships between professors can contribute to greater achievement for students in university settings (Demir et al., 2019). Universities should strive to hire professors who have the knowledge and dispositional competencies to build such rapport with their preservice teachers.

SE1: My mentor for student teaching was unbelievably helpful.

SM2: I remember there was this one professor, oh I wish I could remember his name, but he just really took education just wasn't a job for him. You know, he was always talking about the struggles that you're going to face, like it's going to get hard, but you're going to make it through.

SE2: And then I had an amazing applied behavioral analysis course. I think their ABA course would be one of the most memorable experiences in college. Everything I learned in there. The professor was wonderful.

STE1: I think my field coordinator taking the time to make sure I had experiences in different setting like rural, urban, suburban, just making sure that I got like all the pieces and parts to know.

SP2: The most meaningful learning experience . . . I really, there's a professor that I've had for it would say like you know, 75% of my courses and I really like her instruction. She was also like my advisor and she's currently like the one

advising me and my practicum as well. Just kind of having that one person to kind of touch with and having like you know, that consistency across the coursework, that has been meaningful.

SE5: The internship with PROFESSOR. That was a strong point with that program because my instructor was just beautiful.

Specific Courses

While many of the participants in research question one spoke to the limitations or lack of quality among some of their coursework. Two participants identified specific courses as their most meaningful experiences during their preservice programs.

SP1: I'm trying to think. An assistive technology course along with a sensory motor course and those were very beneficial.

SE2: And then I had an amazing applied behavioral analysis course. I think their ABA course would be one of the most memorable experiences in college. Everything I learned in there. The professor was wonderful.

Conclusions

To provide meaningful experiences for their students, universities should employ multiple strategies. Providing frequent, meaningful, and diverse student-teaching experiences is essential for preparing students for the working world (Goldhaber et al., 2017). These robust experiences were by far the most frequently cited by the study's participants. Two participants pointed out the importance of providing diverse experiences in multiple types of districts. A variety of experiences expand the prospective teachers' knowledge and skills and allows them to form some idea about what type of placement they one day want to teach in.

Positive relationships with university staff are also effective in helping college students make greater gains (Demir et al., 2019). Six participants cited their relationships with specific professors as the most meaningful experience in their preservice program. For many of these participants, the relationships were close enough to remember their names and the specific courses that they took with them. These professors were passionate about their subject matter and made the students feel as if they were contributing members of the education world. As one participant put it "education wasn't just a job" for that professor. In order to improve student performance, universities need to make it a point to hire individuals who have the ability to form these relationships.

Two participants cited specific courses as their most meaningful experiences. While it can be inferred that a lot of the quality of these depends on the quality of the professor, both participants cited the courses usefulness in their current day-to-day responsibilities. Universities should design classes that provide experiences that are as close to real world scenarios as possible in order to further engage their students.

Final Summary

This study's first question asks "How do practicing special educators in Ohio describe their levels of preparedness to meet the CEC's Initial Practice-Based Professional Preparation Standards after having completed their preservice teacher education programs? Table 4 displays a summary of the participants' ratings in the 10 categories addressed in the CEC's Initial Practice-Based Professional Preparation Standards (2020).

Table 3

Levels of Preparedness to Meet the CEC Standards

Category	Responses		
	Well Prepared	Somewhat Prepared	Not Prepared
	No. of Participants (%)		
Knowledge of relevant legislation	8 (53%)	1 (7%)	6 (40%)
Collaboration			
Families	4 (40%)	3 (30%)	3 (30%)
Paraprofessionals	5 (33%)	0 (0%)	10 (67%)
Related service providers	5 (33%)	1 (7%)	9 (60%)
Co-teaching	7 (47%)	3 (20%)	5 (33%)
Differentiation	6 (67%)	2 (22%)	1 (11%)
Diversity	8 (53%)	4 (27%)	3 (20%)
Content area knowledge			
Reading/language arts	6 (43%)	2 (14%)	6 (43%)
Math	5 (36%)	1 (7%)	8 (57%)
Science and social studies	3 (25%)	0 (0%)	9 (75%)
Knowledge of the effects of disability	7 (50%)	5 (36%)	2 (14%)
Research-based instructional strategies	8 (67%)	2 (17%)	2 (17%)
Assessment			
Administration	6 (40%)	3 (20%)	6 (40%)
Accommodations	5 (38%)	0 (0%)	8 (62%)
Assistive technology	6 (43%)	1 (7%)	7 (50%)
Data-driven decision making	7 (50%)	1 (7%)	6 (43%)
Behavioral and emotional management	2 (13%)	4 (27%)	9 (60%)
Professional responsibilities			
IEPs	5 (33%)	1 (7%)	9 (60%)
ETRs	3 (21%)	0 (0%)	11 (79%)
MDRs	0 (0%)	0 (0%)	10 (100%)
BIPs	3 (23%)	0 (0%)	10 (77%)
Progress reports	2 (13%)	2 (13%)	11 (74%)

From the aforementioned statistics, several inferences can be made. Universities appear to have placed a focus on providing direct instruction in diversity, knowledge of the effects of disability, and research-based instructional strategies. Knowledge of the effects of disability is one of the most basic concepts in special education. It stands to reason that programs are communicating this information in introductory special education classes and through coursework that forces students to explore these disabilities. This is cursory knowledge that all programs should be providing.

Diversity is a topic that has risen to the forefront of education, and universities appear to have evolved to meet this need. As the country has become more diverse, so have our schools. As stated in multiple places within the CEC standards, it is essential that teachers understand how cultural, socioeconomic, and family dynamics affect the learning of students. As previously stated, Strassfield (2019) suggested that this topic was significant enough that teaching candidates should receive specific classes solely dedicated to understanding diversity. Based on the information provided by the participants, this appears to be a best practice that many colleges are employing to provide this knowledge. Candidates in many universities are also being provided with the opportunity to see and work in multiple types of setting before entering the field. Multiple candidates mentioned that their most meaningful experience was working in different settings. While classroom instruction in diversity can be helpful, the reality of working directly with students within their authentic environment is the most effective in helping preservice special educators grow their skills and aid them in determining where they would eventually like to work (Goldhaber et al., 2017). Working in a preferred environment can lead to an increase in teacher self-efficacy and a higher level of

retainment in the field (Clark & Newberry, 2019; Darling-Hammond et al., 2002; Ingersoll et al., 2012; Ondrasek et al., 2020).

Since Marzano's early 2000s work revolutionized the way that educators look at instruction, universities appear to have recognized that their instruction should provide their candidates with direct instruction that has been shown by research to be effective rather than providing strategies that are housed in teacher preference or historical use. With multiple candidates mentioning that they were required to include research-based justifications for using particular strategies within their lessons, it would appear that this added focus has been adopted by programs. Allday et al's (2013) research indicated that teachers are unprepared for this skill when entering the field. Based on the participants' answer, it can be inferred that programs have improved in this area in the last decade.

Based on the participants' answers, it is obvious that there are many areas in which universities are falling short. The most notable is behavior management. Multiple researchers have found that teachers are woefully unprepared for managing difficult behaviors when they enter the field (Freeman et al., 2014). The statements made in these interviews unfortunately reinforced previous research. This lack of preparedness may be a contributing factor to teacher attrition (Clark & Newberry, 2019; Darling-Hammond et al., 2002; Ingersoll et al., 2012; Ondrasek et al., 2020). Universities have failed to adapt in this area.

A possible explanation for many of the shortcomings of programs might be the prevalence of dual licensure programs. More than half of the participants were enrolled in programs that offered both early childhood licensure and special education licensure for kindergarten through 12th grade. Available jobs are very prevalent in special education

due to the nationwide deficit (Buttner, 2021). The increased employability of dual licensure programs makes this an obviously appealing avenue. However, these programs cannot be infinitely long and simply cannot provide the length and breadth of skills necessary for success in both areas. Multiple candidates described only receiving a cursory knowledge of special education in these programs as the majority of their work focused on early childhood topics. With multiple participants finding eventual employment in secondary settings, it would appear that candidates are entering the field without having received the curricular and instructional knowledge necessary for success in their current jobs. As one candidate stated, "I am learning as the kids are learning." As teachers are assumed to be experts in their content area, this is very concerning. Two candidates questioned whether or not the state should allow these programs due to the knowledge deficits these programs create.

Beyond curriculum and instruction, these limitations may also be a contributing factor to candidates' lack of preparation for their professional responsibilities. Seven of the eight candidates who were part of dual licensure programs stated that they left college without knowing how to write an IEP. As this is the most basic of special education documents, it can be inferred that the programs are also not sufficiently covering the additional documents required for special education. There is no reasonable explanation for this as completing these documents is one of the core functions of the special educator. It is possible that universities are relying on cooperating teachers to help candidates grow these skills during student teaching placements. If this is the case, then universities should clearly articulate to their partner schools what they want preservice candidates to experience in this area.

This dual licensure pathway may be a reasonable explanation for candidates' lack of preparation for behavioral and emotional management strategies. The strategies for managing the behavior of young children can be very different from those utilized with secondary students. If a program's focus is on early childhood, candidates who find employment in secondary districts may find themselves unprepared. The levels of preparation for the professional responsibilities related to discipline were exceedingly low. This includes 0% preparedness for manifestation hearings and 23% preparedness for behavior intervention plans. For manifestation hearings, multiple teachers mentioned that they did not even know what this document was. This can be partially explained by the grade levels that some of the participants teach; it may also be theorized that this phenomenon is due to teachers' embarrassment in their ignorance of this process. While some candidates were forthright in their responses regarding manifestations, others may have not mentioned them due to their unfamiliarity. This is continued evidence that both professional responsibilities and behavior are poorly addressed by preservice programs.

As previously stated, an insufficient number of teachers mentioned collaboration with families and differentiation in their answers when responding to the survey questions. This may be due to a failure of the interviewer to ask direct questions of all candidates about these topics. It was the researcher's belief that these would be mentioned by candidates throughout the direct questions about collaboration, professional responsibilities, and instructional strategies. This was not an accurate assumption.

The significant lack of preparedness by special educators in many areas is disconcerting as preparedness can be an indicator of longevity in the field (Clark & Newberry, 2019; Darling-Hammond et al., 2002; Ingersoll et al., 2012, Ondrasek et al.,

2020). Some of the deficits found in this study are consistent with previous research regarding specific areas of preparedness. However, they are contradictory to Caniglia's (2016) and Bruno et al.'s (2018) findings regarding overall preparation for the CEC standards. While their studies utilized the 2012 CEC standards, many of the themes were similar to those found in the updated standards. This may be explained by the geographical limitation of the study regarding both the participant population and the location of the universities that they attended.

For research question numbers four and five a similar theme emerged regarding the importance of learning from the profession's veterans. This theme was present for both the most meaningful student experience and the eventual acquisition of missing knowledge. Candidates mentioned the importance of their relationships with cooperating teachers during their student teaching as well as their professors. A large majority of them also mentioned being mentored by veteran teachers within their individual districts. The similarity in these themes indicates that relationships are essential in acquiring new skills as a special educator (Moulding et al., 2014).

Best practices for teacher education programs can be seen throughout the participants' answers. Frequent and specifically targeted field experiences are necessary for providing teaching candidates for real world experiences. Offering specific coursework related to the items present in the standards is another best practice. For example, the offering of courses specific to diversity helps candidates to develop an understanding of how to address this theme in their day-to-day work lives. The offering of classes specifically related to the knowledge of the effects of disability have also been shown to be effective in imparting this knowledge. The importance of faculty and

mentoring relationships is another area that universities need to prioritize. Colleges should be very intentional with their recruitment and hiring efforts so that they can acquire staff that not only are knowledgeable about their content but are also able to build relationships with students.

The findings within this study indicate that universities have a long way to go towards improving the quality of their programs and the level of preparedness that they are administering to their students. While some colleges have made growth in some areas, there are more areas where students are unprepared than they are well prepared. Another finding indicates that universities are inconsistent in their practices and the content that they offer. While some programs offered classes specific to professional responsibilities, others did not. Some universities offered classes specific to applied behavioral analysis, others did not. Accreditation organizations should make an effort to ensure that preservice programs are offering similar levels of preparation for all of their candidates.

Lastly, universities who offer dual licensure programs should add additional classes specific to special education. They should recognize that due to the nationwide special educator shortage, candidates may have a better chance of being employed in special education instead of early childhood education. They also need to recognize that content area instruction at all levels of the Ohio content standards is necessary for these candidates as there is a chance that these prospective teachers are employed at the secondary level because of their board licensure.

