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Early Childhood General Education Inclusion Teachers' Perceptions of Professional Development

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Walden University
2021

Abstract

Early Childhood General Education Inclusion Teachers' Perceptions of

Professional Development

by

Susanne Metscher

MA, University of Albany, 2008

MA, Mercy College, 2012

BS, St. Thomas Aquinas College, 2004

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Early Childhood Special Education

Walden University

August 2021

Abstract

Despite the use of professional development (PD), early childhood inclusive teachers lack the knowledge and skills needed to support students with disabilities. It was unclear what types of PD teachers have received and what supports they still need. If teachers lack PD and the skills needed to teach students with disabilities effectively, then student progress may be negatively affected. The purpose of this basic qualitative research study and the research questions were to understand early childhood inclusive general education teachers' perceptions of past PD experiences of working with students with disabilities and what supports they need to implement evidence-based practices. The conceptual frameworks were Knowles's adult learning theory and Vygotsky's social constructivist theory. Purposeful and snowball sampling were used to recruit 12 early childhood general education inclusive teachers to take part in responsive interviews. Thematic coding was used to analyze the data. Results demonstrated the teachers lack effective PD and administration support; and teachers prefer if PD was relevant, interactive, collaborative, and led by experienced providers who follow-up with participants. These findings confirm previous research on PD. The findings also extend previous findings by identifying the perceptions of PD early childhood inclusive teachers in one school district, acknowledging that intervisitations is a valued PD practice held by teachers, and highlighting that families should be included in PD to offer further collaboration among stakeholders. This study contributes to positive social change as leaders can use the information to design more effective PD, so teachers can be more prepared to support students with disabilities, which can lead to greater learning outcomes for students.

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Dedication

This dissertation is dedicated to my husband, Tim Mosher, who has always encouraged me to just keep writing. He allowed me to talk in circles all about my study, acted as my practice participant, and simply listened to me when I faced challenges and needed to vent. On the toughest days, he always reminded me that I am the most resourceful woman that he knows and that with my level of determination and grit, I could accomplish anything. You are officially, Mr. Dr. Metscher-Mosher now! Thank you for all your support.

I have learned that working towards your doctorate is less about how smart you are or how many articles you have read or even less about the writing skills you hold. It is really about grit, determination, and holding passion to make a change in this world. At the end of this journey, I still hold that same passion for teacher education as I did when I started, and I hope I too can continue to make a change in the way we support our teachers so that they can continue to become the best educators they can possibly be for their students, their students' families, and of course, for themselves.

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Chapter 1: Introduction to the Study

The reauthorization of the 2004 Individuals with Disabilities Education Act (IDEA) provided the legal mandate to ensure that inclusive education is provided in every school by including a clause that indicates that students with disabilities must be placed in the least restrictive environment (Artiles & Kozleski, 2016). The mandate aimed to ensure that students with disabilities attend school in general education classrooms and are provided with supplementary supports and services (Artiles & Kozleski, 2016). Ninety-five percent of students with disabilities in the United States are placed in general education classrooms ranging from the full day to a portion of the school day depending on the students' severity of disability (Hagiwara et al., 2019). Yu (2019) noted that 10% of students in preschool are identified with having disabilities and half of these students attend preschool in a general education setting. Teachers need to know about students with disabilities and developmentally appropriate practices to best support these students' needs for early childhood inclusive programs to be of high-quality (Kwon et al., 2017). However, there is a gap in professional development for early childhood teachers in training them to effectively teach students with disabilities (Kwon et al., 2017). The educational problem was that early childhood general education inclusive teachers lack the knowledge needed to support students with disabilities using evidence-based practices even when they are provided with professional development, which affects student outcomes.

A student's placement in the least restrictive environment is determined from the student's individualized education plan, which may not always suggest the student be

placed primarily in a general education setting (Stites et al., 2018). However, if students are placed in inclusive settings, students with disabilities are exposed to instruction that is tied to grade-level standards and are engaged in instruction alongside their nondisabled peers (Zagona et al., 2017). Faragher and Clarke (2016) explained that the focus on inclusive education has changed over time. Initially, the focus was on placements, moved to the basis of how students learn best and are taught effectively, and currently, the focus is on how teachers can support students with disabilities to access grade-level curriculum and outcomes (Faragher & Clarke, 2016). With more young children attending early childhood inclusive programs than in the past, the role of the teacher has changed, and early childhood teachers need to have the necessary skills to provide developmentally appropriate interventions and supports for young students with disabilities (Park et al., 2018).

Positive learning outcomes emerge when certain characteristics of inclusive settings are evident in the classroom or program (Buli-Holmberg & Jeyaprathaban, 2016; Cate et al., 2018; Navarro et al., 2016). Many of these key characteristics relate to teachers' knowledge, experience, and level of preparation (Cate et al., 2018; Navarro et al., 2016; Pelatti et al., 2016). Cate et al. (2018) explained that teachers' competency involving their knowledge and skill set has a direct effect on the success of inclusive teaching. Additionally, it is essential that teachers in inclusive classrooms can identify and understand the diversity of students in the classroom and incorporate strategies that support all students in accessing the curriculum and instruction (Navarro et al., 2016). High-quality teachers of early childhood education programs must know how to create

and implement developmentally appropriate adaptations and modifications to the environment, instruction, and curriculum resources to engage and support all learners (Warren et al., 2016). Successful inclusive classrooms promote collaboration, supports and adaptations, and flexibility in teaching methods and resources (Buli-Holmberg & Jeyaprathaban, 2016). Overall, key aspects of an effective early childhood inclusive classroom are often tied to the quality of a teacher, including the teachers' level of training and education (Pelatti et al., 2016).

One of the key indicators that promote the success of inclusive programs repetitively found in research is teacher quality (Cate et al., 2018; Navarro et al., 2016; Pelatti et al., 2016). Teacher preparation influences teacher quality (Zagona et al., 2017). The level of preparation of a teacher has been proven to link to students' successful outcomes, yet research has shown that general educators teaching in inclusive environments often believe they are not prepared with the skills and knowledge needed to meet the needs of all different types of learners (Cunningham et al., 2017). Zagona et al. (2017) explained that many teachers believe they lack experience working with students with disabilities and have a gap in knowledge about disabilities, students' learning needs, and ways to differentiate instruction to best support students with disabilities. Anderson and Lindeman (2017) found that even when early childhood teachers felt prepared to teach in inclusion settings, challenges still emerged, and the teachers believed they still need more resources and professional development opportunities to address these challenges. Dinnebeil et al. (2019) found that early childhood inclusive teachers believed they were not prepared to work with young children with disabilities in designing

developmentally appropriate activities, creating goals, and managing challenging behaviors. Teachers often believe they are ill-prepared to meet the demands of teaching in an inclusive environment, and more professional development opportunities are needed to properly prepare these teachers so they can support students with disabilities in achieving greater academic outcomes (Daniel & Lemons, 2018; Gaines & Barnes, 2017; Stites et al., 2018).

According to Robinson (2017), continuing professional development is essential to helping teachers bridge theory to practice when developing inclusive practices. Professional development in special education is crucial, as the use of it has been shown to support teachers in addressing the needs of students and learning about new instructional strategies and practices (Gürgür, 2017). Addressing the needs of early childhood inclusive teachers through professional development is crucial to create high-quality inclusive settings that promote positive outcomes for students (Park et al., 2018). Gartland and Strosnider (2017) explained that teachers need more support in how to provide effective instruction that helps students with disabilities meet the standards and grade-level expectations, and effective, ongoing, professional development is a key strategy to meet this demand. Professional development opportunities are beneficial to supporting teachers' growth and preparation; however, highly effective professional development is even more crucial to support teacher development (Daniel & Lemons, 2018; Oddone et al., 2019).

Although effective practices in professional development have been noted in research, teachers have often reported dissatisfaction with professional development and

have their own preferences for professional development. In fact, Klingner et al. (2003) explained that researchers have noted the ineffectiveness of professional development in supporting teachers in implementing evidence-based practices as early as the mid-1990s. Past researchers indicated that there was a gap between what constitutes effective professional development and what is being implemented in schools (Klingner et al., 2003). Past researchers also indicated that often effective strategies such as coaching and direct observation are not feasible for school educators to implement, and thus, teachers continue to develop a lack of understanding of how to implement evidence-based practices (Klingner et al., 2003). Early childhood inclusive teachers specifically have reported that they have not had enough professional development catering to the needs of students with disabilities (Alexander et al., 2016). Bhroin et al. (2016) explained that teachers value learning opportunities that are embedded within the school and classroom and allow them the opportunity to collaborate with others to implement what has been learned into the field. Teachers want professional development opportunities that connect to the real world and that can support them in implementing the strategies and techniques taught in their own classrooms (Young, 2018). Regarding teaching students with disabilities, teachers want to learn more about the types of disabilities, collaboration strategies with other stakeholders, behavior management techniques, and how to plan appropriate lessons and supports for students with disabilities (Bruno et al., 2018). The preferences of early childhood inclusive teachers should be considered when school leaders are developing professional development opportunities so that teachers' needs and interests are met to better support students with disabilities in their classroom.

Woodcock and Woolfson (2019) explained that there is a lack of research that focuses on teachers' perceptions of the types of supports needed to teach in inclusive classrooms and that more research needs to focus on determining what types of professional development adequately support teachers in implementing effective practices for inclusion. Similarly, Daniel and Lemons (2018) explained that future studies need to be completed to address the problem of the lack of effective professional development opportunities for teachers working with students with disabilities. In the past, some researchers have examined teachers' perspectives. For example, Buell et al. (1999) used a survey given to teachers throughout one state and identified that general education teachers have stronger training needs than special education teachers that include needs such as how to adapt curriculum, manage student behavior, implement individualized education plans, and use assistive technology to support students with disabilities. More recently, State et al. (2019) noted that additional research is needed to determine what professional development practices would be effective in supporting teachers to implement evidence-based classroom practices for students with disabilities. At the local level, in a press release, a special education organization affiliated with the school district in this study explained that there is a need to determine what ongoing professional development is needed for teachers for them to effectively support the 300,000 students with disabilities in this school district.

A lack of professional development can lead to early childhood teachers having increased frustration and stress, and thus the success of inclusive programs is adversely affected (Soukakou, et al., 2018). The educational problem was that early childhood

inclusive teachers lack the knowledge needed to support students with disabilities using evidence-based practices even when they are provided with professional development, which affects student outcomes. This study was conducted to determine what types of professional development early childhood inclusive teachers in a large, urban northeastern school district are currently receiving that focus on working with students with disabilities. Researchers must better understand the beliefs and experiences of teachers to inform professional development policies within schools (Zhukova, 2018). Muccio and Kidd (2018) stated that more research needs to be done to explore early childhood teachers' perspectives about professional development to identify what supports will help close the gap between theory and practice when implementing inclusive-based strategies. Additionally, it is essential that the early childhood inclusive teachers in this district can share their perspectives on what types of professional development supports their needs best and what changes need to be made. The information shared will support school district leaders in making changes to professional development so that it is better aligned with teachers' preferences and needs. By doing so, these teachers can receive high-quality professional development that will better support them in implementing practices to produce greater academic outcomes among students with disabilities in early childhood inclusive settings.

Following this introduction, the first section of Chapter 1 will include a summary of key background information for this study and is followed by the problem statement and purpose for the study. Next, the research questions (RQs) are defined, and there is a description of the conceptual framework that is aligned with this study. After the

framework, I discuss the nature of the study and definitions of key terms relevant to the study. Next, the assumptions, scope and delimitations, and limitations are discussed. Lastly, I explain the significance of the study and conclude with a summary.

Background

Many research studies have been conducted around the topic of the experiences and preferences of teachers with professional development. Liao et al. (2017) determined what content and formats of professional development sessions should be included to support K to 12 teachers in integrating technology into the classroom. Peterson-Ahmad et al. (2018) identified teachers' barriers to professional development, which include time and locations of trainings and that the teachers perceive topics that focus on classroom management, culture and diversity, individual education plans, and learning disabilities in reading as beneficial topics for professional development. Zide and Mokhele (2018) conducted interviews to examine the reflections of the participants' experiences with professional development practices and found participants were unsatisfied with past professional development experiences because of little follow-through after the sessions concluded. Although teachers' experiences and preferences for professional development have been noted in research, there is a lack of research specifically on professional development tied to inclusive practices in early childhood settings.

Much of the research that connects professional development to inclusive practices was conducted in locations outside of the United States (Chitiyo et al., 2019; Mangope & Mukhopadhyay, 2015; Matović & Spasenović, 2016). Mangope and Mukhopadhyay (2015) in a mixed-methods study in Botswana identified teachers'

professional development needs for inclusive education, their current professional development experiences, and what types of professional development were preferred. Chitiyo et al. (2019) also completed a study across three African countries in which the researchers identified the professional development needs of special and general education teachers who work in inclusive classrooms. In Serbia, Matović and Spasenović (2016) examined teachers' perspectives of their level of preparation for teaching in inclusive classrooms and examined the benefits and effects professional development had on their teaching competencies in inclusive classrooms. Even though many studies have been conducted that focus on the professional development experiences, preferences, and needs of teachers teaching in inclusive environments, few studies were conducted in the United States.

There is a gap in research about the professional development experiences and perspectives of teachers in inclusive settings within the United States (State et al., 2019; Woodcock & Woolfson, 2019; Zhukova, 2018). A further gap exists in understanding the professional development experiences and perspectives specifically of early childhood general education teachers in inclusive settings. Thus, this research study can address the gap in knowledge in research by focusing specifically on what professional development practices are currently being used and what types of practices will best support early childhood general education teachers in implementing evidence-based strategies for students with disabilities in inclusive environments within the United States.

Problem Statement

Current research indicates that many teachers believe they are ill-prepared to meet the needs of students with disabilities (Cunningham et al., 2017; Daniel & Lemons, 2018; Majoko, 2017; Zagona et al., 2017). Zagona et al. (2017) explained that general education teachers have reported that they lack knowledge about the learning needs of students with disabilities and what practices would be effective in adapting current content to best support students with disabilities. Past researchers have also noted this problem. Kosko and Wilkins (2009) explained that most types of professional development for teachers do not prepare them to implement inclusive-based practices, and more practical, hands-on, inclusive training is needed for professional development to have a more meaningful effect on teachers' practices. Early childhood inclusive teachers need more knowledge and practice with teaching practices to adequately address the needs of students with disabilities (Park et al., 2018). Daniel and Lemons (2018) explained that a research-to-practice gap exists, and many teachers have reported that they believe they are unprepared to work with students with disabilities and often implement ineffective practices in classrooms. Majoko (2018) noted that early childhood inclusive teachers believe they lack the professional competencies to adapt instruction to students with disabilities' individual needs. Teachers' lack of preparation may then link to students' levels of achievement.

Research has shown that teachers' knowledge and level of preparation directly ties to positive student outcomes, and achievement for students with disabilities still tends to diminish (Cunningham et al., 2017). The educational problem is that despite the use of

professional development practices, early childhood inclusive teachers still lack the knowledge needed to support students with disabilities using evidence-based practices that affect students' academic progress. There is a gap in research about the professional development experiences and perspectives of early childhood general education teachers in inclusive settings (Park et al., 2018; State et al., 2019). Thus, the research problem is that it is unclear what professional development opportunities early childhood general education teachers in inclusive environments are receiving and what supports they still need. Effective professional development may be a way to better support early childhood teachers in addressing students' needs to produce greater academic outcomes.

Students with disabilities should be taught by early childhood teachers who are equipped with the knowledge and skills to support these students in reaching positive academic outcomes. D'Amico et al. (2019) explained that for early childhood environments to be effective in meeting the development needs of students, teachers need to have key knowledge and skills. Teachers can achieve this knowledge and skills through proper training and support provided in professional development. Gartland and Strosnider (2017) explained that for students with disabilities to obtain successful learning outcomes, high-quality professional development for teachers that focuses on implementing instructional strategies to support students' learning needs is essential. Professional development can address the concerns teachers have about implementing developmentally appropriate practices for students with disabilities in early childhood settings (Brodzeller, et al., 2018). Al Otaiba et al. (2016) noted that when kindergarten teachers received effective professional development in differentiation strategies,

teachers more readily implemented appropriate differentiation strategies in the classroom, and as a result, students demonstrated greater academic outcomes in literacy. Despite the prevalence of effective professional development practices, Woodcock and Hardy (2017) suggested more research is needed to determine what types of professional development would improve teaching practices in inclusive settings to achieve greater student outcomes.

Even though there are numerous effective professional development strategies, achievement among students with disabilities is still low as evident in math and English language arts (ELA) state test results in a large, northeastern urban school district. Students' academic outcomes are often tied to teacher quality and preparation. Griffin et al. (2018) explained that students with disabilities have often demonstrated low achievement and found through research that their academic gains were largely linked to the teacher. Using professional development, the researchers found that teachers can develop key math competencies and teaching practices needed. Similarly, Prast et al. (2018) indicated that when teachers were provided professional development on how to differentiate instruction in mathematics based on students' needs, student progress was made. Prast et al. highlighted that these academic outcomes could have been correlated to the teachers' increased competency in applying differentiated practices to meet their students' needs. When teachers are given more opportunities to learn about and practice strategies for working with students with disabilities in early childhood settings, they will build confidence and positive learning outcomes will emerge (Park et al., 2018). Some

aspects of student achievement can be partially linked to an increase in teacher

preparation and competencies tied to professional development.

According to the Department of Education website in the northeastern city where

I conducted the research, between 2016 and 2018, over 80% of students with disabilities

performed below proficiency levels on the ELA state tests in Grades 3 to 8 (see Table 1)

and the math state tests (see Table 2). Between 2016 and 2018, the percentage of students

performing well below proficiency (Level 1) slightly decreased on the ELA state test but

remained consistent on the math state tests. Despite the slight decrease in students

performing well below proficiency in ELA, the percentage of students with disabilities

performing at proficiency or excelling was still below 16% in 2018 (see Table 1).

Although the testing data are based on students in upper elementary settings, the data

may reflect gaps of learning in core foundational skills taught in early childhood settings.

Table 1

Percentage of Students With Disabilities in Grades 3 to 8 Scoring Level 1 to Level 4 on ELA State Tests

	2016	2017	2018
Level 1	60.8%	57.8%	51.8%
Level 2	29.9%	31.5%	32.4%
Level 3	7.9%	8.9%	12.5%
Level 4	1.5%	10.7%	3.3%

Note. Level 1 = Students are well below proficient in grade-level standards; Level 2 = Students are partially proficient in grade-level standards; Level 3 = Students are proficient in grade-level standards; Level 4 = Students excel grade-level standards. From the northeastern city's Department of Education website.

These data are representative of students with a wide range of disabilities and are not disaggregated by disability. It is also important to note that the data do not represent students solely placed in inclusive settings, but only categorizes the data by students that receive special education services. However, in an article shared by a top university, as of the 2016 to 2017 school year, 66% of students with disabilities spend at least 80% of their school day in an inclusive classroom in the research school district in a northeastern city.

Table 1 shows that between 80 and 90% of students in Grades 3 to 8 score below grade-level standards on the ELA state assessments. These data may indicate that if teachers lack the training needed to adequately support students' wide ranges of disabilities in early childhood settings with foundational literacy skills, the students may then continue to perform below grade-level expectations throughout their educational careers as seen in Table 1.

Table 2

Percentage of Students With Disabilities in Grades 3 to 8 Scoring Level 1 to Level 4 on Math State Tests

	2016	2017	2018
Level 1	62.70%	63.80%	62.50%
Level 2	25.80%	24.40%	22.10%
Level 3	7.90%	8.40%	10.40%
Level 4	3.50%	3.50%	5%

Note. Level 1 = Students are well below proficient in grade-level standards; Level 2 = Students are partially proficient in grade-level standards; Level 3 = Students are proficient in grade-level standards; Level 4 = Students excel grade-level standards. From the northeastern city's Department of Education website

The percentage of students with a wide range of disabilities not meeting grade-level benchmarks on the Grade 3-8 math state assessments from 2016-2018 mirrors the data in the ELA assessments. Approximately 85 to 90% of students are performing well below or slightly below grade-level standards. Similarly, these data may show that students with disabilities' early mathematical needs are not being met effectively and thus there is a gap in understanding of early key math skills as they progress through grade levels. The data in Tables 1 and 2 support the need for teachers to be better prepared to meet the needs of students with disabilities across subject areas so that they can develop the early literacy and mathematical skills needed to reach academic achievement levels across grades.

In a press release, a special education organization affiliated with the research school district highlighted that the low proficiency rates among students with disabilities in this district are aligned with the lack of professional development opportunities provided to teachers on topics related to special education, such as differentiated

instruction, characteristics of disabilities, and strategies for inclusive classrooms. Meissel et al. (2016) explained that it is challenging to link the benefits of professional development directly to student achievement; however, the authors explained that student learning truly starts with the knowledge, skills, and competency of teachers. Although lack of professional development opportunities may not be the only cause for low student achievement, professional development will support teacher learning and preparation and help address the needs of teachers.

Woodcock and Woolfson (2019) noted that a positive learning environment in an inclusive education setting that supports student progress is tied to teachers' knowledge and skills; yet the authors question whether the supports and professional development teachers receive are adequate. Teachers' lack of knowledge and limited implementation of effective practices for inclusive teaching are directly tied to the type of learning and support through the professional development they have received (Kurniawati et al., 2017). Kwon et al. (2017) explained that early childhood teachers need to receive specialized training in inclusion and that the content needs to be taught explicitly to increase teachers' understanding of young children's disabilities. Maheady et al. (2016) stated that effective professional development provides teachers with individualized support and coaching, thus providing the one size fits all model of professional development as ineffective. The educational problem is that despite the use of professional development practices, early childhood teachers still lack the knowledge needed to support students with disabilities using evidence-based practices which affects students' academic progress. State et al. (2019) explained that effective, intensive,

ongoing professional development models have been noted in research; however, there is still a need to improve professional development practices in schools. There is a gap in research about the specific professional development experiences and perspectives of general education teachers teaching in early childhood inclusive settings (State et al., 2019; Woodcock & Woolfson, 2019; Zhukova, 2018). More research is needed to focus on the effectiveness of professional development for early childhood teachers working with students with disabilities and what types of supports will be most beneficial for these teachers (State et al., 2019).

Purpose of the Study

The purpose of this qualitative research study was to understand early childhood general education teachers' perceptions of past professional development experiences of working with students with disabilities and what additional supports they may need in implementing evidence-based practices in inclusive environments to support students with disabilities. Information about what types of professional development they have received and reflection on what trainings support them in implementing evidence-based practices or do not support them will be explained. Additionally, teachers suggested approaches to professional development that would be most beneficial in supporting their needs in working with students with disabilities in early childhood inclusive settings.

A better understanding of the evaluation of current professional development experiences of early childhood general education teachers who work with students with disabilities can inform school educators on the effective and ineffective approaches to professional development. If teachers receive professional development in ways that cater

to their learning needs and preferences, they may be more supported in implementing and including a sustained use of inclusive strategies to better address the needs and strengths of students with disabilities in their classrooms. Identifying effective practices for professional development of early childhood general education teachers in inclusive environments could lead to professional development that is better aligned with teachers' needs and interests, improves teacher quality, and increases the use of evidence-based practices, thus increasing achievement among students with disabilities.

Research Questions

I used the RQs to examine the past experiences and perceptions of early childhood general education teachers who teach in inclusive classrooms about professional development. For this study, inclusive classrooms are described as classrooms that include students with disabilities that are taught alongside their non-disabled peers in general education settings (Cunningham et al., 2017; Zagona et al., 2017). Early childhood teachers teach students from birth to Grade 2 (National Association for the Education of Young Children, 2018). I addressed the following RQs in this study:

1. What past experiences with professional development do early childhood general education inclusive teachers perceive as being effective and ineffective in supporting them in implementing evidence-based practices in inclusion classrooms?

2. What professional development practices do early childhood general education inclusive teachers perceive would best support them in implementing evidence-based practices in inclusion classrooms?

Conceptual Framework

The key conceptual framework that informed this study is the adult learning theory or andragogy of Knowles (1984). Knowles explained that adults need to be motivated to learn and must understand the rationale for learning new content. Additionally, Knowles stated that new learning should be built on and relevant to one's prior experiences and include active learning involving problem-solving strategies. Knowles's theory can be used to inform how professional development could be delivered effectively to adult learners. The second supporting conceptual framework is Vygotsky's (1978) social constructivist theory. Vygotsky highlighted the importance of building on one's prior knowledge through social interactions and active learning opportunities with peers and teachers to guide students to build new knowledge. Researchers have highlighted that using a perspective lens of the social constructivist theory in teaching can inform effective inclusive practices (Mallory & New, 1994; Powell & Kalina, 2009). Both conceptual frameworks will be discussed in further detail in this section.

Knowles (1984) focused on the concept that adults learn differently from children in the adult learning theory or andragogy. He made five assumptions about adult learning including that adults (a) hold a secure self-concept, (b) build on their own prior learning experiences, (c) hold a readiness to learn, (d) are intrinsically motivated, and (e) prefer

practical learning with problem-solving. Thus, Knowles suggested that adult learners should have a say in the content and process of their learning and that administrators should consider teachers' prior experiences and include practical learning opportunities.

Referring to the adult learning theory, Franco (2019) explained that adults' past experiences directly correlate to their intrinsic motivation to learn and apply what is learned. Concerning this study, if the teachers have had negative past experiences with professional development, they may be less motivated to learn and apply skills taught in the field. In this study, I aimed to determine what teachers' past experiences with professional development are and what preferences they may have to examine if these past experiences affect their learning and application of the skills taught. Louws et al. (2017) explained that teachers rarely are included in the process of designing the content and format of professional development sessions and the level of their teaching experiences is often not considered when planning the sessions. Teachers' levels of teaching experience and professional development interest relate to Knowles's (1984) concept that adult learning should be tied to prior learning and experiences and readiness to learn.

Louws et al. (2017) proposed that if teachers are involved in what, how, and why they attend professional development through a more differentiated approach, the positive outcomes of professional development can be enhanced. Using learning theories can be beneficial to leaders because it can support them in making choices for professional development that will lead to more positive, stronger learning experiences (Knowles et al., 2011). The purpose of this study was to identify early childhood general

education teachers' experiences with professional development practices and what additional supports will best assist them in implementing evidence-based practices in inclusive environments. This purpose ties to the adult learning theory because the goal was to examine teachers' perceptions of how they would learn most effectively through professional development by having them evaluate their past experiences.