CHAPTER V

DISCUSSION AND FURTHER RESEARCH

Introduction

Due to an attrition rate of nearly twice their general education counterparts, the United States education system is currently facing a nationwide shortage of special education teachers (Buttner, 2021). Several researchers (Clark & Newberry, 2019; Darling-Hammond et al., 2002; Ingersoll et al., 2012; Ondrasek et al., 2020) have demonstrated that increased teacher preparedness led to increased efficacy and increased longevity in the field. It is therefore imperative that preservice licensure programs produce special educators who are ready for the field. Previous studies gave conflicting accounts of the levels of preparedness that were being produced by America's universities. Although some researchers found that special educators felt prepared overall for their work (Bruno et al., 2018; Caniglia, 2016), others found that preservice training is lacking in critical areas (Allday et al., 2013; Beck & Sutter, 2020; Biggs et al., 2019; Chitiyo & Brinda, 2018; Flower et al., 2017). The present study contributes to the already existing body of research by assessing the levels of preparedness reported by novice special educators in Northeast Ohio to meet the Council for Exceptional Children's Initial Practice-Based Professional Preparation Standards (2020). This study also gleaned information adjacent to this topic. The study's research questions follow:

1. How did practicing special educators in Ohio describe their levels of preparedness to meet the CEC's Initial Practice-Based Professional Preparation Standards after having completed their preservice teacher education programs?

2. Which aspect(s) of their positions did special education teachers in Ohio feel most prepared when completing their preservice teacher education programs and entering the field?
3. Which aspect(s) of their position did special education teachers in Ohio feel least prepared when completing their preservice teacher education programs and entering the field?
4. For the area(s) in which participants perceived themselves as unprepared, how was this standard of knowledge or practice eventually obtained (e.g., mentoring, job-imbedded professional development, etc.)?
5. What were the most meaningful and effective learning experiences that participants experienced during their preservice education program?

In this study, 15 novice special education teachers who were within their first five years of service participated in semi-structured interviews. All of the study's participants were, during the study, employed as special educators within public school districts in Northeast Ohio. The participant population represented eight different school districts, three different district typologies, seven different universities, and all age groups of compulsory public education. The study's interview questions were designed to gain insight into the level of preparedness that these teachers experienced as a result of their preservice programs. Additionally, participants were asked to share their most meaningful preservice learning experiences as well as how they eventually acquired knowledge not provided by their licensure programs.

Summary of Findings

Research Question One

Through research question one the researcher gained insight into the preparation received by novice special educators prior to entering the field. In analyzing the data provided by participants, the researcher identified 10 themes which the researcher based upon the CEC's Initial Practice-Based Professional Preparation Standards (2020). Inductive coding was then applied to categorize the participants' answers. Statements made by the participants were used as evidence to classify participants as well prepared, somewhat prepared, and not prepared in each of the following categories:

1. Knowledge of Relevant Legislation
2. Collaboration
3. Differentiation
4. Diversity
5. Content Area Knowledge
6. Knowledge of the Effects of Disability
7. Research-Based Instructional Strategies
8. Assessment
9. Behavior and Emotional Management Strategies
10. Professional Responsibilities

Knowledge of Relevant Legislation

Legislation has long driven the evolution of special education in the United States (Lengyel & Vanderbergeijk, 2021). The very first component of the CEC standards espouses that "candidates practice within ethical guidelines and legal policies and

procedures" (CEC, 2020, p. 1). To meet this standard, prospective special educators must be knowledgeable about the legislation that they are required to follow. Fifty-three percent of study participants indicated that they were well-prepared in this area. Seven percent indicated that they were somewhat prepared. These participants indicated that they received in their preparation programs some kind of direct training in the legal aspects of special education either through an introductory course, online module, or a course specifically designed to cover the legalities of special education.

In contrast, 40% of participants indicated that they were not sufficiently prepared in this area. Failing to follow legal policies regarding the education of students with disabilities can have serious ramifications from students, teachers, and school districts (Decker & Brady, 2015). Two participants mentioned that their lack of preparedness in this area made the state licensure test more difficult for them to pass. Another mentioned that they had to lean on colleagues once they started their professional position to gain this knowledge. If special educators fail to follow legal policies, students may not receive the free and appropriate public education that they are entitled to, and districts can be subject to expensive litigation (Decker & Brady, 2015). Considering the high stakes nature of compliance, this is an area that universities need to improve upon to ensure that teaching candidates graduate with the necessary knowledge and skills (Decker & Brady, 2015).

Collaboration

Collaboration is an essential skill for special educators as it takes a variety of individual efforts to ensure that a student with a disability receives an appropriate education (CEC, 2020). Standard seven of the CEC standards (2020) is dedicated solely

to collaboration. Specific mention is made of facilitating and problem-solving with families, paraprofessionals, and other related professionals in order to meet the individualized needs of students. For this reason, four subcategories emerged in this study under the collaboration theme. These subcategories included collaboration with families, paraprofessionals, related service providers, and co-teaching.

Families. Forty percent of participants indicated that they were well-prepared to effectively collaborate with families. Another 30% noted that they were somewhat prepared in this area. Two universities, as reported by participants, required teaching candidates to work directly with students and families with disabilities in both on-campus and off-campus outreach programs. This experiential approach helped to prepare candidates for real work in the field with families. Other teachers stated that in their preparation programs they received specific training by making mock parent phone calls, participation in targeted coursework, or other opportunities in their student teaching/field experiences that enabled them to work directly with families. It is important to note that only 10 of the 15 participants mentioned working with families in their interview responses. The interviewer did not use a specific question to address family collaboration, instead believing that this topic would come up under other categories such as diversity and professional responsibilities.

Paraprofessionals. Paraprofessionals are often an essential team member when working with students with disabilities. Only 33% of participants stated that they received any training or experience in working with paraprofessionals. The ones that were well prepared in this area had the opportunity to work with paraprofessionals during their student teaching/field experiences or had specific coursework that mentioned the

importance of collaborating with other adults. Multiple participants mentioned the stress caused by the difficulty of having to direct and manage adults who often had significantly more experience. As one teacher stated:

> I did not get prepared at all for working with paras. That is, I have a para I work with right now that is older than me. She's been a para for as long as I've been alive, and now I'm like in charge and it's a huge battle that I'm having a hard time dealing with it in the sense of I don't know how to speak to or give directions or what's my responsibility, what's not my responsibility. I mean, I don't even ever remember talking about paraprofessionals ever in college and then I was put into the work world, and I was given a para that I'm in charge of.

This is in keeping with prior research that showed that this area is lacking in preservice special educator training (Biggs et al., 2017)

Related Service Providers. Thirty-three percent of participants stated that they were well prepared upon leaving their preservice programs for collaborating with related service providers (e.g., speech pathologists, occupational therapists, physical therapists, etc.). Another 7% stated that they were somewhat prepared. As such this appears to be another area in which universities need to improve. Some participants mentioned that they received practice working with related service providers within their student teaching/field experiences. A few others mentioned that this topic was covered in some of their classes and that they were required to demonstrate an understanding of how to incorporate related service providers when serving a student's needs.

Co-teaching. Forty-seven percent of participants stated that they were well prepared for co-teaching, while 13% said that they were somewhat prepared. Teachers

who stated that they were prepared in this area were able to co-teach within their field placements. Others stated that they received direct instruction in their coursework where they learned the different models and responsibilities in co-teaching relationships. Previous research (Allday et al., 2013; Chitiyo & Brinda, 2018) showed that this is an area often missed in preservice teacher education. Universities appear to be making growth in this area to keep up with demand as co-teaching has become a very common practice in public school districts.

Differentiation

The ability to differentiate assessments and instruction is important for special educators. Sixty-seven percent of special educators in this study who utilized the term "differentiation" stated that they were well prepared in this area. Twenty-two percent stated that they were somewhat prepared. Multiple teachers stated that they were required to write extensive lesson plans in their preservice programs. These plans had to include ways to differentiate their instruction to meet the needs of different types of students. It is important to note that only nine of the 15 participants used the word "differentiation" in their responses. There was not a specific question for differentiation in the structured interview. It was the hope of the researcher that this topic would arise in the questions about content area instruction, assessment, and instructional strategies.

Diversity

A common theme throughout many of the CEC standards (2020) and components is the ability to work with students from diverse backgrounds. This is an area in which special education teacher preparation programs demonstrated strength. Fifty-three percent of participants stated that they were well prepared in this area. Twenty-seven percent

stated that they were somewhat prepared. Multiple teachers stated that during their preservice teacher education programs they were required to do field placements in multiple districts with varying typologies. This helped them to grow their skills in working with students from diverse backgrounds. Other participants stated that they had courses specifically devoted to diversity and understanding the perspectives of individuals from varying backgrounds. Participants reported that two universities required their teaching candidates to work in programs that served underprivileged families of students with disabilities.

Content Area Knowledge

Component 3.1 of the CEC standards (2020) states that, "candidates apply their understanding of academic subject matter content of the general curriculum to inform their programmatic and instructional decisions for individuals with exceptionalities" (CEC, 2020, p. 2). This standard emphasizes the importance of special educators possessing content area knowledge. Subcategories of this theme emerged for the major core content areas of instruction that students typically receive. These subcategories included reading/language arts, math, and science and social studies. A common complaint by participants was that programs focused on content area for early childhood exclusively instead of providing instruction relevant to those who would later teach at the secondary level. A possible explanation for this is the fact that more than half of the participants attended dual licensure programs. These programs allowed attendees to receive both early childhood and K-12 special education licensure upon completion. This emphasis on early childhood content area, however, left those who eventually found

employment at the secondary level in special education unprepared for the advanced and rigorous content.

Reading/Language Arts. Of the major content areas, reading/language arts was the most commonly addressed by preservice programs. Forty-three percent of participants stated that they felt well prepared in this area, and another 14% stated that they were somewhat prepared. In this area multiple participants stated that their programs included a number of classes in early literacy and reading intervention. However, there were multiple complaints that this instruction was not age appropriate for higher levels of public education and often were only focused on the act of reading, not necessarily the Ohio academic content standards for language arts.

Math. Thirty-six percent of participants stated that they were well-prepared for teaching math content. Seven percent stated that they were somewhat prepared. As math is often an area where students with disabilities struggle (Schulte & Stevens, 2015), it is concerning that such a low number of participants felt prepared in this area. This, again, can be partially attributed to the prevalence of dual licensure programming.

Science/Social Studies. Although science and social studies are not specifically areas in which a student can qualify for a disability, students often struggle in these areas due to poorly developed reading and math skills (Scruggs et al., 2008). Special educators are often called upon to co-teach or provide interventions in these content areas (Scruggs et al., 2008). A staggering 75% of participants stated that they were unprepared in these areas. Universities need to recognize that general education content area knowledge is essential for special educators and must make a more robust effort toward providing teaching candidates with higher levels of preparation in these areas.

Knowledge of the Effects of Disability

One of the most basic knowledge competencies required for special educators is understanding different types of disabilities and how those disabilities may affect the students that they are serving (CEC, 2020). Based on the results of this survey, providing this knowledge is a strength for universities. Fifty percent of participants stated that they were well prepared in this area. Thirty-six percent stated that they were somewhat prepared. Participants stated that they had direct instruction in this area through coursework and online modules designed to prepare candidates in this area. The high level of preparation reported by teachers indicates that these are best practices that should continue.

Research-based Instructional Strategies

Providing candidates with training in research-based instructional strategies is another area of strength for universities. Sixty-seven percent of candidates indicated that they were well-prepared in this area. Another 17% stated that they were somewhat prepared. Multiple candidates indicated that they were required to write extensive lesson plans that included research-based justification for the methods used. Other participants mentioned specific strategies such as universal design for learning (UDL) and Marzano strategies that were emphasized throughout the instruction they received. According to Allday et al. (2013), many special educators are unprepared for using research-based instructional strategies when entering the field. Based on the participants' responses, this is not the case with this population of teachers.

Assessment

Component 4.1 of the CEC standards states that, "candidates collaboratively develop, select, administer, analyze, and interpret multiple measures of student learning, behavior, and the classroom environment to evaluate and support classroom and school-based systems of intervention for students with and without exceptionalities" (CEC, 2020, p. 2). Based on this standard and the participants' responses, four subcategories emerged under assessment. These included administration, accommodations, assistive technology, and data-driven decision making.

Administration. Administering assessments is essential for special educators (CEC, 2020). A variety of both formal and informal assessments are commonly utilized to determine the needs of students with disabilities. Forty percent of participants stated that they felt well prepared in this area. Twenty percent indicated that they were somewhat prepared in this area. Participants indicated that they were taught about some of the most commonly used assessments in their coursework. Others indicated that they had the opportunity to administer different types of assessments to their students within their student teaching/field placements. One teacher stated that their university had a lending library of assessments, and teaching candidates were encouraged to check them out and practice administering them. Universities should continue to expose their candidates to opportunities to practice administering both formal and unformal assessments to diagnosis and address the needs of their students.

Accommodations. Students with disabilities are typically entitled to accommodations that help level the playing field when taking assessments. It is often up the special educator to ensure that students are receiving necessary and appropriate

accommodations to meet their needs. Teachers must also be knowledgeable about what accommodations are legally allowed for state required assessments. Based on the answers provided by study participants, this is an area in which teacher education programs need to make growth especially when considering the implications for high stakes testing. Sixty-two percent of participants indicated that they were not prepared in this area. Multiple candidates stated that they had to personally research allowable accommodations as these were not taught in their preservice programs. Teacher education programs would due to well to include instruction in this area to their curriculum.