The second supporting theory is the social Vygotsky's (1978) constructivist theory. Mallory and New (1994) expressed the need for a theoretical framework for inclusive practices and selected the social constructivist theory. Vygotsky highlighted the important role of social interaction in constructing new knowledge and explained that social learning precedes development. Vygotsky explained that optimal learning takes place within one's zone of proximal development in which learners are building on their prior learning with new content that is delivered with support from others through scaffolding or guidance. An apprenticeship is created as a peer or adult acts as the tutor to model behavior and skills and provides instruction and guidance to the learner (Vygotsky, 1978). For teachers to apply the proper support to students to maximize learning potential, they must truly know their learners and the current knowledge they must foster the learner's development of new knowledge (Powell & Kalina, 2009).

Mallory and New (1994) suggested that the social constructivist theory should inform inclusive practices, as effective inclusive practices should be built upon the importance of socio-cultural constructs and include the role of social activity and active learning in development and learning. Additionally, students with disabilities can learn new content and developmental abilities through becoming apprentices by observing and

interacting with peers and their teachers (Mallory & New, 1994). Teachers can facilitate learning in inclusive environments by understanding their students and the knowledge they have and building on this knowledge and skills for learning to take place within their zone of proximal development so that teaching is effective (Powell & Kalina, 2009). Teachers can adjust their learning to guide students with disabilities when they are developing new skills and knowledge alongside their peers (Mallory & New, 1994).

Vygotsky's (1978) theory highlights the importance of social context and direct experiences as key elements that create positive development and growth. The purpose of this study is tied to understanding the professional development perspectives of general education teachers in implementing evidence-based practices in inclusive environments. This purpose ties to the social constructivist theory because teachers must develop effective practices in valuing all students in an inclusive community by providing rich, active learning experiences that incorporate socialization and support from peers and support adults to develop new knowledge. Additionally, teachers must find ways to get to know students with disabilities and the skills they have to effectively build off these skills to create learning opportunities for students within their zones of proximal development. A more detailed explanation of Knowles's (1984) adult learning theory and Vygotsky's social constructivist theory can be found in Chapter 2.

Nature of the Study

This study was a basic qualitative design based on two responsive interviews with 12 early childhood teachers with a range of years in teaching experience, but a minimum of 3 years, who teach in inclusive classrooms in a large, urban school district. Merriam

(2009) highlighted that a basic qualitative study design is prominent in educational research, and the goal of it is to interpret the experiences and others' meaning of these experiences by identifying recurring themes and patterns. A quantitative study, using a survey, could provide a numeric description of the teacher's perceptions of certain professional development practices, yet closed questions used in surveys provide a limited value for this study's purpose (Creswell & Creswell, 2018). Additionally, generic qualitative studies are often used when it is challenging for the researcher to align one specific qualitative method approach to the purpose and study design (Liu, 2016). Kahlke (2014) explained that new researchers may struggle to find a methodology that is a perfect fit to address their RQs; thus, a basic or generic qualitative approach may be the best fit. Unlike other research designs such as ethnography, where researchers focus on culture or grounded theory and aim to build new theories through research, in a basic qualitative study the researcher focuses on understanding the experiences and perspectives of others, which directly aligns with the purpose of this study (Caelli, et al., 2003).

In this basic qualitative study, a small sample size was used to identify general education inclusive teachers' experiences and preferences for professional development through interviews. Responsive interviews establish a conversation partnership between the participant and researcher in which the researcher sets the subject and then poses questions to encourage the participants to expand upon their response (Rubin & Rubin, 2005). In responsive interviews, open-ended questions are framed in a way that does not assume the participant's perception and are used so that the participants are urged to

describe their experiences with rich detail (Rubin & Rubin, 2005). The use of open-ended questions in which participants can share their feelings, opinions, and concerns in an in-depth manner provides a deeper understanding of the participants' experiences and perceptions (Creswell & Creswell, 2018). Seidman (2005) explained that although interviewing can be labor-intensive, the use of interviews can help understand the lived experiences of others to make meaning of these experiences through the language and stories the participants share. The use of interviews in this study allowed for a collection of data based on the experiences and perceptions shared by the participants. The initial interview ranged in time from 20 minutes to 40 minutes. A follow-up phone interview was used with participants to gain clarification, ask more probing follow-up questions if needed, and implement member checking. Coding of keywords from the interview transcripts was used to categorize the information into key themes to identify the key professional development experiences of the participants and how they perceive professional development could be better aligned with their needs, interests, and preferences.

Definitions

The following definitions underlie this study:

Early childhood education: Educational settings for students from birth through Grade 2 (National Association for the Education of Young Children, 2018).

Early childhood inclusive education: Educational practices and policies when supporting young children with disabilities and their families that promote their sense of belonging and developmental, academic, and social growth (Soukakou et al., 2018).

Evidence-based practices: The most effective practices to improve instructional decisions evident in multiple, current professional research studies that produce positive academic and behavioral outcomes among students (Daniel & Lemons, 2018; Maheady et al., 2016).

Head Start program: A federally funded program that provides various service models which also offers inclusive services for students with disabilities that are in low-income settings in childcare, home-based settings, and schools that promote school readiness for children from birth to age 5 (Office of Head Start, 2019; Yu, 2019).

Inclusive education: Students with disabilities are taught alongside their non-disabled peers in general education settings so that their learning is aligned with grade-level expectations, and they receive services to address their learning and behavioral needs (Cunningham et al., 2017; Zagona et al., 2017)

Least restricted environment: To the maximum extent possible, students with disabilities are educated in settings with their non-disabled peers, and removal from a general education setting only occurs if deemed necessary by a student's severity of a disability (Westling, 2019).

Professional development: Formal and informal professional learning in school settings that supports teachers in acquiring and applying new skills and practices to improve student outcomes (State et al., 2019; Woodcock & Hardy, 2017).

Students with disabilities: Students' special education needs or learning difficulties that may hinder their educational opportunities because they may have greater difficulties in learning than their non-disabled peers (Robinson, 2017).

Assumptions

In this study, there were two assumptions that I believed to be true but could not be demonstrated to be true. These assumptions were essential to the meaningfulness of the study and were necessary due to the context of this study. One assumption to the study was that the teachers whom I interviewed would be honest in their responses. I assumed that teachers did not provide inaccurate responses because they were reluctant to share negative feedback about professional development or their school leaders. I made this assumption because anonymity and confidentiality were present in this study and the participants were volunteers who could withdraw from the study at any time if they were uncomfortable sharing their perceptions openly. However, I tested the veracity of the teachers' responses by conducting a second, follow-up interview with clarifying questions to compare the participants' responses at two different times to ensure they were reporting the same information. A second assumption was that the teachers accurately recalled their experience with professional development given the fact that professional development has been provided throughout their career. To support this assumption, I used member checking to confirm the factual evidence provided by participants remains consistent across interviews.

Scope and Delimitations

In this section, the scope of this study related to the research problem and the specific included populations are discussed. Additionally, two delimitations of this study are identified. The scope of this study was to determine the perceptions of 12 early childhood general education teachers' experiences and perceptions of professional

development for teaching students with disabilities. This study included early childhood general education teachers who teach in an inclusive environment in a pre-kindergarten through second grade setting in a large, urban school district in the northeastern United States. There are over 700 elementary schools that include early childhood classrooms in this district, and teachers were selected from seven different schools. Although the scope was small in this study, working with a smaller sample size allowed me to gain more in-depth knowledge about the teachers' perceptions, rather than the breadth of interviewing a larger sample size of participants. By better understanding the diverse views of the participants, I hope my research will lead to further empirical research to better analyze the professional development provided, determine its effectiveness, and improve professional development for teachers.

One delimitation of this study was the interviews were conducted with early childhood general education teachers in inclusive settings and not service providers, paraprofessionals, and other stakeholders, thus limiting the data collection of perceptions of all teachers and stakeholders working with students in inclusive settings. Additionally, the teachers I interviewed all teach in urban settings, limiting data collection from other locations such as rural or suburban school settings. Further studies in other settings will need to be conducted to enhance the generalizability of the findings.

Limitations

I addressed two key limitations that could influence the outcomes of this study. Challenges including time, location, and availability of teachers led to the use of a small sample size for this study. The perceptions shared were only from the participants who

agreed to be interviewed. Because a small sample was used, the sample may not represent the larger population of teachers across the 700 schools in this district and generalization of the results will be limited (Etikan, et al., 2016). My findings do not represent the collective view of the population of teachers in this school district because I interviewed a small sample size of teachers from only a few different school settings. The city school district is vast, so different viewpoints may be shared by teachers who teach in different areas of the city.

However, according to Creswell and Creswell (2018), small sample sizes in qualitative studies are often apparent since qualitative studies often focus on the depth of the information and data collected, rather than the breath. In this study, the smaller sample size allowed for a deeper collection of data among participants. Another limitation was some participants may have feared sharing honest views about professional development that their school leaders have chosen because they do not want those views to reflect poorly on their leader. One-on-one interviews with a smaller sample size allowed me to spend more time interviewing each participant using follow-up questions and prompting, sacrificing breadth over depth. My goals during the interview aided the teachers in being more reflective and truthful in their responses as they provide evidence to support the RQs.

Another limitation was that the analysis of the data through qualitative approaches can be subjective in nature (Creswell & Creswell, 2018). There can be concerns of subjectivity and lack of accuracy. To combat these issues, all interviews were recorded,

and a detailed account of the teachers' responses are included to allow for a greater concentration on accuracy and transferability.

Significance

There are potential contributions of the study and social change implications that could advance knowledge in the education field. This study contributes to filling the identified gap in research by identifying the professional development experiences of early childhood general education teachers teaching students with disabilities in inclusive classrooms. It provides insight into the benefits and challenges of professional development as perceived by early childhood general education inclusive teachers and identifies what professional development practices would support them in implementing evidence-based practices. Teachers, administrators, and teacher trainers will be able to continue using beneficial practices and modify ineffective professional development practices to better align with the preferences, needs, and interests of teachers. Positive social change may be affected because if early childhood teachers' needs are met through effective professional development, they will be better equipped to implement evidence-based practices to address the needs and strengths of students with disabilities in inclusive settings to gain greater learning outcomes for students. They will gain a better understanding of developmentally appropriate practices that can be used to support these students' development and growth. Additionally, using more targeted, individualized professional development based on early childhood teachers' perceptions of effective professional development, teacher quality can be improved, which can be linked to more positive gains in student achievement among young children with disabilities. Thus, early

childhood inclusive teachers will be better prepared to provide young children with disabilities with rich, educational experiences to help these students gain the developmental and foundational skills needed for them to make progress throughout their educational experiences.

Summary

The goal of this qualitative research study was to understand early childhood general education teachers' perceptions of past professional development experiences of working with students with disabilities in inclusive settings. Another key goal was to identify what additional supports these teachers may need in implementing evidence-based practices in inclusive environments to support students with disabilities. Past data have shown that students with disabilities did not always reach the same academic outcomes as their peers (Gilmour, 2018; Maheady et al., 2016). Additionally, many general education teachers believe they are ill-prepared to adequately support the needs of students with disabilities in their classrooms (Bemiller, 2019; Gilmour, 2018; Kurniawati et al., 2017).

Effective professional development is needed to support teachers in implementing evidence-based practices to effectively reach the needs of students with disabilities so that these students can reach greater academic outcomes. Evident through the gap in the literature mentioned, there is a need to understand the perceptions specifically of early childhood general education teachers in inclusive settings to determine what aspects of professional development are supporting their needs and teacher growth and what changes need to be made. This information can lead to social change by supporting

school leaders to make modifications to professional development so that it is better aligned with the needs of the teachers to help them become more prepared with the knowledge and skills needed to support students with disabilities in early childhood inclusive settings.

In Chapter 2, I provide the review of the literature used to support the research base for this study. The literature review includes a more detailed discussion of the conceptual framework, an overview of inclusive education, effective characteristics of inclusive education, teachers' perceptions of levels of preparedness in working with students with disabilities, and the specific needs of teachers in working with students with disabilities. I also explain effective characteristics of teacher professional development and alternative modes of professional development.

Chapter 2: Literature Review

Students with disabilities continue to show academic gaps and lower levels of academic progress (Gilmour, 2018; McLeskey et al., 2018). Early childhood teachers are ill-prepared and lack the professional support needed to successfully teach young students with disabilities (Dinnebeil et al., 2019). Teachers often believe that they are underprepared to meet the demands of working in inclusive classrooms with students with disabilities and do not receive the adequate support that they need (Bemiller, 2019; Daniel & Lemons, 2018; Woodcock & Woolfson, 2019). When teachers lack the understanding of students with disabilities and how to best address their needs, they are unable to implement evidence-based practices effectively in inclusive settings to better support students with disabilities in reaching greater academic outcomes (Bemiller, 2019; Maheady et al., 2016). Professional development can be an effective practice to better prepare teachers who work in inclusive environments, yet more research should be conducted to focus on general education teachers' views of what types of effective professional development are needed (Daniel & Lemons, 2018; Woodcock & Woolfson, 2019).

The educational problem was that despite the use of professional development, early childhood teachers still lack the knowledge and skills needed to support students with disabilities using evidence-based practices that affect student outcomes. The purpose of this qualitative research study was to understand early childhood general education teachers' perceptions of past professional development experiences of working with students with disabilities and what additional supports they may need in implementing

evidence-based practices in inclusive environments to support students with disabilities.

Chapter 2 includes a description of the literature search strategy, a detailed explanation of

the conceptual framework used to support this study, and a summary of the literature

related to key variables and concepts.

Literature Search Strategy

I used several databases to search for relevant and current literature, including

Academic Search Complete, EBSCO, Education Source, ERIC, and ProQuest. These

search engines were all accessed by the Walden University Online Library Database.

Additionally, Google Scholar was used to research articles. Search terms including the

word(s) and word variations of *inclusive education*, *evidence-based practices*, *early*

childhood, *teacher training*, *teacher perspectives, professional development*, and *students*

with disabilities were used. These terms were used in varied combinations including

synonyms of the terms in each of the search engines. In cases in which most of the

yielded results came from research done outside of the United States, the terms America,

United States, or the USA were included in the search. In cases in which few results were

evident, the research terms were broadened, or synonyms of the terms were included in

the search. I include research from as early as 1999, but most of the research is from 2016

to 2019. One exception in which older sources were used was when identifying sources

relevant to the conceptual framework. Another exception was that I used some seminal

works to highlight that the problem of professional development ineffectiveness for

teachers, especially teaching in inclusive environments, is a problem that has existed over

time. The literature related to the purpose of this research study is reviewed within this

chapter; however, the literature that specifically relates to the methodology of this study is discussed in Chapter 3.

Conceptual Framework

The key conceptual framework that informed this study was the adult learning theory or andragogy of Knowles (1984). This theory is tied to the component of this study focusing on the professional development of early childhood inclusive general education teachers. A second, supporting conceptual framework that will inform this study is Vygotsky's (1978) social constructivist theory. Social constructivist theory aligns with the effective evidence-based practices teachers will implement in inclusive settings. Both theories will be discussed in greater context in this section.

Andragogy is defined as the study of adult learning, and Knowles et al. (2011) highlight that adult learning contrasts with how children learn based on several core assumptions. These assumptions include that adults (a) hold a secure self-concept, (b) build on their own prior learning experiences, (c) hold a readiness to learn, (d) are intrinsically motivated, and (e) prefer practical learning with problem-solving. The theory focuses on the concept that adult learning is most effective when based on the uniqueness of the individual learner and their circumstances are considered (Knowles et al., 2011).

Scholars have explained this theory and have highlighted key factors of it (Bash, 2003; Chan, 2010; Harper & Ross, 2011). Bash explained that adult learners need to be seen as participants who can make decisions about their learning and are ready to learn when learning aligns with their needs, and they can effectively apply learning to the real world. Harper and Ross (2011) stated that andragogy is how and why adults learn best

and that learning needs to address learners' needs and align to their goals. Chan (2010) explained that this theory has grown in interest by educators and researchers and explained the importance that learners' interests be met, and learners must be involved in the learning experience for learning to be effective. A key component of this theory includes learning that is aligned with the adults' needs, interests, and goals.

Building on the assumption of this theory, Malik (2016) explained that as adult learners grow, they become less dependent in the learning experience and are more self-directed in their learning and are best motivated by internal factors. This idea aligns with this study, as the interview questions will let teachers evaluate past professional development practices and think about what types of learning opportunities will motivate them based upon their individual needs and interests. The interview questions will allow the teachers to be reflective in thinking about how they would prefer to self-direct their learning. Franco (2019) explained that the past experiences one has should relate to how they learn best and what will intrinsically motivate them to learn. This idea shows that teachers' past professional development experiences can shape what approaches support their learning and thus guide them in implementing evidence-based practices. It also demonstrates that their professional development experiences will have greater influence if teachers are self-motivated to learn. This study will help to determine what types of experiences teachers have had with professional development and what needs to be changed so that these experiences have a more positive effect on teachers' ability and interest to learn and continue to grow professionally.

Previous researchers have used the adult learning theory as a framework for their studies (Bair et al., 2019; Sato & Haegele, 2017). Bair et al. (2019) explained that the adult learning theory highlights steps for individuals to direct their learning, which includes identifying their needs, goals, beneficial resources, and learning strategies to be used. In Bair et al.'s study, they noted that when a peer mentoring model was used that was aligned with the adult learning conceptual framework, faculty members were able to study and evaluate their teaching practices to create their next instructional decisions successfully. Sato and Haegele (2017) used the framework of adult learning as a foundation when identifying physical educators' experience with professional development and found that the participants were motivated to partake in professional development when topics were of interest and felt they better understood practices when working with students with disabilities because of the online professional development course. Both studies demonstrate positive learning results when components of the adult learning theory are aligned with professional development opportunities.

Halpern and Tucker (2015) also applied the principles of the adult learning theory to create online tutorials for adult learners that would be engaging and meaningful. The researchers built the tutorials around the key characteristics that adults are motivated to learn, value their life experiences in learning, and prefer learning to be self-directed and aligned with their goals (Halpern & Tucker, 2015). The researchers considered the unique needs of the learners and participants believed that the content and pacing of the courses did reach their interests and aligned with their learning needs (Halpern & Tucker, 2015).

The application of this theory during the course development supported the learning of adults in these tutorials.

Carpenter-Aeby and Aeby (2013) aligned principles of the adult learning theory when designing a social work course for adult learners. The researchers considered the needs and preferences of the learners when planning course activities and identifying the learning strategies to be used in the course. Carpenter-Aeby and Aeby noted that when taking these factors into consideration, the adult learners were able to self-direct their learning and apply course content into their lives. When the adult learning theory has been applied in past research studies, the learners themselves reach positive outcomes including the stronger application of learning, satisfaction with the courses, and stronger motivation among learners to partake in the course (Bair et al., 2019; Carpenter-Aeby & Aeby, 2013; Halpern & Tucker, 2015; Sato & Haegele, 2017).

Ring et al. (2019) implemented a study in which a specific professional training program to support early childhood teachers in working with students with autism was created based on teachers' interests and needs for professional development that teachers expressed in a survey. The professional development training was aligned with the adult learning theory, as it incorporated self-direction, built on the teachers' individual prior experiences, and used multi-modal learning to cater to teachers' diverse learning interests (Ring et al., 2019). Surveys were used to assess teachers' satisfaction with the training. Results indicated teachers increased their knowledge, expertise, and confidence in working with autistic students, and almost 100% of respondents were satisfied or very satisfied with the course because it included practical and realistic approaches to learning

(Ring et al., 2019). Thus, the researchers demonstrated that professional development aligned with the framework of the adult learning theory increased teacher satisfaction and learning.

The framework for adult learning is aligned with the professional development of teachers. Through this study, the teachers' experiences with professional development were explored, which incorporates their prior experience as learners. Additionally, this framework can help address the question as to what professional development practices are effective and ineffective for individual teachers which will help identify best practices in professional development for teachers of students with disabilities in inclusive environments. Knowles' (1984) theory of adult learning aligns with the key idea that teachers must self-direct their learning, and this study will identify the perceptions of teachers on how they would learn best. As shown by the research (Bhroin et al., 2016), using the adult learning theory as a framework can support teachers in acquiring the knowledge and skills needed to teach in inclusive education settings.

A second, supporting conceptual framework that informed this study is Vygotsky's (1978) theory of social constructivism. Vygotsky highlighted that social constructivism builds on the concept that social interaction is needed to create successful learning opportunities, learning takes place within the zone of proximal development, and scaffolding is most effective in supporting students' development. The zone of proximal development is the difference between what a learner can achieve independently as compared to what the learner can achieve with the support of others (Vygotsky, 1978). Vygotsky explained that scaffolding is when a learner works with a more knowledgeable

person, who is at a higher ability, to receive guidance and support when learning a new concept or completing a new task. An apprenticeship is created so that the more knowledgeable person can model the skill or behavior and provide instructions and guidance as needed to support the learner in achieving the task or obtaining new knowledge (Vygotsky, 1978). Researchers have highlighted the social constructivist theory as a framework for inclusive practices because Vygotsky stressed the importance of social context, direct experiences, and scaffolding as key elements that benefit student growth (Mallory & New, 1994; Walker, 2007).

Building on Vygotsky's (1978) theory, Mallory and New (1994) explained that learning is enhanced by social interactions with both their non-disabled peers and adults such as their teachers. Through these interactions, students can use classroom tools effectively, solve problems, collaborate, and develop social norms by learning alongside others (Mallory & New, 1994). Walker (2007) explained that when students with disabilities can engage in play with non-disabled peers, they can develop new social and cognitive understanding to become more independent. Additionally, their peers also learn how to react and respond to students with disabilities through their interactions, thus creating a reciprocal relationship (Mallory & New, 1994).

Walker (2007) explained that there is, unfortunately, limited discussion on how the social constructivist theory can inform best practices in early childhood inclusion settings other than the research of Mallory and New (1994). However, Vygotsky's (1978) social constructivist theory can provide guiding principles for teachers in understanding how students with disabilities learn best through play and social experiences with others.

Vygotsky's social constructivist theory supports inclusion practices because it helps teachers understand how children learn best in an inclusive setting through the role of social interaction, active learning, and the importance of guiding learners through the zone of proximal development (Walker & Berthelsen, 2008). The teacher acts as a guide to scaffold instruction for students with disabilities by helping them to solve problems, collaborate with others, and learn new skills (Mallory & New, 1994).

Crucial to the role of social constructivism in inclusive classrooms is the concept that all students are members of the same community, and all students have the right to belong, are valued, and should have proper accommodations to support their development growth (Mallory & New, 1994). Leatherman (2007) highlighted that through the lens of Vygotsky's (1978) social constructivist theory, teachers can view inclusive classrooms as places where students with disabilities can continue to grow, interact, and build positive relationships with others. Using this theory as a basis for inclusive teaching, teachers will develop a strong understanding of their students with disabilities and implement evidence-based teaching practices such as play and peer learning to support students' needs and build off their prior knowledge and strengths. However, teachers need effective types of professional development to support them in implementing these practices successfully.

Previous researchers have used the social constructivism theory as a framework for their studies (Grenier, 2006; Jamero, 2019; Sempowicz et al., 2018). The importance of play within one's education is highlighted by using social constructivism as an aligned theory in inclusion. Play allows students to problem solve, interact with others, and

experience new challenges to continuously learn and develop certain desired behaviors (Mallory & New, 1994). Jamero (2019) used the work of Mallory and New (1994) as a framework for research in which Jamero explored the play experiences and interactions of early childhood students with autism in inclusive settings using classroom observations. Jamero discovered that play can result in either a child with disabilities isolating themself or in the creation of meaningful experiences with others that can affect a child's learning. Jamero found that if play is supported with teacher interaction in the form of scaffolding, teachers can bridge gaps between peer interactions and support students in taking part in meaningful learning experiences. Jamero explained that teachers need to support students in play to promote awareness of their peers, encourage collaboration, use strategic pairing, and mediate issues to support students in problem-solving. Through peer and adult support, students with disabilities can have experiences in inclusive classrooms in which they build on their prior knowledge through play so learning can take place, which is aligned through the framework of the social constructivist theory.

Grenier (2006) used the social constructivist perspective as a guide when observing the practices of teachers in a third-grade inclusion physical education class that had students with cerebral palsy and a visual impairment. Grenier indicated that the social constructivist approach towards inclusion incorporates basic principles such as focusing on a student's ability, the use of relationships to support development, and the importance of interactions between students to develop meaning. Through the social constructivist lens, Grenier determined that the observed teacher's practices aligned with this theory in

that she believed in the development of the students with disabilities skills, used strategies to accommodate the learner based upon what she knew about the student, and established learning opportunities through experiences and interaction with peers.

Lastly, Sempowicz et al. (2018) used the social constructivist perspective to examine the effect curriculum has on students' experiences in schools among adopted and foster children. They too found the importance of the teacher in understanding each child's background and individuality fully to acknowledge ones' differences and plan and adapt instructional decisions accordingly to support students in having positive classroom experiences. These findings relate to the ideas outlined in using the social constructivism theory as a principle for inclusion such as teaching aligned with the students' zone of proximal development (Sempowicz et al., 2018).

The social constructivism theory is aligned with best teaching practices in inclusive environments. Through this study, the teachers' perspectives on what professional development is needed to implement effective inclusive practices will be explored. The theory of social constructivism can help address the question as to what professional development practices early childhood general education inclusive teachers perceive would best support them in implementing evidence-based practices in inclusion classrooms. Vygotsky's (1978) theory stresses the importance of social context and direct experiences as key elements that benefit student growth. Teachers must know how to develop these types of experiences through professional development to effectively teach students with disabilities in inclusive environments.

As shown by Grenier (2006), using the social constructivist theory as a lens throughout this study can ensure that the practices teachers want to develop through professional development align to strategies that accommodate the learner based upon what teachers know about students with disabilities. Then teachers can effectively create learning opportunities through experiences and interaction with peers with scaffolding supports. Knowles' (1984) adult learning theory can inform professional development facilitators to provide professional development to teachers in a way in which adults learn best to support the teachers in implementing evidence-based practices in inclusive settings. Together, adult learning theory and social constructivist theory relate to the importance of teachers being provided with the proper supports needed to effectively implement evidence-based practices in inclusive education settings.