Assistive Technology. CEC components 4.3 states that "candidates assess, collaboratively analyze, interpret, and communicate students' progress toward measurable outcomes using technology as appropriate, to inform both short- and long-term planning, and make ongoing adjustments to instruction" (CEC, 2020, p. 2). This standard enforces the importance of special educators understanding the available assistive technology for aiding students in overcoming the conditions that their disabilities create. Forty-three percent of survey participants indicated that that they were well prepared in this area. Seven percent indicated that they were somewhat prepared for using assistive technology. Candidates who were prepared stated that they had specific coursework dedicated to the use of instructional technology to aid students.

Data-driven Decision Making. Using data to drive instruction is not only a hot topic in education but is also immersed in multiple standards laid out by the CEC. Fifty percent of participants indicated that they were well prepared in this area. Seven percent indicated that they were somewhat prepared. As this is a pervasive trend in education, it is essential that universities provide instruction in this area. Participants who indicated

that they were prepared in this area had direct instruction in their coursework that required them to utilize data to plan out instruction and accommodations in order to serve students. Those who were not prepared expressed frustration in how often this lack of knowledge has impacted their work performance, both in instruction and in progress monitoring.

Behavioral and Emotional Management

Instructing prospective teachers how to manage difficult behavior is an area in which universities need to make considerable growth. Component 6.3 of the CEC standards (2020) states that, "candidates systematically use data from a variety of sources to identify the purpose or function served by problem behavior to plan, implement, and evaluate behavioral interventions and social skills programs, including generalization to other environments." Only 13% of participants indicated that they were well prepared in this area. Participant after participant expressed frustration with their lack of preparation for dealing with students whose behavioral and emotional struggles are detrimental to the learning environments that they are attempting to create. Flower et al. (2017) found that many universities advertise that they teach research-based behavior management strategies, but this coursework is frequently ineffective. This research appears to be strengthened by the responses of the participants in this study.

Professional Responsibilities

Informing teaching candidates on how to perform their professional responsibilities is another area in which universities need to improve. Completing legally binding documents is a large part of the day-to-day work responsibilities of a special education teacher. The predominant lack of preparation to perform any of these duties is

disconcerting. It is possible that universities are relying on student teaching placements to provide training in these areas; but if this is the case, universities need to closely monitor what specific experiences candidates are receiving and provide training where necessary. This category is divided into five subthemes based upon the documents most commonly completed by special educators.

IEPs. The individualized education plan is the most commonly crafted document by special education teachers. This document outlines the services that the student is entitled to based upon their unique learning needs. Sixty percent of the participants in this study indicated that they left college without being sufficiently prepared to craft this document. Multiple participants indicated that they never had the opportunity to write an IEP in college or were limited to completing only the goal section and did not learn how to craft the remainder of the document. Considering the significant amount of time that intervention specialists have to dedicate to the IEP process and the importance of compliance which is often tied to funding, it is essential that universities improve in this area.

ETRs. In order to qualify for special education services a student must have a current evaluation team report (ETR). While the school psychologist is typically responsible for the largest portion of this document, intervention specialists play a critical role in assessing and reporting on a student's progress in order to determine their needs. Seventy-nine percent of study participants stated that they were unprepared for contributing to ETRs. Universities again need to improve dramatically in this area.

MDRs. When a student with a disability is suspended for more than 10 days, the IEP team is required to meet to determine whether or not the offending behavior is

directly related to the student's disability. The special educator is a required member of this team and is often responsible for facilitating these meetings and completing the corresponding report. There was not a single participant in this study who felt prepared for this responsibility when entering the workforce. Multiple participants stated that they did not know what these meetings even were. It is notable that two of the participants were preschool teachers and therefore these meetings are not applicable to them. It can also be noted that the participants in this study taught in suburban and small-town districts where suspensions and corresponding manifestation are less frequent than in urban districts (Leung-Gagne et al., 2022). Of the 15 participants, only ten spoke directly to their preparation for manifestations. This might be attributed to the participants' complete lack of knowledge of this process.

BIPs. Behavior intervention plans are initialized when a student has a pervasive behavior that impedes their learning or the learning of others. While some districts employ behavior specialists or utilize school psychologists to conduct functional behavioral assessments to determine a student's needs, intervention specialists are commonly called on to craft or contribute to behavior plans. Seventy-seven percent of participants indicated that they were unprepared in this area. This is not surprising considering universities' aforementioned failure to teach preservice candidates how to address student behavior.

Progress Reports. Intervention specialists are required to report progress on IEP goals as often as they report grades for students non-disabled counterparts. Seventy-four percent of subjects stated that they were unprepared for preparing these reports when entering the field. These documents again are legally required. As with all of the

aforementioned documents, failing to complete compliant progress reports can result in litigation (Decker & Brady, 2015) as these reports can serve as evidence of the district offering a free and appropriate public education. This is yet another area in which preservice preparation needs to improve.

Research Question Two

The second research question asked which areas special educators are most prepared for when entering the field as a result of their preservice training. Based on the participants' statements, three areas distinguished themselves as strengths for teacher preparation programs. These included diversity, knowledge of the effects of disability, and research-based instructional strategies. With 80% of participants indicating that they were either well prepared or somewhat prepared in this area, it is evident that universities have made diversity education a priority. Colleges helped candidates acquire this knowledge through multiple methods including classes with curriculum that was directly related to diversity topics, field placement requirements in districts with different typologies, and volunteer requirements for working in university sponsored community service programs.

Knowledge of the effects of disability was another area where colleges appear to be preparing candidates well overall. With 50% of candidates saying they were well-prepared and 36% saying they were somewhat prepared, this is another area that programs are making a point of emphasis. Participants stated that universities utilized introductory classes and online modules for learning about the specific disabilities that they may encounter in the field. Another participant stated that they were required to do a project where they had to go through each identified area of disability and plan out

research-based interventions to use with students with these deficits. These methodologies appear to have been effect in conveying this knowledge to preservice educators and should continue to be utilized.

Research-based instructional strategies was another area that universities were effectively addressing. Sixty-seven percent of participants stated that they were well prepared in this area. Seventeen percent were somewhat prepared. Multiple participants stated that they were required to write extensive lesson plans and justify their use of instructional strategies through research. Component 5.2 of the CEC standards (2020) states that, "candidates use effective strategies to promote active student engagement, increase student motivation, increase opportunities to respond, and enhance self-regulation of student learning." Universities appear to be rising to the challenge of ensuring that candidates are graduating with this skill set. Allday et al.'s (2013) research indicated that teachers are unprepared for utilizing research-based strategies when entering the field. Based on the participants' answers, it can be inferred that preservice programs have improved in this area in the last decade.

Research Question Three

Research question three asked what areas special educators are least prepared for when entering the field. These areas include professional responsibilities and behavior and emotional management. Only 13% of participants felt well-prepared with managing student behavior. Twenty percent felt somewhat prepared and 67% were unprepared in this area. Multiple participants shared that negative student behavior was very difficult to cope with when entering the field and that they wished they had been taught specific strategies to utilize. As one participant stated, "The one thing I would say like I've really

noticed like my first year teaching that I was not ready for is behaviors with like aggression." Another stated, "I have struggled with this a lot this year. I wish I had gotten more instruction and like strategies to use when a kid is in crisis." Based on the participants' answers in this study, this appears to be an area in which universities need to make substantial growth.

Within the professional responsibilities domain several subcategories emerged based upon the different types of documentation that special educators are required to complete. For the most basic document, the IEP, 60% of teachers were unprepared to create this document. For evaluation team reports, 79% were unprepared. For progress reporting, 74% of teachers reported being unprepared in this area. While these numbers are disappointing, the areas that teachers were least prepared for under the professional responsibilities domain related directly to universities' other major area of failure. Manifestation determination hearings and reports (MDRs) are completed when a student is suspended for more than 10 days due to their behavior. One hundred percent of candidates who mentioned the manifestation process directly stated that they were unprepared in this area. Behavior intervention plans (BIPs) are completed in order to help reduce the occurrence of challenging behavior in students with disabilities. Seventy-six percent of participants indicated that they were not prepared for crafting these plans.

Research Question Four

The fourth research question inquires how novice special educators gain knowledge that was not explicitly provided by their preservice program. Five themes emerged in this area. The most commonly occurring method for attaining missing knowledge was peer mentorship. Ohio's resident educator program requires that new

teachers are assigned a mentor by their district. This relationship between novice teachers and benevolent co-workers willing to provide guidance is an essential component of helping new teachers to develop self-efficacy and to simply survive their first years (Schwan et al., 2020). One candidate stated, “If I didn’t have her, I don’t know where I would have been.” This sentiment was seen over and over as all 15 participants mentioned some form of peer mentoring as a modality for acquiring new job-related knowledge.

Previous life experiences are also valuable teachers in the world of education. Two of the participants specifically mentioned that they had learning disabilities when they were in school and that they used this experience to help fill in the gaps where instruction was missed by their preservice programs. Two other teachers mentioned that where they had grown up influenced their teaching. Specifically, living in diverse neighborhoods had prepared them for the unique learning conditions that can influence students in the classroom.

Other degree programs were also a key component in the acquisition of knowledge and skills for some special educators. Four participants indicated that they had pursued other degrees prior to going to school for their special education licensure. For three of these participants the knowledge they gained prepared them for the general education side of teaching. Special education was added later, perhaps to increase employability. One candidate cited his MBA program as a significant influencer on his skills as a teacher. Through this program he was able to gain necessary math and writing skills that he did not get from his special education licensure program.

Four teachers indicated that they were forced to seek out knowledge on various aspects of the position through self-study. This included frequent use of the Ohio Department of Education's online resources, additional web searches, and signing up for programs that provide information to special educators. These teachers cited the need to gain information on accommodations, content area knowledge, related services, and behavioral management all because their programs did not prepare them sufficiently in these areas.

Lastly, three teachers identified professional development through their school district as a way they acquired necessary knowledge and skills. Darling-Hammond et al. (2017) found that thoughtful and targeted professional development can help increase teacher effectiveness. The teachers who mentioned professional development did so in reference to learning to better co-teach and to better fulfill their professional responsibilities regarding legally binding documentation.

Research Question Five

The final research question addressed by this study hoped to gain insight into what was the most meaningful experience that preservice special education teaching candidates participated in during their programs. The overwhelming majority of teachers identified their field placements and student teaching experiences as the most meaningful. As one participant stated, "That was when it became real." The importance of robust student teaching placements is well documented when it comes to developing educators (Dunst et al., 2020; Swennen, 2020). The statements made by participants in this study are in keeping with previous research and underline the importance of providing frequent and diverse opportunities for candidates to get into the field prior to licensure.

Two other themes emerged out of the participants' answers to this question. These included meaningful relationships with university staff and specific courses. Multiple candidates identified university staff members that they felt influenced their growth in a positive manner and helped them to navigate their preservice programs. Relationships at any level of education, including postsecondary, can aid students in achieving higher levels of self-efficacy and achievement (Moulding et al., 2014). Two participants mentioned specific courses that provided meaningful instruction that directly aided the teacher once they entered the field. These responses demonstrate the importance of universities offering meaningful coursework that has direct relevance to the workforce.

Discussion of Findings

The following section summarizes the new information that can be added to the already existing body of research regarding the preparedness of special education teachers. It is organized based upon each of the study's five aforementioned research questions.

Research Question One

Research question one gauged how novice special educators within the state of Ohio described their preparedness to meet the CEC Initial Practice-Based Professional Preparation Standards (2020) based on the training they received in their respective preservice teacher preparation programs. This question was divided into 10 subthemes based on the skills and knowledge base laid out by the standards. These included:

1. Knowledge of Relevant Legislation
2. Collaboration
3. Differentiation

4. Diversity
5. Content Area Knowledge
6. Knowledge of the Effects of Disability
7. Research-based Instructional Strategies
8. Assessment
9. Behavior and Emotional Management Strategies
10. Professional Responsibilities

The delivery of special education services has long been driven by federal legislation and legal precedents (Lengyel & Vanderbergeijk, 2021). For this reason, it is important that special education teachers are aware of the rights and responsibilities that their students and the families they serve. With 60% of participants reporting that they had some level of preparation in this area, it would appear that some universities did well in this area and some did not. Those who were well prepared in this area reported that they had coursework directly related to IDEA and other legislation that they must operate under. Those who were not prepared reported that they did not have enough training in this area and that too much instructional focus was placed on memorizing acronyms instead of on how these laws apply to the actual practice of special educators. Universities should continue to provide specific coursework to teach relevant legislation while at the same time making sure that teaching candidates understand how to apply it.

The CEC's Initial Practice-Based Professional Preparation Standards (2020) include an entire standard devoted to collaboration. Within this study this theme was broken down into subcategories that included families, paraprofessionals, related service providers, and co-teaching. With 66% of participants reporting some level of preparation

to collaborate with families, it would appear that this is an area in which some universities are doing well. The participants who were well-prepared in this area attended universities that included a "family studies" class or required prospective teachers to collaborate with families through university sponsored programming. These appear to be best practices in imparting this type of training and should be incorporated by all universities. It is important to note that only 10 of the 15 study participants directly addressed their training in regards to preparation for collaborating with families. This may be explained by the fact that there was no direct survey question regarding this aspect. The researcher believed that this topic would arise under the diversity and professional responsibilities questions, but it did not in all instances.