Inclusive Education

There are varied definitions of the term inclusive education. After reviewing research on the topic of inclusion, Haug (2016) explained that the definition can vary in a narrow context by solely referring to students with disabilities and in a broad context referring to all students and marginalized groups and not only just those with disabilities. In analyzing 30 key articles from across the country, Nilholm and Göransson (2017) noted that the definition of inclusion varied from article to article and even within specific articles themselves, yet key components of the definition often included that students with disabilities were placed in a mainstream setting and were provided with educational supports. Stites et al. (2018) explained in their study, that inclusion refers to a student's least restrictive environment which is determined by a student's individualized

education plan. Although the definition of inclusion varies, key components often relate to a student being placed in the least restrictive environment with non-disabled peers and that the student receives the educational support they need to produce positive educational and social outcomes.

The inclusion of students in early childhood general education classrooms is a major educational topic across the world. There are more students with disabilities placed in general education settings in early childhood than in primary schools (Nonis et al., 2016). There has been a shift across the world to focus on the use of inclusion practices and prioritizing that the needs of diverse students are met in students' least restrictive environments since the 1990s (Cate et al., 2018). In the research state alone, nearly a half a million students served under IDEA as of 2016 nearly doubling the population of students since 1991 (U.S. Department of Education, 2017). As the number of students with disabilities in early childhood settings rises, there is a greater focus on the benefits of inclusive education.

The growing focus on inclusive education is aligned with the academic and social benefits that the inclusive model produces with students with disabilities. McLeskey et al. (2018) noted that students often perform stronger academically in inclusive settings versus self-contained settings and develop social-emotional skills such as positive work habits, risk-taking, and an increase in self-confidence. Morningstar et al. (2016) explained that students with disabilities may show greater academic progress, higher academic achievement aligned with grade-level standards and curriculum, improved behavior, and the acquisition of social and functional skills when placed in an inclusive

general education setting. Similarly, Kirby (2017) cited several studies in which students with disabilities that were placed in inclusive settings outperformed students with disabilities placed in non-inclusive settings in academic areas including language arts and math. Lundqvist et al. (2016) explained that students in early childhood inclusive settings develop social skills through play with their typically developing peers and teachers in their study indicated that the peers' understanding and views of the students with disabilities are often more positive than the teachers' understanding and views. Students with disabilities that are placed in inclusive settings make both academic and social gains.

Despite the benefits of inclusive education and best practices in inclusion, there are still disadvantages and obstacles in inclusive settings. Contrastingly to the previous research (Kirby, 2017; Lundqvist et al., 2016; McLeskey et al., 2018; Morningstar et al., 2016), Gilmour (2018) explained that students with disabilities often show less academic progress than their non-disabled peers and achievement gaps specifically in math exist between students. Anderson and Lindeman (2017) used surveys and interviews to examine the perspectives of teachers who work in prekindergarten inclusive classrooms and found teachers struggle to meet the needs of students using interventions and have trouble helping students with disabilities reach high academic expectations. Ceylan and Aral (2016) found that teachers struggle to use effective classroom management practices when meeting the behavioral needs of students with disabilities. Even though inclusive education is promising in promoting positive outcomes for students with disabilities, challenges around gaps in learning and teachers' challenges in supporting students effectively academically and behaviorally are still prevalent. Teachers need to be

provided with the skills and knowledge needed to become adequately prepared to meet the demands of working in an inclusive environment.

Effective Practices in Inclusion

For the benefits of inclusion to prevail and the obstacles of inclusion to be combatted, certain key factors of inclusive education must be present. These factors include collaboration, and a clear vision of what inclusion means among stakeholders. Collaboration is when stakeholders including staff members and families work together to share instructional and organizational responsibilities. For example, Murphy (2018) explained effective inclusion practices include the use of teacher collaboration by using co-teaching models and transformative leadership in which leaders communicate their vision, encourage and support others, and using problem-solving to address co-teaching challenges. When collaboration is used, a unified commitment to support students with disabilities in inclusive settings will be created (Hoppey et al., 2018) Coupled with collaboration, a shared vision that emphasizes that all stakeholders are responsible for students' success is needed to promote quality inclusive programs. In a study using interviews to examine teachers' perspectives in using a framework for inclusion called the Universal Design of Learning, participants shared that effective inclusion models included a shared vision in which all stakeholders are involved in the leadership, problem-solving and decision-making involving students with disabilities and promoting inclusive practices in schools (Lowrey et al., 2017). All stakeholders should have an active role in decision-making and leadership responsibilities so that a shared vision can be created to produce greater student outcomes. A shared vision of the benefits of

inclusion and the use of collaboration are key practices that will facilitate a positive inclusive model used in schools.

In addition to a clear, positive vision about inclusion, inclusive teachers also use instructional practices focused on differentiation that supports students with disabilities (Buli-Holmberg & Jeyaprathaban, 2016; Jordan, 2018; Warren et al., 2016). *Differentiated instruction* is teaching practices that directly align to individual students' learning needs (Jordan, 2018). However, though researchers have found that differentiation is a key component of teaching needed to create effective inclusive learning environments in the early childhood general education setting, research also indicated that not all teachers are adequately prepared or able to implement differentiation practices in inclusive classrooms (Buli-Holmberg & Jeyaprathaban, 2016; Jordan, 2018).

Early childhood teachers also need to be able to create a positive classroom environment and learning activities that focus on developmentally appropriate practices (Brodzeller et al., 2018). For example, teachers should develop learning opportunities that focus on language acquisition that incorporate play which developmentally is appropriate for students in early childhood settings (Warren et al., 2016). Effective developmentally appropriate practices are a key factor in the success of inclusion and student developmental growth, but some teachers may need greater support in implementing these practices and some students may still not progress developmentally even when effective instruction is included. For effective practices to be present in inclusive classrooms, high levels of teacher quality and competency are needed so that

teachers can implement developmentally appropriate instruction in the classroom (Cate et al., 2018).

Teachers' Perceptions of Levels of Preparedness

Special education teachers often take part in university-level coursework that focuses on supporting students with disabilities, whereas general education teachers often lack courses specializing in this field and thus are unprepared to adequately work with students with disabilities. In a mixed-methods study, Zagona et al. (2017) incorporated interviews and surveys to identify general education and special education teachers' experiences with preparation for inclusive environments. They consistently found that special education teachers felt more prepared than general education teachers in supporting students with disabilities in inclusive environments (Zagona et al., 2017). General education teachers lack skills in individualizing and adapting instruction and assessments for students with special needs (Majoko, 2018; Zagona et al., 2017). Similarly, Stites et al. (2018) used a mixed-methods study to examine the perceived needs of preservice teachers from both special education and general education when teaching in inclusive environments. The results demonstrate that the teachers were concerned they were still not adequately prepared in understanding the diverse needs of students, strategies to increase classroom equity for students with disabilities, and how to effectively use differentiation techniques (Stites et al., 2018). However, Stites et al. indicated the need for further research to be done to compare the perceived needs of teaching in inclusive environments of special education preservice teachers with general education teachers. The results of these studies indicate the need for further research on

the needs of teachers working in inclusive environments so that teachers can become more adequately prepared to work with students with disabilities.

Although there is a lack of adequate preparation of general education teachers to work with students with disabilities, there is limited research that shows how to address this need (D'Amico et al., 2019; Woodcock & Woolfson, 2019). Woodcock and Woolfson (2019) stated that there is a lack of research that focuses on teachers' perspectives of the types of supports needed to teach in inclusive classrooms and that more research needs to focus on determining what types of professional development adequately support teachers in implementing effective practices for inclusion. D'Amico et al. (2019) highlighted that few researchers examined the challenges general education pre-service teachers have in inclusive environments. Because teachers believe they are underprepared to teach in inclusive classrooms, it is important to determine what teachers' specific needs are so that professional development can be designed to address teachers' needs and challenges that they face.

Teachers' Needs in Working With Students With Disabilities

Teachers' lower levels of perceived preparedness for teaching inclusive environments align to the perceived needs they have. When interviewing Head Start teachers who teach in inclusive environments, Muccio and Kidd (2018) found teachers express a need for support in acquiring knowledge about the specific disabilities that students may have and the best practices to support these students. Although teachers had positive views towards inclusion, they still perceived that they lacked the necessary knowledge and skills to work with students with disabilities particularly when working

with students with severe disabilities or behavioral needs (Yu, 2019). Teachers have expressed an interest in understanding ways to better support students with disabilities (Bemiller, 2019). They expressed a need to learn more classroom management and instructional strategies that superficially cater to students with disabilities (Bemiller, 2019). Even when teachers have basic knowledge about students with disabilities, they still need professional experts to support them in acquiring and implementing instructional practices to support students with disabilities in early childhood inclusive settings (Dinnebeil et al., 2019; Ravet, 2018). Teachers are aware of what their individual needs are and are eager to have their needs met by learning new instructional and classroom management strategies through professional development to better support students with disabilities in inclusive classrooms.

Teachers have perceived preferences regarding the types of effective professional development supports such as hands-on practice and observation of best practices (Majoko, 2017; Park et al., 2018; Young, 2018). Hands-on training will help teachers apply the practices demonstrated and learn from experts to build their confidence in working with students with disabilities (Park et al., 2018; Young, 2018). Teachers also need more time observing best practices in applying strategies for working with students with disabilities in inclusive environments (Majoko, 2017). It is necessary to provide teachers with hands-on support and observational opportunities to address their needs, yet it is still unclear what specific types of professional development support would be appropriate and beneficial in increasing teacher knowledge and skills.

Past Research on Professional Development for Inclusive Teachers

Previous research conducted on the experiences with professional development

specifically for teachers teaching in inclusive environments demonstrates that there is a

need to better prepare teachers to support students with disabilities (Klingner et al., 2003;

Kosko & Wilkins, 2009). Klingner et al. (2003) explained that teachers reported needing

continuous, research-based professional development support to effectively implement

evidence-based practices such as the use of coaching and ongoing discussions with

mentors, but most school leaders found these practices to be too time-consuming and not

feasible. In a survey, 78% of general education teachers reported that they did not receive

in-service training in how to support students with disabilities and requested the need for

more professional development on adapting curriculum and various teaching practices to

support these students (Buell et al., 1999). Kosko and Wilkins (2009) explained that the

types of professional development being used to train inclusive teachers are not

adequately preparing teachers to use inclusive-based practices and a larger amount of

more practical inclusion training is needed to support teachers. Past research is consistent

with current research in stating that more effective professional development is needed to

address the needs of teachers in working with students in inclusive environments

(Brodzeller et al., 2018; Woodcock & Hardy, 2017).

Despite identifying problems and barriers in professional development, some

previous researchers cited effective practices in professional development for inclusive

teachers (Buysse & Hollingsworth, 2009; McLeskey & Waldron, 2002). McLeskey and

Waldron (2002) explained that traditional lecture-based seminars are ineffective because

these seminars do not consider the complexity of different schools and classrooms. For professional development to be effective, it must be tailored to each school, classroom, and each teachers' beliefs and attitudes about inclusion (McLeskey & Waldron, 2002). Similarly, Buysse and Hollingsworth (2009) explained that effective professional development should be tailored to the different characteristics of the learners in the classroom so that it is relevant to the teachers and should be aligned with the goals and standards of that school, teacher, and the students. Additionally, professional development should be teacher-centered and embedded in the classrooms including coaching and ongoing, follow-up training (McLeskey & Waldron, 2002). Other examples of these practices include group collaboration with teacher leaders and ongoing coaching and consulting through consistent, intensive feedback (Buysse & Hollingsworth, 2009). These characteristics of effective professional development are still echoed in more current research about these practices.

Characteristics of Effective Professional Development

The phrase professional development encompasses a range of definitions and has most recently incorporated more informal learning activities that can take place during the regular school day. Professional development is a transformation of teachers' practices and knowledge, and this transformation can improve student learning outcomes through varied means (Darling-Hammond et al., 2017). Evans (2019) encouraged professionals to hold a broad lens when defining professional development in thinking about how informal learning opportunities such as classroom observations and sharing of best practices among teachers can also enhance one's professionalism and be identified as

professional development. Instead of the traditional use of lecture seminars and workshops, professional development can include informal approaches through activities teachers experience daily such as those outlined by Kyndt et al. (2016) which include reflection, experimentation, overcoming difficulties, and collaboration between education professionals. The definition of professional development has expanded over time thus providing an array of options for professional development to support teacher growth.

One characteristic of effective professional development is that it is ongoing (State et al., 2019). Ongoing means that professional development must take place throughout the school year in different settings and not be based on just one workshop (Woodcock & Hardy, 2017). Teachers need to receive sustained professional development practices so that they are given frequent opportunities to learn and interact with experts in the field (Daniel & Lemons, 2018). Ongoing opportunities can be more readily available since professional development can include formal and informal modes.

As important it is for professional development to be ongoing, effective professional development must align with the individual teacher's needs and interests for positive effects to be seen. Jimenez and Barron (2019) explained that learner-centered professional development that is based on an individual teacher's needs and goals will provide teachers with the resources needed to increase student achievement. For learning to take place, professional development needs to match teachers' needs and beliefs and emerge from actual obstacles and issues teachers are facing so it relates to the reality they are experiencing in the field for transformative learning practices to take place (Attard, 2017; Martin et al., 2019). Individualized professional development is valued throughout

research (Attard, 2017; Martin et al., 2019), yet it is unclear how instructional leaders can create learning experiences that will align to the individual teacher and are relevant to the teacher.