Researchers (Biggs et al., 2018; Caniglia, 2016) showed that intervention specialists were not sufficiently prepared for collaborating with paraprofessionals. This continues to be the case according to the present study. With two-thirds of the study participants being unprepared in this area, universities need to improve in this area. Multiple teachers expressed the stress that came with being unprepared for adult management. That is, being put in charge of other adults who in some cases had been working as paraprofessionals for longer than the new teachers had been alive. The teachers who were prepared in this area had the opportunity to work with paraprofessionals during their field experiences. If universities are relying on school districts to provide these opportunities, then the universities need to closely monitor the experiences their candidates are having and provide additional training if necessary.

Collaborating with related service providers is another area where universities need to make growth. Sixty percent of participants reported that they were unprepared in

this area. Related service providers are often a necessary member of the IEP team and frequently collaborate with special educators to ensure that students' needs are met. Teachers who reported that they were prepared in this area had coursework that taught them about the roles of the other professionals that they might have the opportunity to work with in the field. They also had opportunities to collaborate with paraprofessionals during student teaching. This is another area that universities should improve upon.

Co-teaching has become a frequent practice in most local school districts. As such, it is essential that universities train prospective teachers to effectively collaborate in these relationships. With 67% of participants reporting some level of preparation in this area, it would appear that training for co-teaching differs from program to program. Participants who were well-prepared in this area gained experience in their field or student teaching placements or had specific courses that taught them the most commonly accepted models for co-teaching. With the inclusion movement becoming the norm in public education, prospective teachers need to know how to adequately work alongside general educators. Universities should ensure that teaching candidates have field experiences that not only are diverse by typology but also include different formats for the delivery of services (e.g., resource room, co-teaching, units).

Differentiation is a topic that undergirds many of the CEC's Initial Practice-Based Professional Preparation Standards (2020). This appears to be an area where universities have delivered instruction effectively in many instances with 89% of participants reporting some level of preparation in this area. Multiple participants discussed the requirement to write extensive lesson plans that included planning for differentiating for students based upon their individual needs. It is important to note, however, that only

nine of the 15 participants specifically mentioned differentiation in their responses. This can be explained by the fact that there was not a question that specifically mentioned differentiation as the researcher believed that this topic would arise in other areas.

According to the results of this study, diversity education has become a strength of some teacher education programs. Eighty percent of participants reported some level of preparedness with diversity. Many universities are now including classes specifically dedicated to diversity in their graduation requirements. Universities are also requiring that their candidates participate in field/student teaching experiences that include districts of different typologies. This ensures that candidates deal with diversity firsthand. Beyond those initiatives some universities have developed partnerships with other nonprofit organizations where teaching candidates are required to volunteer to provide assistance to families in need. All of these strategies appear to be working towards producing candidates who enter the field better prepared to help students from a wider array of backgrounds.

According to the CEC standards (2020), special educators need to be experts in content as well as in intervention. Under this category, three subcategories emerged. These included reading/language arts, mathematics, and science/social studies. Teachers reported that the largest focus of their content area instruction was on reading. However, this instruction was geared towards early childhood readers and did not include any instruction on delivering the Ohio content standards for language arts. A smaller number of teachers received some level of math instruction, but it again was mostly geared towards younger students. Seventy-five percent of teachers did not receive any level of preparation to deliver science and social studies instruction. The low level of content area

instruction may be related to the number of participants who participated in dual licensure programs. These programs allowed teachers to acquire an early childhood license and a K-12 special education license upon completion. Many of the participants then found employment at the secondary level and were largely unprepared for the level of content that they were required to deliver to their students. Universities need to ensure that if they are preparing teachers for K-12 licensure that they are also providing content at all levels of education and in the major subjects their candidates may be required to teach.

Knowledge of the effects of disability is another strong area for universities. Eighty-six percent of participants reported some level of preparation in this area. Teachers reported that their universities had coursework that directly related to the major types of disability that candidates are likely to encounter in the field. Some reported that they had projects where they planned interventions to help students with each of the recognized disability categories. Others reported that they completed online modules where they explored the characteristics of different types of disabilities and the interventions most commonly used to assist students with these conditions. As these teaching strategies appear to have been successful, universities should continue to employ them.

Research-based instructional strategies were another area of strength for universities. Eighty-four percent of participants reported some level of preparation for utilizing these types of strategies. Well-prepared candidates in this area stated that they were exposed to widely recognized research-based systems such as Universal Design for Learning (UDL) or Marzano strategies. Multiple candidates stated that within their

extensive lesson planning training they were required to include research-based evidence for why they chose particular strategies that they planned to utilize. These appear to be best practices that universities ought to continue.

The CEC's fourth standard (2020) deals solely with the importance of assessment. According to the CEC (2020), candidates need to be able select, administer, and use the data from assessments in order to gauge what their students know and can do. They should then be able to utilize the data that these assessments produce in order to drive instruction (CEC, 2020). For the purposes of this study, this category was divided into four subthemes These included administration, accommodations, assistive technology, and data-driven decision making. Sixty percent of participants had some level of preparation for administering assessments to students. Candidates in this area discussed having the opportunity to administer both summative and formative assessment during their student teaching experiences. One candidate's university allowed her to utilize a lending library of popular assessments that she in turn checked out and practiced with. These practices appear to have been effective and should be continued by universities.

On the other hand, 62% of teachers reported being unprepared for utilizing accommodations for students. Multiple candidates indicated that they had to do personal research to determine what accommodations they could utilize with students because they were not provided with this information during their preservice program. As special educators are frequently called upon to ensure that their students are getting their appropriate accommodations, it is essential that universities do a better job of providing training in this area.

Component 4.3 of the CEC standards (2020) states that candidates need to be able to utilize technology, when appropriate, to assess students and therefore drive instruction. The preparation for using assistive technology seemed to vary from program to program as 50% of candidates had some level of preparation in this area and the other 50% did not. Candidates who were well-prepared in this area had classes specifically devoted to using educational technology with students.

Present throughout the CEC standards (2020) is the necessity to utilize data to drive instruction. This movement has become a popular trend in education as districts look to use student data to improve instruction and quantify the quality of the instruction that students are receiving. With 57% of participants feeling some level of preparation in this area, it appears that some universities are trying to prepare their students for this trend. Teachers who were well prepared in this area were given student data and were required to utilize it to group students or to plan interventions. Other students were asked to give their own assessments and then use the subsequent data to justify grouping and other instructional decisions within comprehensive lesson plans. These methodologies appear to have been effective and should be adopted by more universities to ensure that a greater percentage of preservice teachers are prepared in this area.

Standard six of the CEC standards (2020) is about behavioral and emotional management. Unfortunately, providing the skills necessary for helping students with behavior and emotional management was a major weakness for the universities in this study. Sixty-seven percent of candidates were not prepared in this area. Such a high number indicates that preservice programs are missing the mark. Under this category teachers stated that they had some general discussions about behavior but were not

prepared for how to manage them when they got into the field. Other teachers simply stated that they had no training in this area at all. Teachers who had some level of preparation in this area had psychology classes where behavioral interventions were taught. Another teacher stated that she had an applied behavioral analysis (ABA) class where managing behavior was covered. Universities should provide specific coursework related to behavioral and emotional interventions so that teachers are more prepared for this area when they enter the field.

Professional responsibilities were another area of deficit for universities in this study. This category was broken into subcategories based on the major types of meetings and documents that special educators must complete. These included IEPs, ETRs, MDRs, BIPs, and IEP progress reports. The IEP is the most basic document that special educators have to complete. These meetings have to take place a minimum of once per year for each student on a special educator's caseload. Sixty percent of participants stated that they were not prepared in this area. A portion of these participants stated that they never had to write an IEP in college and then experienced a high level of stress when they had to begin working on them immediately after entering the work world. Being allowed to graduate and pursue licensure without having been taught how to craft this document is not acceptable. If universities are relying on student teaching placements to impart this knowledge, then they need to closely monitor these placements to ensure that candidates are in fact having these experiences. If that is not possible, they need to hold mock IEP meetings to compensate for the lack of exposure in their placements.

The Evaluation Team Report (ETR) is the document which summarizes the assessments that qualify a student for special education services. While the ETR process

is traditionally led by the school psychologist, the intervention specialist still plays an important role. Typically, the special educator is responsible for some forms of data collection and writing up a report of how the student is performing within his current placement. Seventy-nine percent of teachers interviewed said that they were not prepared for writing or participating in ETRs. Universities again should be ensuring that their students are either experiencing these meetings in their student teaching or within a simulated environment.

Manifestation determinations are meetings that occur whenever a special education student is suspended for more than 10 days. Of the nine participants who discussed their preparation for manifestations, zero felt prepared. It is important to note that these meetings are not applicable to preschool teachers and therefore those two teachers could not speak to their level of preparation. All candidates were asked about manifestations as part of a larger question about professional responsibilities. Multiple candidates shared that they had never heard of a manifestation or still did not know what they were. Others did not mention this document as they answered the question. This may be explained by a hesitancy to seem ignorant of this process. It can also be seen as a part of a bigger problem, the aforementioned lack of instruction when it comes to discipline and behavior within special education.

Behavior intervention plans (BIP) are referred to under the sixth CEC standard (2020). These plans are typically developed in conjunction with the school psychologist or another professional whose primary job responsibility involves managing difficult behavior. Seventy-seven percent of intervention specialists interviewed in this study were unprepared for crafting or contributing to these documents. While these documents are

not written every day, they are part of a special educators' role and universities simply need to do better. Due to the fact that these documents are not as frequent as some of the others, it is possible that teaching candidates do not see them during their field experience. That makes it all the more important that universities create simulations for their students so that they have some frame of reference for these documents when entering the field.

Progress reports for IEP goals are required to be created and sent to parents as often as grades are sent home. These are mandatory documents that all special educators have to send home multiple times a year. Seventy-four percent of participants reported that they were not prepared in this area. If districts fail to properly measure and report progress, districts can be held liable for failing to provide a student with FAPE. This could result in litigation that leads to expensive outplacements or compensatory education. For these reasons, it is imperative that special educators be trained in how to write these documents. While there may be some variability from district to district about what verbiage and format is utilized, teaching candidates should enter the field with a basic understanding of what to do come progress time. As previously mentioned, universities should be monitoring field placements to ensure that experience in this area is taking place or should be providing simulated opportunities to craft these documents within coursework.

Research Question Two

Within this study, universities demonstrated strengths in two major areas. First, universities seem to have prioritized exposing teaching candidates to diversity. With 53% of participants stating that they were well prepared and 27% indicating that they had

some level of preparation in diversity, this appears to now be an area of focus. Participants who were well-prepared in this area stated that their universities offered specific coursework related to working in diverse settings as well as field placement requirements for prospective teachers to experience working in districts with different typologies. Candidates from two universities described volunteer opportunities that they had through university-sponsored community outreach programs. These programs required teaching candidates to work with underprivileged students from the local district in order to provide an authentic learning experience that benefited both students and candidates. This methodology is in keeping with the experiential learning cycle and based on the effectiveness of the experiences described by the candidates, is a best practice that more universities should consider adopting.

Another area of strength for universities was imparting knowledge of the effects of disabilities. Eighty-six percent of participants identified this as an area where they had some level of preparation. Some participants who felt prepared in this area had specific coursework or completed online modules related to each of the major areas of disability. Others completed projects where they were required to describe and plan out interventions for students with specific disabilities. Based on the reported success of these strategies, universities should continue to employ these methodologies to train their teaching candidates.

Research Question Three

Behavior and emotional management and professional responsibilities are the areas in which universities have the most growth to make. The CEC's sixth standard (2020) states that a candidate needs to employ strategies to help students manage their

behavior and emotional well-being and create learning environments that are safe and responsive. The results of this study indicate that universities are not adequately providing the instruction necessary for teaching candidates to meet this standard. Research shows that this is not a new problem (Flower et al., 2017; Klopfer et al., 2019). Universities need to improve the quality and quantity of instruction they offer their teaching candidates so that they are better prepared when they enter the field.

Professional responsibilities are another area that is sorely lacking in preservice special education training. The crafting of legally binding IEPS, ETRs, BIPs, MDRs, and IEP progress reports is an essential need that special educators should be trained for before entering the field. While it can be argued that some of the nuances, processes, and procedures regarding these documents may vary from different to district, some candidates are finishing their programs without even a cursory knowledge of the case management procedures that will take up a significant amount of time in their working life. With 77% of participants being unprepared for behavior intervention plans and 100% being unprepared for manifestation hearings, these two areas of growth for universities are in some ways related. Multiple participants in this study graduated without ever having written the most basic special education document, the IEP. These candidates expressed the stress that this caused as they were immediately called upon to hold a meeting and craft a document when they entered the field. This is simply unacceptable. If universities are hoping for this training to be part of student teaching or field experiences, they need to a do a better job of ensuring that their students really do have these experiences. Otherwise, these responsibilities should be modeled in coursework so that candidates have a frame of reference when entering the field. The few

participants who did feel well-prepared to manage behavior and to conduct their professional responsibilities had specific courses that focused on these areas. As there are major CEC standards (2020) linked to these areas, universities would do well to assign specific courses to these areas and to hold mock meetings or create mock documents that model what candidates will experience in the field.

Research Question Four

Research question four inquired as to how novice special education teachers in Northeast Ohio gain the necessary job-related knowledge and skills that they were not prepared for in their preservice teacher education program. Five subthemes emerged in this category. These included mentoring, job-embedded professional development, other coursework or degrees, life experiences, and self-study.

Mentoring is an essential component of developing new teachers (Schwan et al., 2020). So much so, that all 15 participants mentioned mentoring as a way in which they received the necessary knowledge for their current positions. The state of Ohio has recognized this fact and put into place a mandated mentoring program for teachers entering the profession. The mentoring relationships that participants spoke of often involved not only their officially assigned mentor but also included other staff members willing to share their expertise to ensure these young teachers' survival in the early years of their career. The state of Ohio should continue to require that districts provide this mentoring service as a way of helping ease new teachers into the system. Public school districts and specifically building level administrators would also do well to establish a welcoming and supportive culture in their buildings so that new staff members are

embraced by all of their peers in an effort to see that they succeed and remain in the profession.

Professional development is another way to ensure that teachers receive proper job training (Darling-Hammond et al., 2017). Special education can be very nuanced in the way in which districts offer services or require their intervention specialists to complete documents. As a result of this fact, it is essential that special educators are provided with ongoing professional development to ensure compliance with state mandates regarding documentation as well as best practices in the classroom. District administrators tasked with professional development should ensure that the topics discussed are relevant and applicable to the work lives of new teachers so that they can be active participants in their learning (Knowles, 1978, Merriam, 2001).

Other degree programs can impart knowledge that is critical to helping novice teachers in the classroom. Four teachers in this study had sought previous degrees or licensures and that information was helpful in the teacher's daily work performance. Three of the teachers had pursued or received licensures outside of special education before changing career paths. The knowledge that they gained regarding teaching in general was crucial to their current work. Another participant, however, pointed out that another degree area can be helpful even when it is not education related. One participant spoke about going back to school to complete their MBA. The content area knowledge regarding math and writing that they gained in this program aided them in their current position as a secondary special educator. Without this seemingly unrelated degree they may have experienced difficulty in their current content areas as they did not receive this level of training in their dual licensure special education program.

Life experiences can also be valuable in gaining the knowledge and skills necessary for being a special educator. Two participants mentioned that they had been on IEPs and had first-hand experience as students with disabilities. This previous knowledge of available services and the IEP process aided them as they switched roles from students to teachers. Two other participants mentioned the diversity of their previous living situations as a means of preparing for the field. Living in communities similar to those in which they are teaching can help a teacher to appreciate the challenges and unique perspectives that diversity can create.

Finally, self-study is another viable means for acquiring the skills necessary for the field. A plethora of resources are available online. Both the state of Ohio and the Council for Exceptional Children have online resources for teachers so that they are able to follow legal and ethical guidelines and utilize best practices. The four participants who identified self-study as a viable way to gain knowledge did so in order to learn about accommodations, specific content area knowledge, the role and availability of related services, and behavioral management strategies because they felt their programs did not prepare them sufficiently in these areas. Universities, advocacy groups, and state departments of education should continue to make these resources available online as they appear to be regularly utilized by special educators hoping to grow their skills and inform best practices.

Research Question Five

Research question five hoped to discover what experiences novice teachers in Northeast Ohio described as the most meaningful parts of their respective preservice teacher education program. Three subcategories emerged under this question as a result

of the participants' replies. These included field placements/student teaching, relationships with university staff, and specific coursework that was directly related to workforce readiness.

The overwhelming majority of participants considered their student teaching/field placements as the most meaningful experience in their preservice program. This is not surprising considering previous research which demonstrates the importance of a robust student teaching experience. Candidates espoused their appreciation for having multiple placements in different types of districts and at different age levels. This allowed candidates to have real world experiences that would help them to grow their skills and plan out their own career path. As a primary vehicle for developing preparedness in teaching candidates, universities need to make sure that they are intentional about where their candidates are placed and who they are placed with. As one participant stated, "I had several hours put in which really helped me out a lot because I feel like the experiential learning piece was more of what I needed." Utilizing the experiential learning cycle can be very effective with adults (Clark et al., 2010). One of the assumptions of the theory of andragogy is that adults want relevancy in their learning (Knowles, 1978; Merriam, 2001). Student teaching experiences give candidates the opportunity to apply knowledge directly in the field and to gain immediate feedback in real time. For these reasons, universities who get their students into the field early and often should continue to do so.

Another theme that emerged was meaningful relationships with staff. Relationships and positive rapport with an instructor can increase student efficacy and achievement, even at the collegiate level (Moulding et al., 2014). The participants who

mentioned this theme recalled the patience and kindness that they were treated with at a very critical junction in their lives. In consideration of this, universities should prioritize hiring professors who not only are knowledgeable about their content but also have the interpersonal skills to inspire and to mentor their students.

Lastly, two participants mentioned specific courses that they took as their most memorable experiences. One participant spoke about an educational technology class and a sensory motor class that was most helpful to them. Another spoke to an applied behavioral analysis course. In both of these cases, the participants felt as if these classes were directly related to their daily work. This is again, in keeping with the assumptions of Knowles' theory of andragogy which states that adult learners demand relevancy (Knowles, 1978; Merriam, 2001).

Significance of Study

The following section discusses the manner in which this study's findings fit into the greater body of research about the preparedness of special educators. It was previously unknown how special educators within Northeast Ohio perceived their levels of preparation to meet the CEC's Initial Practice-Based Professional Preparation Standards (2020). Previous research on other demographics of special educators has shown deficits in several key areas of preparation that are referenced within the standards. These deficits include poor preparation for co-teaching (Allday et al., 2013; Chitiyo & Brinda, 2018; Ricci et al., 2017; Sasson & Malkinson, 2021), behavior management (Flower et al., 2017; Freeman et al., 2014;, Klopfer et al. 2019), collaborating with paraprofessionals (Biggs et al., 2019; Caniglia, 2016), and working

with families and other professionals to facilitate the IEP process (Accardo et al. 2020; Beck & Desutter, 2020; Gavish et al., 2016; Strassfield, 2019).

In the area of co-teaching, 47% percent of participants felt that they were well prepared in this area. Another 20% indicated that they were somewhat prepared. With two thirds of the participants reporting that they had some level of preparation in this domain, it can be concluded that universities may have recognized the trend of co-teaching in public schools and are adjusting their curriculum to better suit their candidates. It may also be that the prevalence of co-teaching in public schools has made it common place for prospective teachers to experience inclusive settings while in their field/student teaching placements.

Regarding behavior management, the findings of this study confirmed previous research on the failure of universities to adequately prepare teaching candidates for addressing challenging behavior (Flower et al., 2017; Freeman et al., 2014; Klopfer et al. 2019). With so few teachers being well prepared in this area (13%), it is clear that this is a continued area in need of improvement. Foreman and Markson (2022) found that only 16% of secondary and 9% of elementary teachers had received any instruction in participating in functional behavior assessments. While functional behavioral assessments were not brought up in the structured survey questions, a question was specifically asked about corresponding documents including the manifestation determination review (MDR) and the behavior intervention plan (BIP). Participants were woefully unprepared in these areas with only 23% prepared to participate in BIPs and 0% to perform MDRs. Obviously, behavior management is an area in which universities have significant room for growth.

Both Caniglia (2016) and Biggs et al. (2019) found that special education teaching candidates enter the field unprepared to collaborate with paraprofessionals. The findings of this study confirm these previous discoveries. Only 33% of the participants in this study report being prepared to work with paraprofessionals by their preservice programs. Multiple participants referred to the difficult position that this lack of training created when they entered the field. As the management of paraprofessionals is a component of the CEC standards (2020), it is important that universities do not overlook the importance of preparation in this area.

Several researchers (Accardo et al., 2020; Beck & Desutter, 2020; Gavish et al., 2016; Sewell, 2012; Strassfield, 2019) noted that the ability to work with families and other professionals in the IEP process is often missed by universities. Strassfield (2019) suggests that it is best practice to offer preservice classes or coursework that prepares teaching candidates for dealing with diversity and collaborating with families of differing backgrounds. According to this study's results, this is an area where universities are doing well. Participants cited specific classes dedicated to diversity as well as being required to participate in university-sponsored programs designed to serve the needs of struggling students. Other participants were given multiple field placements and were required to work in districts with different typologies with the hope that this would better prepare them for the field. While all of the candidates spoke to their preparation for diversity in general, only 10 discussed their preparation for specifically working with families. Of these, four felt well prepared and three felt somewhat prepared for interacting with families. This may be attributed to the wording of the questions that were posed.

Although diversity was a strength for universities, the IEP process and collaborating with related service professionals were not. Only 40% of participants had any level of preparation for working with related service providers. Special educators should be knowledgeable about the role of these professionals when they enter the field. Preparation for the IEP process itself was also a weakness for universities in this study. Sixty percent of candidates entered the field unprepared for writing and conducting IEPs. Multiple candidates stated that they had left college never having written an IEP. As this is a major function of the role of the special educator, this is simply unacceptable and an area in which universities need to make immediate improvements.

Participants in this study were also asked to discuss how they eventually acquired job essential knowledge that they did not receive in their preservice programs. They indicated that there were five major ways in which this knowledge was acquired. These methods included mentoring, self-study, professional development, other degree programs, and life experiences. Mentoring was the most frequently mentioned means of knowledge acquisition as all of the candidates mentioned receiving assistance through assigned mentors or through benevolent coworkers who were willing to take them under their wings and help them through what can be a very challenging first few years. This is in keeping with current research that shows that effective mentorship can be essential for building self-efficacy (Schwan et al., 2017). Producing teacher self-efficacy is important because it can be linked to gains in student achievement (Lacks & Watson, 2018; Shahzad & Naureen, 2017).

Effective teacher professional development is another method for building this self-efficacy (Darling-Hammond et al., 2017). Darling-Hammond et al. (2017)

discovered that while much of the professional development that goes on in schools is ineffective, professional development that is content focused, incorporates active learning, and supports collaboration can supply teachers with the necessary knowledge base and confidence to aid their students in gaining higher levels of achievement (Lacks & Watson, 2018; Shahzad & Naureen, 2017). Self-efficacy has also been shown to support longevity in the profession (Clark & Newberry, 2019; Ingersoll et al. 2012; Ondrasek, 2020).

Lastly, this study sought to discover what were the most meaningful experiences that special education teachers had during their preservice program. Responses in this area included student teaching/field experiences, relationships with university staff members, and specific coursework. The overwhelming majority of participants stated that their student teaching/field experiences were the most meaningful. As one teacher stated, "When it came down to it, that was when it became real, and it was like actually my job." The fact that fieldwork was the most commonly referenced experience is not surprising. Research shows that relevant field experiences are one of the most essential parts of a quality teacher education program (Dunst et al., 2020; Swennen, 2020). It is important to note that student teaching and relationships with university staff are closely related. In each case, the professors who stood out enough to be mentioned by the study's participants, were those who oversaw the prospective teacher's field placements. The relationship between the prospective teacher and the cooperating university coordinator is critical (Dreer, 2020; Moulding et al., 2014). According to Moulding et al. (2014), there is a significant correlation between the self-efficacy of teachers entering the field and their perceptions of the support that they received during their student teaching

experience. As previously stated, this self-efficacy is essential as it can be linked to gains in student achievement (Lacks & Watson, 2018; Shahzad & Naureen, 2017) and longevity in the profession (Clark & Newberry, 2019; Ingersoll et al. 2012; Ondrasek, 2020).

The role of the special educator is a challenging one. Districts rely on their special education staff to perform the typical responsibilities of a teacher (e.g. planning, instructing, assessing) with the some of the district's most challenged students. In addition, special educators are expected to fulfill a set of professional responsibilities that includes the preparation of legally binding documents and effective collaboration with specialized staff members. The expectations for this position could be a contributing factor to the high turnover rate of special educators nationwide.

Preservice special education programs are tasked with preparing prospective special educators for the challenging road ahead of them. The results of this study may suggest that there are areas where improvement is needed. Programs should be cognizant of their candidates upcoming responsibilities and should design curriculum and experiences that provide value to their candidates. By increasing the level of preparation that they produce programs may increase the longevity and effectiveness of their graduates (Clark & Newberry, 2019; Ingersoll et al. 2012; Lacks & Watson, 2018; Ondrasek, 2020; Shahzad & Naureen, 2017).

Limitations

There are multiple limitations associated with this study. This study was limited geographically to Northeast Ohio. As such, it cannot be assumed that similar results would be achieved if the study was conducted in another region or state. While most laws

governing special education have been implemented at the federal, rather than the state level, the job expectations of special educators may differ slightly by state.