Coupled with individualization for relevancy, job-embedded professional development is another effective professional development practice. Job-embedded professional development takes place within a teacher's school or class and includes learning that takes place as teachers collaboratively plan, reflect, and practice action research methods during everyday school activities (Darling-Hammond, 2017). Woodcock and Hardy (2017) highlighted that job-embedded learning through opportunities such as direct coaching or collaborative study groups were more effective professional development models than traditional workshops or seminars. When professional learning takes place within the context of the classroom through authentic experiences, inclusive practices can successfully be adopted by teachers (Robinson, 2017). It is evident that job-embedded professional development promotes teacher learning, but it is unclear what types of job-embedded opportunities promote the greatest teacher growth.

Alternative Modes of Professional Development

Professional development can be delivered in a wide range of contexts but to be effective it must include explicit, intensive training of evidence-based practices in which the teacher is an active learner (State et al., 2019). Bentley and Cason (2019) explained that traditional modes of professional development such as attending a workshop or watching a video are types of professional development that teachers receive rather than

experience through tailored trainings and thus are found less effective in research. Traditional workshops and seminars do not support teachers in implementing and transferring teaching practices into the field and lack the ongoing support teachers need to connect theory to practice effectively (State et al., 2019). Thus, varied types of professional delivery that are job-embedded, ongoing, and include the teacher as active participants are promising practices in professional development.

Coaching or mentoring of teachers by experts has been a mode of professional development that has gained attention in the field. Carmouche, et al. (2018) defined coaching as observations of teachers by stakeholders such as a peer, supervisor, or professional development provider that include feedback given to the teacher to increase the teacher's confidence and levels of teaching performance. Through coaching, teachers' skills can be improved, they can make greater connections between theory and practice, and will use teaching tools and strategies more consistently (Gürgür, 2017; Tekin-Iftar et al., 2017). Coaching helps teachers accurately implement teaching strategies effectively and teachers begin to value the strategy as an evidence-based practice (Rakap, 2017). In-person coaching is a way to support teachers in bridging the gap between theory and practice so that they can implement evidence-based practices in the field effectively over sustained periods to better support students in their classrooms.

In-person coaching is not always a feasible option for school leaders as it can be timely and costly and alternative forms of coaching have become valuable professional development tools. Other forms of coaching such as the use of virtual or distance coaching through videos have been found to be effective in supporting teacher growth

while combatting school leaders' challenges faced with timing, flexibility, and cost

(Barton et al., 2018; Coogle et al., 2018). Some forms of e-coaching incorporate

technological platforms such as Skype to help observers provide teachers with immediate

feedback during a lesson through an earpiece as the observer watches the lesson from a

different location (Coogle et al., 2018). Other forms of virtual coaching include video

conferencing in which an observer watches a teacher's lesson through a video or live

technological platform and then provides feedback after the lesson through video

conferencing at a time that is the best fit for the teacher (Carmouche et al., 2018). These

different forms of virtual coaching have demonstrated positive benefits in supporting

teachers to gain new teaching skills to improve instructional practices through more

consistent communication to provide ongoing professional development (Barton et al.,

2018; Coogle et al., 2018). Although e-coaching proves to be beneficial in supporting

teachers in making changes in instruction, e-coaches need to make strides to develop

positive rapport with teachers virtually first and coaches must be trained specifically on

how to work through online platforms (Coogle et al., 2018). E-coaching cannot be a mere

replacement to professional development that includes face-to-face interactions but can

be a supplement in adding in more ongoing communication and learning opportunities.

Email coaching is another beneficial use of virtual coaching. Email coaching is

when performance-based feedback is sent via email to a teacher after an observation and

includes links to resources or specific videos to model a teaching practice to support the

teacher in implementing next steps (McLeod et al., 2019). The use of email coaching

helps to provide regular communication and feedback to teachers to support them in

implementing evidence-based practices (Carmouche et al., 2018). Providing coaching through email has increased early childhood teachers' implementation of a specific target behavior and supported teachers in creating changes in instruction successfully which improved student outcomes (Barton et al., 2018; Matsumura et al., 2019). Email coaching provides an alternative for in-person coaching but should not replace it because in-person coaching is essential to provide more individualized coaching to teachers (Coogle et al., 2018). Thus, even though virtual forms of coaching are effective, they should be coupled with other forms of professional development to be the most effective and technology use in professional development in other formats can also provide additional options to teachers.

Varied types of modes of technological-based professional development include online modules that are courses teachers can take virtually to learn new information. Online modules allow learners to self-direct their learning and pacing by giving them the option to return to modules to address challenges they may have in understanding or implementing evidence-based practices into the field (Sam et al., 2018). If designed and implemented effectively, online modules have been identified as a tool that can be used to increase teacher knowledge about evidence-based practices for students with disabilities (State et al., 2019; Walker et al., 2019). Although online modules have increased teacher knowledge about specific evidence-based practices, this mode does not always effectively support teachers in implementing and applying the practices into the field (Jimenez et al., 2016). Additionally, self-directed learning in an online format may not be the correct approach for all learners and some may need more support in

individualizing learning for themselves through other professional development supports

(Sam et al., 2018). Thus, online modules can enhance understanding of different

instructional strategies or content but may not support teachers in implementing and

applying practices taught. Therefore, the use of online modules may not be the best fit for

all learning content and the content objectives should be considered before selecting this

mode of professional development as a viable option.

Online professional learning networks are ways for teachers to receive

professional development through collaboration with others through online platforms

such as Facebook, Twitter, Wiki, or Instagram. Online professional learning networks

align with an inquiry method in which the teacher decides the content and skills to be

explored and which source to collaboratively communicate with others virtually to

acquire this content (Cook et al., 2017). Cook et al. (2017) explained that because

teachers serve students with varied disabilities and needs, online professional learning

networks personalize the learning the teacher may need to support specific students.

Through different online platforms, teachers can share best practices and many teachers

recognize online platforms and social media as a valued professional development

practice (Goodyear et al., 2019; Rosell-Aguilar, 2018). Even though the use of social

media has been favored by teachers as one mode of professional development, if the

platforms are not used and facilitated properly by experts, teacher growth may not prevail

(Cook et al., 2017; Goodyear et al., 2019; Rosell-Aguilar, 2018).

Most of the positive research on using online platforms and social media as

professional development was based on studies that were reported by teachers and not

formally evaluated so it is unclear if this mode holds effective results in increasing teachers' implementation of instructional practices. For example, Rosell-Aguilar (2018) used surveys and interviews to have language teachers self-report their knowledge of using Twitter for professional development and the effect it has on their teaching practices. Although social media and online platforms have been noted as a beneficial professional development practice (Goodyear et al., 2019; Rosell-Aguilar, 2018), a skilled facilitator must lead the online platforms to be most effective, so effective implementation of the use of online professional learning communities is considered.

Varied modes of professional learning have benefits in teachers' education yet combining varied types of learning in different formats to support teachers in changing and implementing new practices can also be beneficial (Brock et al., 2018; Kennedy et al., 2017). In a study in which self-directed online learning through a multimedia platform was combined with in-person coaching, teachers were found to explicitly teach vocabulary more often and more effectively to students with disabilities (Kennedy et al., 2017). In a case study, when teachers were able to repeatedly access video modeling of evidence-based instruction to students with severe disabilities and receive direct coaching in using the strategies, teachers implemented the strategies effectively and student progress was made (Brock et al., 2018). Kennedy et al. (2018) explained that teachers can implement evidence-based practices effectively in inclusive classrooms without taking part in traditional in-person workshops, but rather through mixed-media approaches that include direct feedback on the teachers' skills and implementation of them. Providing

teachers with varied formats of professional development coupled with coaching and direct feedback be promising practices in teaching training.

Summary

The purpose of this literature review was to provide background to frame this study in which I sought to understand early childhood general education teachers' perceptions of past professional development experiences for working with students with disabilities and what additional supports they may need in implementing evidence-based practices in inclusive environments to support students with disabilities. The review outlines background information about inclusive education as well as effective practices in inclusion settings. The review also included teachers' perceptions of the levels of preparedness in working with students with disabilities and the needs that they still have. Lastly, the review highlighted key characteristics of effective professional development and alternative modes of delivery for professional development opportunities such as the use of online modules or e-coaching.

Teachers believe they are ill-prepared to work with students with disabilities and need more professional development to support their needs. There are identified types of professional development that have been noted in research as being beneficial in supporting teachers in acquiring and implementing new skills to support students with disabilities. Yet, there is a gap in the literature in identifying the experiences and preferences for professional development specifically of early childhood general education teachers who are teaching in inclusive classrooms. In this study, I aim to close the gap by identifying the experiences of professional development of early childhood

general education inclusive teachers and identifying what professional supports the

teachers perceive as being most beneficial in supporting their needs and interests in

working with students with disabilities. The information presented in this study can be

used to assist those responsible for designing professional development for early

childhood inclusive teachers to do so in more effective ways.

     In Chapter 3, I address the study design and rationale for selecting a basic

qualitative study. I explain the role of the researcher, the methodology, and issues of

trustworthiness. The methodology explained in Chapter 3 is consistent with that of

qualitative studies which seek to interpret participant experiences.

Chapter 3: Research Method

The purpose of this qualitative research study was to understand early childhood general education teachers' perceptions of past professional development experiences of working with students with disabilities and what additional supports they may need in implementing evidence-based practices in inclusive environments to support students with disabilities. Chapter 3 includes a description of the research design and rationale, the role of the researcher, and the methodology including instrumentation, participant selection, and procedures for recruitment, participant selection, and data collection. Additionally, I summarize the data analysis plan, issues of trustworthiness, and ethical procedures, and close with a summary.

Research Design and Rationale

The research design selected for this study was based on a rationale. Early childhood general education teachers need to be prepared with the knowledge, strategies, and developmentally appropriate practices needed to adequately support students with disabilities in inclusive settings. Yet, many teachers believe they lack the knowledge and skills needed to competently support students with disabilities in inclusive settings, and there is a gap in professional development for early childhood teachers in training them to effectively teach these students. If teachers are not adequately prepared, student outcomes may be negatively affected. According to the Department of Education website in the northeastern city, there is an achievement gap among students with disabilities in this large, urban school district (see Table 1 and 2). There was a need to understand early childhood inclusive teachers' experiences with professional development in this school

district and what supported the teachers additionally needed to be prepared to effectively work with students with disabilities in inclusive settings. Effective professional development may be a way to better support early childhood teachers in acquiring the knowledge and teaching practices needed to successfully support students with disabilities in inclusive classrooms to produce greater academic outcomes.

The phenomenon of interest that I explored was the experiences of early childhood general education inclusive teachers with professional development and their evaluation of what additional supports they need in implementing evidence-based practices with students with disabilities. The RQs that were addressed in this study were:

1. What past experiences with professional development do early childhood general education inclusive teachers perceive as being effective and ineffective in supporting them in implementing evidence-based practices in inclusion classrooms?

2. What professional development practices do early childhood general education inclusive teachers perceive would best support them in implementing evidence-based practices in inclusion classrooms?

The study was a basic qualitative design that included two responsive interviews with teachers so that their experiences with past professional development could be explored. A researcher selects a basic qualitative study design when they aim to interpret the experiences of others, as well as the meaning of these experiences (Merriam, 2009). When other study approaches do not align with the purpose of a study or the data that will be collected, a basic qualitative study could be the best approach (Percy et al., 2015).

I considered using a case study or narrative research design. A case study is when a researcher studies a topic of interest over time and uses multiple sources of data to share information about that case that may include multiple sites or one site (Creswell & Poth, 2018). In this study, only interviews were used at one given time to explore the perceptions of teachers. Further information on how interviews were conducted will be highlighted later in this chapter. Other sources of information such as observations and reports are not needed to understand the perspectives of the teachers. Additionally, it is not necessary to explore different cases over time, as the focus of the study is to better understand the perspectives of early childhood general education teachers about past experiences with professional development. Narrative researchers use storytelling to report the lived experiences of participants often reported in chronological order (Creswell & Creswell, 2018). Although narrative research may help to identify the experiences of teachers with professional development, it did not align to the purpose of the study to understand the perceptions of teachers about professional development and what additional supports teachers will need to support students with disabilities.

Liu (2016) explained when it is difficult for the researcher to select one specific qualitative method approach that aligns with the purpose of a study, a basic qualitative design is an appropriate approach to select. A basic qualitative study focuses on understanding the experiences and perspectives of others (Caelli et al., 2003). Kahlke (2014) highlighted that when researchers use a basic or generic qualitative approach, they aim to understand how people interpret experiences, and while using this approach, researchers deeply analyze the data and use coding to incorporate deep descriptions of the

findings. A basic qualitative study helps researchers to understand how participants interpret and respond to certain events and experiences by collecting rich, accurate descriptions of these experiences (Percy et al., 2015). After reviewing extensive readings on various methodologies, deeply considering each methodology as a fit for my study, and consulting my mentors as suggested by Kahlke, I determined a basic qualitative study was the best fit to align to the purpose of understanding early childhood inclusive teachers' experiences with professional development and their evaluation of these experiences.