The use of convenience and snowball sampling resulted in a sample that included teachers from three different typologies of suburban and small-town districts. None of the study's participants came from urban settings. As urban schools can be very different from suburban and small-town schools, the perceptions of preparedness may also vary. For this reason, the results of this study may not be generalizable to teachers in urban districts.

Out of the study's fifteen participants, thirteen were female. This ratio of females to males is above the national mark. Currently, females make up 77% of the nation's teacher work force (NCES, 2023). This disparity could influence the generalizability of the study's results.

This study was also limited to currently practicing special educators within their first five years in the profession. The sample was purposely focused on early career teachers in order to gain a more accurate depiction of preservice experiences. Caniglia (2016) discovered that teachers with six or more years of experience report higher levels of confidence in their abilities due to their professional experience and not necessarily because of the quality of their preservice teacher education program. This study does not make any knowledge claims about the experiences of special educators with more than five years in the profession.

Lastly, this study is based on the 2020 CEC's Initial Practice-Based Professional Preparation Standards. While this is a national set of standards there are other standards upon which a similar study could be based, and this study does not account for any other

standard. While there is likely a significant overlap between the CEC standards and those of other states and organizations, it is possible that universities design their programs to prepare their teaching candidates for different sets of standards.

Recommendations for Future Study

Throughout the conduction of this study, new questions and possible avenues for research emerged. The limitations of this study are a primary source of topics for other studies. The participants in this study were limited to small town and suburban districts. There were no participants from urban districts. It might be worthwhile to study the perceived levels of preparedness of practicing urban special educators as the population and needs of their students can be very different. The geographic limitations of this study may also be fodder for future research. Teachers in this study were limited to the region of Northeast Ohio. Conducting a similar study with teachers from other locations may yield different results.

The typology of universities may also be worth examining. Participants in this study came from a combination of public and private universities within Ohio. Future researchers may wish to compare whether there is a difference in the level of preparation being reported separately by graduates from each type of university or in universities outside of Ohio.

Another interesting topic that emerged was the prevalence of teachers who completed dual licensure programs. Multiple candidates attributed the limitations of their programs to the facts that their colleges allowed them simultaneously to earn both early childhood and special education licensure simultaneously. Although this combination might be appealing to potential students who wish to be as employable as possible,

participants in this study pointed out that this dual licensure approach led to a lack of preparation in many areas related to both special education and to secondary content area knowledge. Future researchers may wish to more closely examine the merits of these programs and their effects, both on their graduates and on special education as a whole.

Conclusion

The purpose of this study was to examine the self-perceived preparedness of special educators in meeting the CEC's Initial Practice-Based Professional Preparation Standards (2020) through the lens of their preservice teacher education program. Additionally, this study examined what other methods special educators utilized to acquire the necessary skills for their position as well as the most meaningful experiences that the participants had in their preservice programs. The study consisted of 15 semi-structured interviews conducted with novice special educators (e.g., within their first five years of service) within the region of Northeast Ohio. Evidence from the interview transcripts was used to rate the participants on 10 separate themes that were present within the CEC standards (2020).

The study determined that while there was a variation between universities in the quality and delivery method of necessary special educator knowledge and skills, overall patterns emerged in the levels of preparedness that universities are producing in their special education graduates. Overall, according to this study's participants, teacher education programs have become effective in preparing their candidates for teaching in diverse settings, utilizing research-based instructional strategies, and providing knowledge of the effects that disabilities have on students. This research demonstrates that universities may need to make significant improvement in the areas of

accommodations, content area knowledge, behavior and emotional management, and professional responsibilities (i.e., crafting IEPs, ETRs, MDRs, BIPs and IEP progress reports).

For those areas that were not well covered by preservice programs, there were five major ways in which study participants gained the essential knowledge and skills necessary for success in the classroom. The most dominant one was mentoring. All 15 participants mentioned that they received some level of formal or informal mentoring support from their districts when they began their career. Participants also cited self-study, district professional development, life experiences, and other degrees as different methods in which they acquired knowledge and skills essential to their current roles.

Lastly, participants were asked to describe the most meaningful experience that they had during their preservice program. Answers to this question fell into three categories. The most commonly cited experience was the student teaching/field experiences. Multiple participants indicated that it was during student teaching that the job became real to them and that having placements in multiple types of districts along with the opportunity to work in multiple settings helped them to narrow down the type of school or student population that they eventually wanted to serve. In response to this question, participants also cited the relationships that they built with university staff members and specific courses that they took.

The shortage of special educators is a problem that continues to plague many districts throughout the country (Buttner, 2021). Through better preservice preparation it may be possible to increase the self-efficacy of special educators and increase their longevity in the field (Clark & Newberry, 2019; Darling-Hammond et al., 2002; Ingersoll

et al., 2012, Ondrasek et al., 2020). The findings of this study contribute to the already existent body of knowledge on this topic and can hopefully be utilized to improve preservice special education teacher preparation.

REFERENCES

Accardo, A. L., Xin, J. F., & Shuff, M. (2020). Special education and teacher preparation and family collaboration, *School Community Journal, 30*(2), 53-72.

Allday, R. A., Neilsen-Gatti, S., & Hudson, T. M. (2013). Preparation for inclusion in teacher education pre-service curriculum. *Teacher Education and Special Education, 36*(4), 298-311, DOI: 10.1177/0888406413497485

Antony, P. J. (2012). Understanding the history, current status, and future of special education in the United States. *Loyola Journal of Social Sciences*, *26*(2), 251-265.

Beck, S. J., & DeSutter, K. (2020). An examination of group facilitator challenges and problem-solving techniques during IEP team meetings. *Teacher Education and Special Education, 43*(2), 127-143. DOI: 10.1177/0888406419839766

Berry, R.L. (2011). Special education teacher burnout: The effects of efficacy expectations and perceptions of job responsibilities. *Western Washington University Graduate School Collection. 127*. https://cedar.wwu.edu/wwuet/127

Biggs, E. E., Gilson, C. B., & Carter, E. W. (2019). "Developing that balance": Preparing and supporting special education teachers to work with paraprofessionals, *Teacher Education and Special Education, 42*(2), 117-131, DOI: 10.1177/0888406418765611

Block, E., Breaud, M., McNulty, C., Papa, T., & Perry, M. (2019). Perspectives of special education: Literature review and interview. *Creative Education, 10*(1), 1973-1981. DOI: 10.4236/ce.2019.109143

Boe, E. E., Shin, S., & Cook, L. H. (2007). Does teacher preparation matter for beginning teachers in either special or general education? *The Journal of Special Education, 41(*3), 158-170.

Boston University Center for Learning and Teaching. (n.d.) Experiential learning. https://www.bu.edu/ctl/guides/experiential-learning/#:~:text=Experiential%20learning%20is%20an%20engaged,by%20reflecting%20on%20the%20experience.&text=Opportunities%20for%20students%20to%20engage,emotionally%2C%20socially%2C%20or%20physically/

Boyd, D. J., Grossman, P. L., Lankford, H., Loeb, S., & Wyckoff, J. (2009) Teacher preparation and student achievement. *Educational Evaluation and Policy Analysis, 31*(4), 416-440. DOI: 10.3102/0162373709353129

Brendle, J., Lock, R. & Piazza, K. (2017). A student of co-teaching identifying effective implementation strategies. *International Journal of Special Education*, *32*(3).

Brownell, M. T., Ross, D. D., Colon, E. P., & McCallum, C. L. (2005). Critical features of special education teacher preparation: A comparison with general teacher education. *The Journal of Special Education, 38*(4), 242-252.

Brownell, M. T., Sindelar, P. T., Kiely, M. T., & Danielson, L. C. (2010). Special education teacher quality and preparation: exposing foundations, constructing a new model. *Exceptional Children, 76*(3), 357-377.

Bruno, L. P., Scott, L. A., & Willis, C. (2018). A survey of alternative and traditional special education teachers' perception of preparedness, *International Journal of Special Education, 33*(2), 295-312.

Buttner, A. (2021). Special education and the teacher shortage. *Frontline Education*. https://www.frontlineeducation.com/blog/special-education-teacher-shortage/#:~:text=12.3%25,that%20of%20general%20education%20teachers/

Cancio, E. J., Larson, R., Marthur, S., Estes, M. B., Johns, B., & Chang, M. (2018). Special education teacher stress: Coping strategies. *Education and Treatment of Children, 41*(4), 457-482.

Caniglia, C. (2016). *Special education teachers' reported preparedness and confidence to implement the 2012 CEC initial level special educator preparation standards*. Washington State University. Research Exchange. https://rex.libraries.wsu.edu/esploro/outputs/doctoral/Special-Education-Teachers-Reported-Preparedness-and/99900581520901842/

Cattell, R. B. (1963). Theory of fluid and crystallized intelligence: A critical experiment, *Journal of Educational Psychology, 54*(1), 1-22.

Chan, S. (2010). Applications of andragogy in multi-disciplined teaching and learning, *Journal of Adult Education, 39*(2), 25-35.

Chitiyo, J., & Brinda, W. (2018). Teacher preparedness in the use of co-teaching in inclusive classrooms. *Support for Learning, 33*(1), 38-51. DOI: 10.1111/1467-9604.12190

Clark, R. W., Threeton, M. D. & Ewing, J. C. (2010). The potential of experiential learning models and practices in career and technical education & career and technical teacher education, *Journal of Career and Technical Education, 25*(2), 46-61.

Clark, S., & Newberry, M. (2019). Are we building teacher self-efficacy? A large-scale study examining teacher education experiences. *Asia-Pacific Journal of Teacher Education, 47*(1), 32-47. https://doi.org/10.1080/1359866X.2018.1497772/

Cochran-Smith, M., & Dudley-Marling, C. (2012). Diversity in teacher education and special education: The issues that divide. *Journal of Teacher Education, 63*(4). https://doi.org/10.1177/0022487112446512/

Coe, R., Aloisi, C., Higgins, S., & Major, L. E. (2014) What makes great teaching? Review of the underpinning research, Sutton Trust

Coots, J. J. (2007). Building bridges with families: Honoring the mandates of IDEIA. *Issues in Teacher Education, 16*(2), 33–40.

Council for Exceptional Children. (2015a). What every special educator must know: Code of Ethics, *Council for Exceptional Childre*n, https://exceptionalchildren.org/sites/default/files/2020-07/Code%20of%20Ethics.pdf

Council for Exceptional Children. (2015b). What every special educator must know: Standards for professional practice. *Council for Exceptional Children*, https://exceptionalchildren.org/sites/default/files/2020-07/Standards%20for%20Professional%20Practice.pdf/

Council for Exceptional Children. (2020). Initial practice-based professional preparation standards for special educators. *Council for Exceptional Children*. https://exceptionalchildren.org/standards/initial-practice-based-professional-preparation-standards-special-educators

Darling-Hammond, L. (2000a). *Studies of excellence in teacher education: Preparation at the Graduate Level.* Washington, DC: AACTE Publications.

Darling-Hammond, L. (2000b). Teacher quality and student achievement. *Education Policy Analysis Archives*, *8*(1). https://doi.org/10.14507/epaa.v8n1.2000

Darling-Hammond, L. (2009). *Educational opportunity and alternative certification: New evidence and new questions.* [Policy brief]. Stanford Center for Opportunity Policy in Education. https://edpolicy.stanford.edu/sites/default/files/publications/educational-opportunity-and-alternative-certification-new-evidence-and-new-questions.pdf/

Darling-Hammond, L. (2014). Strengthening clinical preparation: The holy grail of teacher education. *Peabody Journal of Education, 89*(4), 547-561.

Darling-Hammond, L., Chung, R., & Frelow, F. (2002). Variation in teacher preparation: How well do different pathways prepare teachers to teach? *Journal of Teacher Education, 53*(4). 286-302. doi:10.1177/0022487102053004002

Darling-Hammond, L., Hyler, M. E., Gardner, M., & Espinoza, D. (2017). Effective teacher professional development. *Learning Policy Institute*

Decker, J., & Brady, K. (2015). Increasing school employees' legal literacy. *Journal of School Public Relations. 36*(3), 231-259.

Demir, M., Burton, S., & Dunbar, N. (2019). Professor-student rapport and perceived autonomy support as predictors of course and student outcomes. *Teaching of Psychology, 46*(1), 22-33. DOI: https://doi.org/10.1177/0098628318816132

Dreer, B. (2020). Towards a better understanding of psychological needs of student teachers during field experiences. *European Journal of Teacher Education, 43* (5), 676-694. https://doi.org/10.1080/02619768.2020.1744557/

Dunst, C. J., & Bruder, M. B. (2014). Preservice professional preparation and teachers' self-efficacy appraisals of natural environment and inclusion practices, *Teacher Education and Special Education, 37*(2), 121-132, DOI: 10.1177/0888406413505873

Dunst, C. J., Hambry, D. W., Howse, R. B., Wilkie, H., & Annas, K. (2020). Research synthesis of meta-analyses of preservice teacher preparation practices in higher education. *Higher Education Studies, 10*(1), 29-47.

Dweck, C. S., Walton G. M., & Cohen, G. L. (2014). *Academic tenacity: Mindsets that promote long-term learning*. Bill and Melinda Gates Foundation. https://ed.stanford.edu/sites/default/files/manual/dweck-walton-cohen-2014.pdf/

El Paso Society for Human Resource Management. (2022, June 16) *Workforce readiness*. http://www.epshrm.org/page-18065#:~:text=Introduction,required%20in%20their%20respective%20occupations/

Etscheidt, S.K. (2006). Progress monitoring: Legal issues and recommendations for IEP teams. *Teaching Exceptional Children, 38*(3), 56-60. https://doi.org/10.1177/004005990603800308

Feng, L., & Sass, T. R. (2013). What makes special education teachers special? Teacher training and achievement of students with disabilities. *Economics of Education Review, 36*(1), 122-134. http://dx.doi.org/10.1016/j.econedurev.2013.06.006/

Fitchett, P. G., & Heafner, T. L. (2018) Teacher quality or quality teaching? Eighth grade social studies teachers' professional characteristics and classroom instruction as predictors of U.S. history achievement, *Research in Middle Level Education (RMLE) Online, 41*(9), 1-17.

Flower, A., McKenna, J. W., & Haring, C. D. (2017). Behavior and classroom management: Are teacher preparation programs really preparing our teachers? *Preventing School Failure: Alternative Education for Children and Youth, 61*(2), 163-169. http://dx.doi.org/10.1080/1045988X.2016.1231109/

Foreman, K. & Markson, C. (2022). Students with disabilities and suspension rates: A cautionary tale for school districts. *Department of Education*

Freeman, J., Simonsen, B., Briere, D. E., & MacSuga-Gage, A. S. (2014). Pre-service teacher training in classroom management: A review of state accreditation policy and teacher preparation programs. *Teacher Education and Special Education, 37*(2), 106-120, DOI: 10.1177/0888406413507002

Fullan, M., & Hargreaves, A. (2013). The power of professional capital: With an investment in collaboration, teachers become nation builders. *The Learning Professional, 34*(3), 36-39.

Gavish, B., Ban-On, S., & Shein-kahalon, R. (2016). Beginning special education teachers in Israel: Perceived self-efficacy. *International Journal of Special Education, 31*(1), 10-22.

Goldhaber, D., Krieg, J. M., & Theobald, R. (2017). Does the match matter? Exploring whether student teaching experiences affect teacher effectiveness. *American*

Educational Research Journal, 54(2), 325-359. DOI: http://doi.org/10.3102/0002831217690516/

Goldhaber, D., Liddle, S., & Theobald, R. (2013). The gateway to the profession: Assessing teacher preparation programs based on student achievement. *Economics of Education Review, 34*(1), 29-44.

Green, A. L., McKenzie, J., Lewis, T. J., & Poch, A. L. (2021). From NCLB to ESSA: Implications for teacher preparation and policy. *Journal of Disability Policy Studies, 32*(3), 204-211. https://doi.org/10.1177/1044207320945397/

Hattie, J. (2018). *Hattie ranking: 252 Influences and effect sizes related to student achievement*. Visible learning. https://visible-learning.org/hattie-ranking-influences-effect-sizes-learning-achievement

Henry, G. T., Bastian, K. C., Fortner, C. K., Kershaw, D. C., Purtell, K. M., Thompson, C. L., & Zulli, R. A. (2014). Teacher preparation policies and their effects on student achievement. *Education Finance and Policy, 9*(3), 264-303, doi:10.1162/EDFP_a_00134

Hoaglund, A. E., Birkenfeld, K., & Box, J. A. (2014). Professional learning communities: Creating a foundation for collaboration skills in pre-service teachers. *Education, 134*(4), 521-528.

Holmes, L., & Schumacker, R. (2020). Latent analysis of teacher characteristics: Can we identify effective teachers? *Measurement: Interdisciplinary Research and Perspectives, 18*(2), 75-86. https://doi.org/10.1080/15366367.2019.1657350/

Ida, Z. S. (2017). What makes a good teacher? *Universal Journal of Educational Research, 5*(1), 141-147. DOI: 10.13189/ujer.2017.050118

Ingersoll, R., Merril, L., & May, H. (2012). Retaining teachers: How preparation matters. *Educational Leadership: Supporting Beginning Teachers, 69*(8), 30-34. Retrieved from http://www.gse.upenn.edu/pdf/rmi/EL-May2012.pdf/

Joyce, J., Harrison, J.R., & Gitomer, D.H. (2020). Modifications and accommodations: A preliminary investigation into changes in classroom artifact quality. *International Journal of Inclusive Education, 24*(2), 181-201, DOI: 10.1080/13603116.2018.1453876

Kaufman, D. (1996). Constructivist-based experiential learning in teacher education, *Action in Teacher Education, 18*(1), 40-50.

Kim, L. E., Oxley, L., & Asbury, K. (2021). What makes a great teacher during a pandemic? *Journal of Education for Teaching, 48*(1), 129-131.

Klopfer, K. M., Scott, K., Jenkins, J., & Ducharme, J. (2019). Effect of classroom management training on attitudes and skills for teaching children with emotional and behavioral problems: A randomized control trial. *Teacher Education and Special Education, 42*(1), 49-66. DOI: 10.1177/0888406417735877

Knowles, M. (1978). Andragogy: Adult learning theory in perspective. *Community College Review, (5)*3, 9-20.

Koch, K. A. (2016). The influence of parenting experience on special education teacher's pedagogy. *International Journal of Special Education, 31*(3), 2-20.

Koppich, J. E. (2000). Trinity university: Preparing teachers for tomorrow's schools. In L. Darling-Hammond (Ed.), *Studies of excellence in teacher education: Preparation in a five-year program* (pp. 1–48). Washington, DC: AACTE Publications.

Kurth, J. A., Allcock, H., Walker, V., Olson, A., & Taub, D. (2021). Faculty perceptions of expertise for inclusive education for students with significant disabilities. *Teacher Education and Special Education, 42*(2), 117-133. https://doi.org/10.1177/0888406420921582/

Lacks, P., & Watson, S. B. (2018). The relationship between school climate and teacher self-efficacy in a rural Virginia school system. *School Leadership Review, 13*(1), 48-58.

Lee, A. (2022, June 16) *What is a functional behavioral assessment (FBA)?* Understood. https://www.understood.org/en/articles/functional-assessment-what-it-is-and-how-it-works/

Lengyel, L. S. & Vandergeijk. (2021, June). A brief of special education: Milestones in the first 50 years. *EP Magazine*. https://reader.mediawiremobile.com/epmagazine/issues/207207/viewer/

Leung-Gagne, M., Mccombs, J. Scott, C. & Losen, D.J. (2022). Pushed out: Trends of disparity in out-of-school suspension. *Learning Policy Institute*.

Markelz, A., Riden, B., & Scheeler, M.C. (2017). Generalization training in special education teacher preparation: Does it exist? *Teacher Education and Special Education, 40*(3), 179-193, DOI: 10.1177/0888406417703752

Marzano, R., Pickering, D., & Pollock, J. (2001). Classroom instruction that works. *Association for Supervision and Curriculum.*

McGovern, M. (2015). Least restrictive environment: Fulfilling the promises of IDEA. *Widener Law Review, 21*(1), 117-137.

Mehta, J. & Fine, S. (2015). Bringing values back in: How purposes shape practices in coherent school design. *Journal of Educational Change, 16*(4), 483-510. DOI 10.1007/s10833-015-9263-3

Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education, 89*(1), 3-13.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.

Morin, A. (2022, June 20). *IEP and special education terms*. Understood. https://www.understood.org/en/articles/iep-terms-to-know?_sp=ef2da1a0-c8ed-466c-9a27-920e798c440a.1655920657948

Moulding, L. R., Stewart, P. W., & Dunmeyer, M. L. (2014). Pre-service teachers' sense of efficacy: Relationship to academic ability, student teaching placement characteristics, and mentor support. *Teaching and Teacher Education, 41*(1), 60-66. http://dx.doi.org/10.1016/j.tate.2014.03.007/

National Center for Educational Statistics. (2023, May). *Characteristics of Public School Teachers.* https://nces.ed.gov/programs/coe/indicator/clr/public-school-teachers

National Science Teaching Association. (2022, June 17) *Pre-service Teacher Resources*. https://www.nsta.org/levels/pre-service-teachers/

Neuenschwander, J. A. (1978). Remembrance of things past: Oral historians and long-term memory. *The Oral History Review, 6*(1), 45-53. https://www.jstor.org/stable/25066073?seq=1#metadata_info_tab_contents/

Nisbett, R. E. (2013). Schooling makes you smarter: What teachers need to know about IQ. *American Educator,* Spring 2013. https://www.aft.org/periodical/american-educator/spring-2013/schooling-makes-you-smarter/

Ohio Department of Education. (2017, April). *A guide to parent rights in special education: Special education procedural safeguards notice*. Ohio Department of Education. https://education.ohio.gov/Topics/Special-Education/A-Guide-to-Parent-Rights-in-Special-Education

Ohio Department of Education. (2019, June 20). *Typology of Ohio school districts.* https://education.ohio.gov/Topics/Data/Report-Card-Resources/Report-Card-Data-Forms-and-Information/Typology-of-Ohio-School-Districts

Ondrasek, N., Carver-Thomas, D., Scott, C., & Darling-Hammond, L. (2020). *California's special education teacher shortage.* Policy and Analysis for California Education. https://edpolicyinca.org/sites/default/files/2020-02/r_ondrasek_feb20.pdf/

Orr, A. C. (2009). New special educators reflect about inclusion: Preparation and K-12 current practice. *Journal of Ethnographic and Qualitative Research, 3*(1), 228-239.

Osewalt, G. (2022, June 16). *4 benefits of inclusive classrooms.* Understood. https://www.understood.org/en/articles/4-benefits-of-inclusive-classrooms/

Perera, A. (December 14, 2020). Fluid vs. crystallized intelligence, *Simply Psychology*. https://www.simplypsychology.org/fluid-crystallized-intelligence.html#:~:text=Fluid%20intelligence%20involves%20comprehension%2C%20reasoning,the%20performance%20of%20many%20tasks/

Prather-Jones, B. (2011). "Some people aren't cut out for it": The role of personality factors in the careers of teachers of students with EBD. *Remedial and Special Education, 32*(3), 179-191. DOI: 10.1177/0741932510362195

Ricci, L. A. & Fingon, J. (2018). Collaboration and co-teaching perceptions of students. *Networks: An Online for Teacher Research, 20*(2), 1-26, DOI: 10.4148/2470-6353.1260

Ricci, L. A., Zetlin, A., & Osipova, A. V. (2017). Preservice special educators' perceptions of collaboration and co-teaching during university fieldwork: Implications for personnel preparation. *Teacher Development, 21*(5), 687-703, https://doi.org/10.1080/13664530.2017.1293561/

Sasson, I., & Malkinson, N. (2021). Co-teaching based professional development, *Journal of University Teaching and Learning Practice, 18*(6), 82-99.

Scheeler, M. C., Budin, S., & Markelz, A. (2016). The role of teacher preparation in promoting evidence-based practice in schools. *Learning Disabilities: A Contemporary Journal, 14*(2), 171-187.

Schneider, J. (2018). Marching forward, marching in circles: A history of problems and dilemmas in teacher preparation. *Journal of Teacher Education, 69*(4), 330-340, DOI: 10.1177/0022487117742904

Schulte, A. C., & Stevens, J. J. (2015). Once, sometimes, or always in special education: mathematics growth and achievement gaps. *Exceptional Children, 81*(3) 370-387.

Schwan, A., Wold, C., Moon, A., Neville, A. & Outka, J. (2020). Mentor and new teacher self-perceptions regarding the effectiveness of a statewide mentoring program. *Critical Questions in Education 11*(3).

Scruggs, T. E., Mastropieri, M. A., & Okolo, C. M. (2008). Science and social studies for students with disabilities. *Focus on Exceptional Children 41*(2), 1-24.

Sewell, T. (2012). Are we adequately preparing teachers to partner with families? *Early Child Education Journal, 40*(1), 259-263. DOI 10.1007/s10643-011-0503-8

Shahzad, K., & Naureen, S. (2017). Impact of teacher self-efficacy on secondary school students' academic achievement. *Journal of Education and Educational Development, 4*(1), 48-72.