Responsive interviews were used so that a deep understanding of the teachers' experiences and perceptions about past professional development can be explored. Through interviewing, researchers can better understand and make sense of the experiences that individuals have had (Seidman, 2005). Responsive interviews, more specifically, allow the researcher to elicit more detailed descriptions from participants by posing open-ended questions to have the participants continuously expand upon their responses until their experiences are deeply described (Rubin & Rubin, 2005). More detail about the interview process is found in a later section. Through the analysis of the interviews, I was able to make meaning of the teachers' experiences by identifying patterns, trends, and eventually the key results of the study.

Role of Researcher

As the researcher, I had a key role in this study, and therefore it is important to identify previous personal and professional relationships with participants and any biases that I hold. My role as a researcher was to conduct interviews using open-ended

questions. The interviews were audio-recorded, which I later transcribed. Some of the

participants are graduates of the School of Education college program where I currently

teach. Other participants included former colleagues I used to teach with in two public

elementary schools. I no longer have a professional working relationship with these

participants, as the graduates do not attend the college and I no longer teach in the

elementary schools. Despite the lack of professional or personal relationships with these

participants, there may be some concerns of biases or conflicts of interests when working

with these participants.

To manage biases and conflict of interest concerns, I first assigned participants

pseudonyms to ensure the protection of their identities and that all data collected remain

confidential. Next, I engaged in self-reflection in examining my role as a researcher and

my beliefs about this phenomenon of interest. Some of the participants are former

colleagues whom I worked with 6 to 10 years ago. I may have had similar past

experiences with professional development because we once worked in the same school

setting. I also considered confirmation and leading question biases. Confirmation bias can

occur when a researcher responds to information in an interview to confirm a belief that

was held by a researcher (Creswell & Creswell, 2018). Leading question bias can occur

when the researcher directs, prompts, or responds to questions in a way that aligns with

their preconceived beliefs about the topic (Creswell & Creswell, 2018). To address both

biases, I took a neutral stance when responding to participants and held a stance of

openness in which I was willing to understand multiple perspectives on the given topic

and did not manipulate data to align to or reveal my beliefs (Patton, 2015). I kept

questions open-ended, asked clarifying questions, and avoided summarizing what

participants shared in my own words (Creswell & Creswell, 2018). My questions did not

reveal my beliefs on the topic nor led the participant in a direction aligned with my own

assumptions, but rather were framed in a way that is open to understanding multiple

perspectives that may be different than my preconceived thoughts on this topic of

interest. Additionally, I used recordings of responses and checked with the participants to

confirm the accuracy of my notes to ensure accuracy and minimize biases (Patton, 2015).

Participant Selection

A specific target population and criterion for participation selection were

identified for this study. I used two sampling strategies to recruit participants, and the

procedures for recruitment are outlined throughout this chapter. The target group was

early childhood general education teachers who teach in inclusive environments. For this

study, early childhood includes students from ages 3 to 8 years old. Inclusive

environments include general education classrooms in which students with disabilities are

included in instruction for at least part of the school day. Most of the teachers work with

students with high incidence disabilities which may include students with learning

disabilities and speech and language impairments, as well as developmental delays. The

criteria for the sample selection was: (a) the teacher is a general education teacher, (b) the

teacher is an early childhood teacher working with students ages 3 to 8, (c) the teacher

works in an inclusive environment in which students with disabilities or developmental

delay are present in their classroom for part or the full school day, (d) the teacher has a

minimum of 3 years of experience, and (e) the teacher teaches within the designated

large, urban school district. Although the criteria included teachers with a minimum of 3 years of experience, teachers were selected based on a wide range of years of teaching experiences from 3-25 years. These criteria aligned with the purpose and problem statements.

I received approval from the Walden University, and then purposeful sampling was used by contacting social media pages/groups that have members that could fit the criteria of my study. I recruited potential participants by first sending the administrators of the social media pages/groups a message inquiring if they would agree to post a flyer with the recruitment information for my study on their page or within their group. The email included background information about the study and the criteria for selection. Once the flyer was posted, potential participants reached out to me via email for more information and to express their interest in the study. I also used snowball sampling to recruit additional participants. Snowball sampling is when the researcher asks existing participants to connect them to other teachers who may fit the study criteria and be interested in participating in the study (Patton, 2015). Three of the participants shared the flyer with information about the study with colleagues who were also interested in participating in the study and met the criteria.

After a potential participant contacted me with interest in the study, I sent the teachers more information about the study. Teachers were asked to reply with any questions they had, if they met the criteria of the study, and if they were interested in participating in the study. If teachers were still interested in the study, they were asked to reply to the email to confirm that they met all the criteria for selection. I reviewed each

interested participant's school website to confirm the grade level the teacher teaches and that they are teaching in the designated large, urban school district in a general education classroom. When the interested participant met the criteria, I sent an email with information on scheduling the interview and the consent form.

The sampling strategies I chose were purposeful and snowball sampling. Purposeful sampling is often used in qualitative studies, as the researcher can identify individuals and groups of people who may have had experiences directly related to the phenomenon being studied (Palinkas et al., 2015). The use of social media sites to support the purposeful sampling process has more recently been noted as a way that researchers can recruit participants in a timely, cost-free manner (Gelinas et al., 2017). Snowball sampling was also used to attract additional participants as the initial participants were asked to share the flyer for the study recruitment with colleagues that may also be interested in partaking in the study. The target group was early childhood general education teachers who teach in inclusive environments. I sought to understand their perceptions of professional development and what additional supports they needed.

Patton (2015) explained that there are no specific guidelines when choosing a sample size for a basic qualitative study. Additionally, Fusch and Ness (2015) suggested that the sample size should ensure data saturation and a large sample does not necessarily determine saturation. The researcher should rather consider what participants would best align with the study and should concentrate on the quality of data to be collected (Fusch & Ness, 2015). Therefore, a smaller sample size of 12 participants that included early childhood inclusive general education teachers helped in reaching saturation. Using

individual in-depth interviews with each of the participants supported me in obtaining quality data.

Instrumentation

I used data collection instruments in this study. One key interview was used in this study, and a follow-up interview was included when needed to seek further clarification on responses. An interview protocol (see Appendix) was the primary instrument that I used to collect data during the initial responsive interview. Research gaps and key concepts found within the literature review relating to professional development experiences, content, and delivery modes were the basis for the questions that I developed for the interview protocol. The first set of questions provided background information about each participant, the second set of questions established the context of the teachers' classroom, and the last set of questions were open-ended questions that align to the RQs. Each question included prompts to support in eliciting detailed responses from each participant to better understand their experiences, their evaluation of these experiences, and what additional professional development supports they believe are needed. However, additional probing questions were used to encourage participants to expand upon their responses. Some of the questions were aligned with the conceptual framework in which the questions will be used to explore what content and modes of professional development teachers preferred. I recorded the interviews and transcribed the audio recordings.

During the initial interview, teachers were also asked to indicate what topics of professional development they believe will support them in effectively supporting

students with disabilities in inclusive classrooms and what modes of delivery of

professional development worked best in meeting their learning needs and interests. I

listed the options and marked down their responses. Some of the options for professional

development topics were selected from the Council for Exceptional Children's 2020

conference agenda (Council for Exceptional Children, 2019). Others were selected

through key topics in special education found in the literature review research. Modes of

delivery were selected based upon effective evidence-based professional development

modes found through the literature review.

Yeong et al. (2018) suggested that when ensuring the content validity of an

interview guide, the researcher should align each interview question to a RQ. The

alignment for the initial interview can be seen in the Appendix. After I aligned the

questions, I added additional questions to fill in any gaps noted. Additionally, the

researcher should contact experts in the field of study to review interview questions to

offer feedback on the questions (Yeong et al., 2018). To ensure content validity, the

interview questions and professional development options were reviewed by two

doctorate professionals with PhDs. in education who have experience in educational

research and currently train and coach teachers through an education program at a

college. I shared the questions via email and asked each expert to respond with emailed

feedback on the content of the questions within 7 days of receiving the email. Based on

the feedback, revisions to the questions were made. Any changes to the interview

protocol were submitted to the Walden IRB.

Procedures for Recruitment, Participation, and Data Collection

The procedures for recruitment, participation, and data collection are outlined in this section. For recruitment, social media site/page administrators were initially emailed information about the study with an attached flyer and were asked if they would be willing to post the flyer on their page or in their group. The social media pages/groups that were contacted were obtained by searching for key terms including the city's name and the words teacher and school on various social media sites. Once the flyer was posted, potential participants emailed me for information about the study which I then sent to them. If they met my criteria, I then sent the participants the consent form in which they were required to reply to the email writing, "I consent." When the site administrators or teachers were initially unresponsive, I resent the email again within a week. The recruitment process took place over the course of a month.

I then worked with each participant in scheduling a virtual interview using Zoom. The initial interview occurred once and lasted approximately 20 to 40 minutes. A follow-up phone call interview was scheduled to confirm some participants' responses and participants were asked any additional follow-up questions within two weeks of the initial interview. Depending on the need for confirmation and clarity, these follow-up interviews ranged from 5-10 minutes. The participants were asked for consent to having the interview audio-recorded. Participants were asked to confirm if the interpretation of some of their responses was accurate and asked follow-up questions for responses in which an in-depth answer may not have been given. The participants were asked to recommend colleagues who may be interested in participating in the study and met the

participation selection criteria. Patton (2015) refers to this type of sampling as snowball sampling in which participants that hold information related to the study's purpose recommend additional connections to other participants that may be good sources of information.

Data Analysis Plan

I created a clear data analysis plan for this study. The purpose of this qualitative research study was to understand early childhood general education teachers' perceptions of past professional development experiences for working with students with disabilities and what additional supports they may need in implementing evidence-based practices in inclusive environments to support students with disabilities. Two responsive interviews were used to collect data from participants. The interview questions (see Appendix) align with the RQs. Questions 1-5 helped gain background information about the participant and the context of their classroom. Questions 6 and 7 were aligned with RQ1 which identifies the teachers' current experiences of professional development, and the teachers' evaluation of these experiences. Question 8 aligned with RQ2 in identifying what additional supports through professional development teachers need. Questions 9-12 aligned with RQ2 to specifically determine the content topics and modes of delivery teachers would prefer. Question 13 was used as a clarifying question. Probing questions (indicated by letters) were used throughout the interview to inquire more information as to why the teacher responded in a certain way or to better understand the rationale for providing such an answer. The probing questions were also used to have the teacher

expand on the response to give a more detailed account of an experience or their perception.

The follow-up interview was used as a clarifying and confirmation interview. Some of the questions not asked during the initial interview or questions that need to be confirmed were asked or repeated during this process. The questions that were asked were determined after the initial interview to identify gaps in understanding when reviewing the transcripts from the initial interview. During the second interview, member checking was also used which will be discussed in detail later in this chapter.

I used thematic analysis to determine themes in the interviews. Thematic analysis is when researchers identify key patterns and themes in data that address the RQs (Maguire & Delahunt, 2017). The analysis is not a summary of the research, but rather it is a thematic analysis used to interpret the data to make meaning (Maguire & Delahunt, 2017). When interpreting the data hand-coding was used following the framework for the thematic analysis presented by Braun and Clarke (Maguire & Delahunt, 2017). I used the following steps:

- Step 1: I became familiar with the data by listening and rereading them often (Maguire & Delahunt, 2017). When transcribing the interviews, I listened to the interview several times. I then used a transcription service to transcribe the interviews and reread the transcriptions often to ensure accuracy.

- Step 2: I used open coding (Maguire & Delahunt, 2017). This is when the researcher modifies the codes as they go along by thinking about what chunks of the larger data are relevant to the RQ (Maguire & Delahunt, 2017). While

rereading the transcripts for accuracy I used open coding to identify key

patterns throughout the data that align with my two RQs.

- Step 3: I then highlighted key codes in the interview notes and transcripts.

  Next, I identified similar codes and began to chunk the codes into given

  categories which led me to eventually selecting the themes.

Identifying discrepant cases is a key part of establishing validity in a study

(Bickman & Rog, 2009). It is when the researcher examines data that support the

conclusions of a study and just as thoroughly examines that data that is considered

discrepant (Bickman & Rog, 2009). The researcher should report all discrepant cases and

explain them thoroughly when identifying the results of the study. The reader can then

evaluate the results to determine if the discrepant cases still warrant that the same

conclusions of the study should be retained or not (Bickman & Rog, 2009). A few

discrepant cases emerged during this study. One teacher indicated she felt supported by

her administrators when working with students with disabilities, but later contradicted

this statement in stating that she wished more support were provided and feels she has to

be independent in seeking her own resources to effectively support students with IEPs.

Three teachers indicated that they had some professional development experiences

related to working with students with disabilities and two teachers shared they had

training about the topic through their coursework at a university. However, despite

having these experiences, all the participants also noted that a lack of professional

development aligned with special education is an issue in their schools and that they

believe more professional development related to this topic should be provided. Thus,

consistency was found among participants' responses about the lack of professional development provided and the need for more administrative support in working with students with disabilities. Therefore, there was no need to continue to recruit new participants for interviews.

Issues of Trustworthiness

Trustworthiness is a key component of the research process and strengthens the worthiness or value of a research study (Amankwaa, 2016). In this study, trustworthiness was achieved through credibility and transferability by providing rich descriptions of participants' responses and the findings of the study. Credibility was also ensured by using member checking. Lastly, dependability and confirmability were met by describing each step of the research process through detailed steps.