State Support Team 6. (2022, June 16) *IDEA Essential Components*. https://www.sst6.org/EssentialComponents.aspx/

Strassfield, N. M. (2019). Preparing pre-service special education teachers to facilitate parent involvement, knowledge, and advocacy: Considerations for curriculum. *Teacher Education and Special Education, 42*(4), 283-296, DOI: 10.1177/0888406418806643

Swennen, A. (2020). Experiential learning as the "new normal" in teacher education. *European Journal of Teacher Education, 43*(5), 657-659. https://doi.org/10.1080/02619768.2020.1836599/

The CEEDAR Center & The Center on Great Teachers and Leaders. (2020) *Preparing and retaining effective special education teachers: Short-term strategies for long-term solutions* [Policy brief]. U.S. Department of Education, Office of Special Education Programs. https://ceedar.education.ufl.edu/wp-content/uploads/2020/01/CEEDAR-GTL-Shortages-Brief.pdf/

The Outreach Center for the Deafness and Blindness. (2022 June, 16). *MedEd connections resource guide: Deaf and hard of hearing (D/HH) teachers*. https://deafandblindoutreach.org/meded-connections-dhh/meded-dhh-teachers/

Trochim, W. M., Donnelly, J. P., & Arora, K. (2016). *Research methods: The essential knowledge base*. Cengage Publishing.

U. S. Bureau of Labor and Statistics. (January 24, 2022) https://www.bls.gov/ooh/education-training-and-library/special-education-teachers.htm#tab-2/

Urbach, J., Moore, B. A., Klingner, J. K., Galman, S., Haager, D., Brownell, M. T. & Dingle, M. (2015). "That's my job": Comparing the beliefs of more and less accomplished special educators related to their roles and responsibilities. *Teacher Education and Special Education, 38*(4), 323-336. DOI: 10.1177/0888406415591220

Walker, J.D. & F.J. Brigham. (2017). Manifestation determination decisions and students with emotional/behavioral disorders. *Journal of Emotional and Behavioral Disorders, 25*(2), 107-118. DOI: 10.1177/1063426616628819

Watson, S., Miller, T., Davis, L., & Carter, P. (2010). Teachers' perceptions of the effective teacher. *Research in the Schools, 17*(2), 11-22.

Watt, H. M. G., & Richardson, P. W. (2008). Motivations, perceptions, and aspirations concerning teaching as a career for different types of beginning teachers, *Learning and Instruction, 18*(5), 408-428.

Wehmeyer, M. L. (2022). From segregation to strengths: A personal history of special education. *Phi Delta Kappan, 103*(6), 8-13. https://doi.org/10.1177%2F00317217221082792/

Weinberg, A.E., Sebald, A., Stevenson, C.A., & Wakefield, W. (2019). Toward conceptual clarify: A scoping review of coteaching in teacher education. The Teacher Educator, DOI: 10.1080/08878730.2019.1657214

Woolf, S. B. (2019). Critical skills for special educator effectiveness: Which ones matter most, and to whom? *Teacher Education and Special Education*, *42*(2), 132-146. DOI: 10.1177/0888406418776714

APPENDICES

APPENDIX A

COUNCIL FOR EXCEPTIONAL CHILDREN'S INITIAL PRACTICE-BASED PROFESSIONAL PREPARATION STANDARDS AND CORRESPONDING CATEGORIES

Standard	Research Categories
Standard 1: Engaging in Professional Learning and Practice within Ethical Guidelines.	
Component 1.1: Candidates practice within ethical guidelines and legal policies and procedures	Knowledge of Relevant Legislation Professional Responsibilities
Component 1.2: Candidates advocate for improved outcomes for individuals with exceptionalities and their families while addressing the unique needs of those with diverse social, cultural, and linguistic backgrounds.	Diversity
Component 1.3: Candidates design and implement professional learning activities based on analysis of student learning; self-reflection; and professional standards, research and contemporary practices.	Professional Responsibilities
Standard 2: Understanding and Addressing Each Individual's Developmental and Learning Needs	
Component 2.1: Candidates apply understanding of human growth and development to create developmentally appropriate and meaningful learning experiences that address individualized strengths and needs of students with exceptionalities.	Knowledge of the Effects of Disability
Component 2.2: Candidates use their knowledge and understanding of diverse factors that influence development and learning, including differences related to families, languages, cultures, and communities, and individual differences, including exceptionalities, to plan and	Diversity

implement learning experiences and environments.	
Standard 3: Demonstrating Subject Matter Content and Specialized Curricular Knowledge	
Component 3.1: Candidates apply their understanding of academic subject matter content of the general curriculum to inform their programmatic and instructional decisions for individuals with exceptionalities	Content Area Knowledge
Component 3.2: Candidates augment the general education curriculum to address skills and strategies that students with disabilities need to access the core curriculum and function successfully within a variety of contexts as well as the continuum of placement options to assure specially designed instruction is developed and implemented to achieve mastery of curricular standards and individualized goals and objectives.	Content Area Knowledge Differentiation
Standard 4: Using Assessment to Understand the Learning Environment for Data-based Decision Making	
Component 4.1: Candidates collaboratively develop, select, administer, analyze, and interpret multiple measures of student learning, behavior, and the classroom environment to evaluate and support classroom and school-based systems of intervention for students with and without exceptionalities.	Assessment
Component 4.2: Candidates develop, select, administer, and interpret multiple, formal and informal, culturally and linguistically appropriate measures and procedures that are valid and reliable to contribute to eligibility determination for special education services	Assessment
Component 4.3: Candidates assess, collaboratively analyze, interpret, and communicate students' progress toward measurable outcomes using technology as	Assessment

appropriate, to inform both short- and long-term planning, and make ongoing adjustments to instruction.	
Standard 5: Supporting Learning Using Effective Instruction	
Component 5.1: Candidates use findings from multiple assessments, including student self-assessment, that are responsive to cultural and linguistic diversity and specialized as needed, to identify what students know and are able to do. They then interpret the assessment data to appropriately plan.	Differentiation Assessment
Component 5.2: Candidates use effective strategies to promote active student engagement, increase student motivation, increase opportunities to respond, and enhance self-regulation of student learning.	Research-Based Instructional Strategies
Component 5.3: Candidates use explicit, systematic instruction to teach content, strategies, and skills to make clear what a learner needs to do or think about while learning.	Research-Based Instructional Strategies
Component 5.4: Candidates use flexible grouping to support the use of instruction that is adapted to meet the needs of each individual and group	Research-Based Instructional Strategies
Component 5.5: Candidates organize and manage focused, intensive small group instruction to meet the learning needs of each individual	Research-Based Instructional Strategies
Component 5.6: Candidates plan and deliver specialized, individualized instruction that is used to meet the learning needs of each individual	Differentiation Research-Based Instructional Strategies
Standard 6: Supporting Social, Emotional, and Behavioral Growth	
Component 6.1: Candidates use effective routines and procedures to create safe, caring, respectful, and productive learning environments for individuals with exceptionalities	Behavior and Emotional Management Strategies

Component 6.2: Candidates use a range of preventive and responsive practices documented as effective to support individuals' social, emotional, and educational well-being	Behavior and Emotional Management Strategies
Standard 7: Collaborating with Team Members	
Component 7.1: Candidates utilize communication, group facilitation, and problem-solving strategies in a culturally responsive manner to lead effective meetings and share expertise and knowledge to build team capacity and jointly address students' instructional and behavioral needs	Collaboration
Component 7.2: Candidates collaborate, communicate, and coordinate with families, paraprofessionals, and other professionals within the educational setting to assess, plan, and implement effective programs and services that promote progress toward measurable outcomes for individuals with and without exceptionalities and their families	Collaboration
Component 7.3: Candidates collaborate, communicate, and coordinate with professionals and agencies within the community to identify and access services, resources, and supports to meet the identified needs of individuals with exceptionalities and their families.	Collaboration
Component 7.4: Candidates work with and mentor paraprofessionals in the paraprofessionals' role of supporting the education of individuals with exceptionalities and their families	Collaboration

APPENDIX B

INFORMED CONSENT

Dear Sir or Madam,

I am a student from Youngstown State University. I am conducting a study to investigate the reported preparedness of currently practicing special education teachers within the state of Ohio. In this study, you will be asked to participate in a semi-structured interview about your experiences with your preservice teacher education program and how well it prepared you for your work in the field. I will also need to collect information such as the number of years that you have been teaching, the university you attended, and the school at which you currently work. You will meet with me for one session and your participation will last approximately 20 to 30 minutes. Audio of the interview will be recorded for transcription purposes. This study is limited to participants who are within their first five years of teaching.

You may be at risk of harm because of this research. This harm includes embarrassment that may occur should a breach of confidentiality allow your previous teacher preparation program to know any disparaging remarks made. The likelihood that you will be harmed is minimized because I will store all records of our conversation securely and will not utilize any identifying information in my reports or dissertation.

The benefit to your participation is the satisfaction in knowing that you will help contribute to the body of research surrounding special education preparedness. It is the hope of the researcher that this study and others like it will be used by universities to help improve their programs. Additionally, you will receive a $25 Amazon gift card to compensate you for your time.

Your privacy is important, and I will handle all information collected about you in a confidential manner. I will report the results of the project in a way that will not identify you. I plan to present the results of the study to my dissertation committee in pursuit of my doctoral level degree and may utilize the results for publication.

You do not have to be in this study. If you do not want to, you can say no without losing any benefits that you are entitled to. If you do agree, you can stop participating at any time. If you wish to withdraw, just tell me.

If you have any questions about this research project please contact Ian Miller at (440)488-3569 or by email at ibmiller@student.ysu.edu. If you have any questions about your rights as a participant in a research project, you may contact the Office of Research Services at YSU (330) 941-2377 or at YSUIRB@ysu.edu.

I understand the study described above and have been given a copy of this consent document. I am 18 years of age or older and I agree to participate.

_____

Signature of Participant Date

APPENDIX C

IRB PERMISSION LETTER

2023-164 - Initial: Initial - Exempt

do-not-reply@cayuse.com <do-not-reply@cayuse.com>
Thu 1/19/2023 11:32 AM
To:Ian B Miller <ibmiller@student.ysu.edu>;Rodney Rock <rdrock@ysu.edu>

YOUNGSTOWN STATE UNIVERSITY

Jan 19, 2023 11:32:01 AM EST

Rodney Rock
Teacher Ed and Leadership St

Re: Exempt - Initial - 2023-164 Are They Ready for This? The Reported Preparedness of Special Educators in Northeast Ohio

Dear Dr. Rodney Rock:

Youngstown State University Human Subjects Review Board has rendered the decision below for Are They Ready for This? The Reported Preparedness of Special Educators in Northeast Ohio

Decision: Exempt

Selected Category: Category 3.(i)(A). Research involving benign behavioral interventions in conjunction with the collection of information from an adult subject through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information collection.
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,
Youngstown State University Human Subjects Review Board

APPENDIX D

PREPAREDNESS IN SPECIAL EDUCATION

SEMI-STRUCTURED INTERVIEW GUIDING QUESTIONS

Demographic Questions

How many years have you been a practicing special educator?

What university did you receive your special education degree or endorsement from?

What state is that university located in?

What type of district do you teach in (i.e. urban, suburban, rural)?

What district is it located in?

What level of school do you teach in (elementary, middle, secondary)?

What grade and in what setting do you primarily teach?

Content Questions

1. **In recent years, working with students from diverse cultural, socioeconomic, and ethnic backgrounds has become a large focus of public education. How and how well did your program prepare you for working with students from diverse backgrounds?**
2. **While every student is unique, we know that there are common characteristics amongst students experiencing different types of disabilities (i.e. autism, cognitive disabilities, learning disabilities). How and how well did your program inform and prepare you for dealing with the individual challenges that disabilities create for students?**

3. **Legal standards and compliance are a large part of the world of special education. How and how well did your program inform you of the relevant legal precedents that govern special education?**

4. **Special educators are not only tasked with all of the responsibilities of a general education teacher, but also have the additional responsibilities of case management. How and how well did your preservice program prepare you for writing IEPs and ETRs, creating BIPs, participating in manifestation hearings, and reporting progress on goals?**
5. **Ensuring that students with disabilities have access to their least restrictive environment and, as much as possible, to the same experiences of their non-disabled peers is an enormous part of special education. How and how well did your preservice program prepare you for working in inclusive environments and in co-teaching ?**
6. **Beyond comprehensive knowledge of student learning differences, special educators have to have content area expertise to aid and educate their students. How and how well did your preservice program provide you with specific content area knowledge and research-based instructional strategies?**
7. **Assessment is an essential component of teaching, especially when working with students with disabilities. How and how well did your program prepare you for administering different types of assessments to your students, utilizing different allowable accommodations with them, or utilizing assistive technology?**

8. **Data driven decision-making has become a hot topic in education in general. How and how well did your preservice program prepare you for using assessment data to drive educational decisions and instructional practices?**
9. **Beyond just academic needs, students with disabilities have a wide range of behavioral and emotional needs. How and how well did your preservice program prepare you for helping students in these areas?**
10. **How and how well did your program prepare you for collaborating with paraprofessionals and related service providers (e.g. speech, OT, PT)?**
11. **If you had to design the ideal preservice, special education program, what would it look like?**
12. **Overall, how well do you feel your preservice teacher education program prepared you for the field?**
13. **What were your program's strengths?**
14. **What were your program's weaknesses?**
15. **What was the most meaningful learning experience that you had in your program?**
16. **For those elements of special education that you were not sufficiently prepared for, how did you eventually gain that knowledge (e.g. professional development, mentoring, etc.)?**