Credibility is when the results of a study are aligned with the participants' original responses and data collected and that these data have been interpreted accurately (Korstjens & Moser, 2018). To establish credibility, rich, thick descriptions were used to provide a detailed account of participants, and the themes identified in the study (Creswell & Creswell, 2018). Providing a rich, thick description allows the readers to feel as if they are experiencing the events mentioned in the study so that they can determine if the concepts are applicable or transferrable to a different setting (Creswell & Creswell, 2018). I provided detailed descriptions of the experiences with professional development as discussed by the teachers in this study. I also provided a thorough description of the feelings and evaluations of these professional development experiences as mentioned by the teachers by describing the key themes noted.

During the analysis of interviews, gaps or lack of clarity in data can occur (Patton, 2015). Member checking is when participants are provided with the opportunity to react to the data by reflecting on the accuracy of it by determining if the data and themes mentioned make sense, if enough evidence is used to support the themes, and if the information is accurate (Creswell & Creswell, 2018). Member checking can be used to help the researcher verify the interpretations of the data or help deepen the responses of participants to obtain a more in-depth description of experiences (Patton, 2015).

After the data had been analyzed, I used member checking by giving the participants a copy of the transcription to address descriptive validity and included a table that outlined their key responses with the assigned code to address interpretive validity via email (see Maxwell, 1992). Participants had 2 weeks to respond with any feedback or follow-up questions. During member checking, the participant was provided with the option to withdraw from the study if they chose to withdraw. Using member checking, allowed participants to correct errors or add more information if necessary, so that they are allowed to react to the data and results noted to establish greater credibility. After member checking was complete and the data had been analyzed, I debriefed with participants through an emailed debriefing statement. The email contained a review of the purpose and rationale for the study along with initial anticipated results. The participants were offered the option of having the official results of the study shared with them if they choose.

Transferability is the degree to which the readers can identify if the results of a study can be transferred or applied to other settings (Creswell & Creswell, 2018). I

included rich, thick descriptions using key details so that the reader can determine if the concepts are transferable to a different setting (Amankwaa, 2016). Korstjens and Moser (2018) explained that it becomes the reader's role to read through the rich descriptions the researcher provides to make their own judgment in determining if the findings can be transferred to their setting.

Dependability is evident when the study can be replicated in a similar setting and with similar participants so the results would be consistent (Pandey & Patnaik, 2014). Confirmability relates to the researcher being neutral in which the results of the study are shaped by the participant's responses and not the researchers (Korstjens & Moser, 2018). To provide dependability and consistency, the researcher must perform an audit in which they thoroughly describe every step of the research process by including detailed records from the beginning of the study to the end (Korstjens & Moser, 2018). Thus, I included a detailed description of notes and reflections of each step of the research process, which includes participation selection and sampling procedure, data collection methods, or the data analysis process. Additionally, I tested participants' consistency in their responses by using a phone call follow-up interview to confirm some of the responses from the first interview and compared the responses to the follow-up interview.

Ethical Procedures

To proceed with this study, IRB approval was needed from Walden University (Approval No. 05-11-20-0661880). After IRB approval, teachers who met the study criteria were emailed a letter of invitation explaining that the purpose of the study is to understand early childhood general education teachers' perceptions of past professional

development experiences for working with students with disabilities and what additional supports they may need in implementing evidence-based practices in inclusive environments to support students with disabilities. The email informed the participants of the interview process. Additionally, scheduling options including times and locations for the interview were included in the email. Participants were offered the option to ask any questions they might have about the study before and after agreeing to participate in the study. If participants were interested in partaking in the study, they were asked to respond to the email.

A letter of informed consent for the participants to sign was also attached to the email. The teachers replied "I consent" if they agreed with the form. Within the informed consent, I explained the teacher's right to privacy, the right to discontinue the interview at any time, their right to refuse to answer any question that they are not comfortable addressing, and their right to withdraw from the study. The participants were informed that their participation in the study is voluntary and does not include compensation. Participants were informed that all data collected will be confidential. To ensure confidentiality, the names of participants were not included on any of the documents or within the results. Each participant was given a pseudonym in place of their names and only I knew the actual names of participants. I informed participants that all information gathered would be kept safely in a locked cabinet for 5 years, stored at my residence, and then shredded as per Walden University policy.

In the past, I was a teacher at the same school as some of the participants. My current position has no connection to the schools the participants work in, but the

possibility exists in which there would be concerns of bias and even conflict of interests about the research study. Additionally, in the past, I worked as an early childhood general education teacher in an inclusive setting in this school district. Thus, I hold my own experiences and perceptions regarding the professional development that was offered. I informed the participants that although I was familiar with some of the schools that they currently teach in, I would not let that interfere with the integrity of the study.

<div align="center">**Summary**</div>

In Chapter 3 I described the study methodology. A basic qualitative study design was used so that the experiences and perspectives about the professional development of early childhood inclusion teachers can be understood. Data collection included the use of one-on-one in-depth interviews. All interviews were recorded and transcribed, and hand-coding was used to identify patterns and themes within the data collected.

Purposeful and snowball sampling was used to identify participants for this study that met the five key criteria identified, and the study included 12 participants. A recruitment email that included the consent form was sent to participants. The requirements for participation in the study and ethical consideration involving their protection and confidentiality were explained and participants had the opportunity to ask questions before the study began. Throughout the study process, I kept a reflection journal of my responses and thoughts. In chapter 4, a description of the setting, demographics of participants, and the data collection process is included. Additionally, a description of the data analysis and results of the study is noted.

Chapter 4: Results

The purpose of this qualitative research study was to understand early childhood general education teachers' perceptions of past professional development experiences of working with students with disabilities and what additional types of support they may need in implementing evidence-based practices in inclusive environments to support students with disabilities. Information about what types of professional development they have received and reflection on what training opportunities would support them in implementing evidence-based practices or do not support them will be explained. Additionally, teachers suggested approaches to professional development that would be most beneficial in supporting their needs in working with students with disabilities in early childhood inclusive settings.

The RQs include:

1. What past experiences with professional development do early childhood general education inclusive teachers perceive as being effective and ineffective in supporting them in implementing evidence-based practices in inclusion classrooms?

2. What professional development practices do early childhood general education inclusive teachers perceive would best support them in implementing evidence-based practices in inclusion classrooms?

The RQs were informed by the conceptual framework and aligned with the problem and purpose of this study. The data for this basic qualitative study included results from 12 individual interviews based on 13 key questions and the follow-up

questions that were included based upon participant's responses. The questions addressed

the background and context of the participant's classroom, an explanation of participant's

prior experiences with professional development aligned with the topic of special

education or students with disabilities, and the participant's perception of how

professional development should be offered to best support their needs and interests

around the topic of special education and working with students with disabilities. I

analyzed and coded the interview transcripts to discover key themes aligned with each of

the RQs. In Chapter 4, I discuss the setting for collecting the data, the demographics of

participants, the data collection and analysis, evidence of trustworthiness, the results, and

a concluding summary.

Setting

The setting of this study was a large, urban public school district that employs

approximately 75,000 teachers. Due to the pandemic and COVID-19 restrictions, the data

for this basic qualitative study were collected virtually using Zoom video conferencing. I

used the conferencing tool to interview 12 early childhood teachers who taught in

inclusive classroom environments.

Several organizational conditions may have influenced the interpretation of the

study results. The participants were from seven different schools within the district, and

some of the participants have taught in multiple schools throughout their career in this

school district. As a result, participants may have had different experiences while

receiving different types of professional development depending on the location of their

school. Additionally, over the last year, teachers have been experiencing professional

development sessions focused on topics relating to teaching during a pandemic such as social-emotional learning, remote teaching strategies, and technology tools. Thus, teachers were reminded to reflect on professional development training that was offered before the pandemic that focused on the topic of students with disabilities or special education or during the pandemic in which they could correlate aspects of the training to the topic of students with disabilities.

Demographics

Twelve participants consented to participate in this study. The participants were from seven different schools in the school district and taught in a variety of grades from pre-kindergarten to second grade. Most of the participants have taught in multiple grade levels in an early childhood education setting throughout their careers. Participants had a wide range of teaching experiences from 3 to 27 years teaching in this school district. Five of the participants had more than 20 years of experience, three participants had more than 10 years of experience, and four of the participants had between 3 and 6 years of teaching experience. Most participants noted that out of all the years of their teaching careers, at least in 60% of those years they had students with disabilities in their classrooms. Most participants noted that the students with disabilities in their classrooms mostly commonly had learning disabilities, speech and language needs, attention deficit hyperactivity disorder (ADHD), or at times an emotional/behavioral disturbance or autism. Ten participants currently taught in a general education classroom, and two participants taught in an integrated co-teaching (ICT) classroom alongside a special education teacher. All 12 participants were female. Four participants identified

themselves as Hispanic, two participants identified themselves as African American, and six participants identified themselves as White. Table 3 represents the demographics for each participant including the current grade level taught, number of years teaching, and the approximate number of years teaching students with disabilities. The last column presents what types of disabilities students typically had in the participant's classroom. I used pseudonyms for the participant names to ensure confidentiality.

Table 3

Demographics of Participants

Pseudonym	Current grade level taught	Number of years of teaching experience	Approximate number of years teaching students with disabilities	Types of disabilities students had in classrooms
Ana	1st (ICT)	28	18	Speech and language; Emotional disturbance; ADHD
Charlotte	1st (ICT)	14	9	Learning disabilities; Speech and language; Autism
Clara	Kindergarten	25	9	ADHD; Autism
Gloria	2nd	6	5	Speech and language; Other health impairments
Janice	1st	11	6	ADHD; Learning disabilities
Julysa	1st	3	2	Learning disabilities; Speech and language
Lydia	1st	20	11	Developmental delays; Speech and language
Maria	Kindergarten	21	21	Speech and language; Emotional disturbance; ADHD
Maya	Pre-kindergarten	27	24	Speech and language; Other health impairment; ADHD
Olivia	Pre-kindergarten	14	10	Speech and language; Emotional disturbance; ADHD
Rosa	1st	3	3	Autism; Speech and language
Tanya	Pre-kindergarten	6	3	Speech and language

Data Collection

Eleven participants partook in an initial responsive interview through Zoom video conferencing. One participant partook in the interview through a phone conversation. The interviews lasted between 25 and 45 minutes depending on the participant. The main interviews were audio-recorded through Zoom, and I recorded the phone interviews

through a hand-held voice recorder. I downloaded the audio recordings, deleted them

from the platforms, and saved them to a secure, encrypted, and password-protected

computer. The transcriptions were created using Descript software. The Zoom and phone

recordings were uploaded to the Descript software and an automatic transcript was

created. I then listened back to the recordings and fixed errors and updated inaccuracies

on the automated transcripts as needed to maintain accuracy. The participants took part in

5-10-minute phone follow-up interviews after the interviews had been transcribed to

clarify their answers to some of the questions. Hand-written notes were taken during the

follow-up interviews. There were no unusual circumstances to report during any of the

interviews. There were also no variations in data collection. The interviews, recordings,

and transcripts were consistent.

Data Analysis

The first step in the data analysis process was to complete the transcriptions. The

interviews were transcribed using the Descript software. I then began to become more

familiar with the data by listening to the recordings while rereading each transcript

several times, making corrections to the transcriptions when needed to help ensure

accuracy. Each participant was then assigned a pseudonym to ensure confidentiality. The

next step was to begin thematic analysis, which is when researchers identify key patterns

and themes in data that address the RQs using open coding (see Maguire & Delahunt,

2017). During this process, I identified chunks of data from the transcripts that were

relevant to my RQs. I added this data to the left side of a t-chart, and I identified a key

code or codes on the right side of the t-chart that aligned with my RQs. After listening to

each transcript several times and adding in various codes, I began to search for key patterns throughout the data by highlighting key codes in each participant's t-chart. I began to find similar codes and would put these codes into larger categories which eventually led me to select the key themes aligned with each of my RQs.

When I completed hand-coding, I used member checking by providing the participants with a copy of the transcription through email to address descriptive validity and included the t-chart table that outlined their key responses with the assigned code to address interpretive validity. I asked participants to respond to me within 2 weeks if they determined there were any inaccuracies in the data or if they wanted to clarify their responses in any way. One of the participants noted a need for me to make a change to the transcript, but none of the participants asked me to make changes to my analysis.

Table 4 contains the key codes and themes aligned with RQ1, which addressed teachers' past experiences with professional development. There were 19 key codes aligned with RQ1 which included phrases such as a lack or need for professional development, lack of knowledge, and a need for support in working with students with IEPs. The three larger themes that emerged from the codes were lack of professional development about the topics of special education and teaching students with disabilities (Theme 1), lack of support from administrators (Theme 2), and the need to use informal professional development methods to address knowledge gaps in understanding special education and how to effectively teach students with disabilities (Theme 3).

Table 4

Key Codes and Themes for RQ1

Codes	Themes
Do not understand IEP; need more support	Theme 1: Lack of professional development on the topic of special education or how to support students with disabilities
Need to understand what the disabilities are	
Need support in working with students with IEPs	
Lack of professional development	
Need for more professional development	
Lack of knowledge about students with disabilities	
Need to better understand strategies for students with dyslexia	
Need for more training	
Lack of support	Theme 2: Lack of support from administrators
Requests for professional development ignored	
Administrator does not help	
Trial and error	Theme 3: Self-advocacy and informal professional development
Need to do your own research	
Attend webinars independently	
Attend college course about special education	
Self-advocacy to keep learning	
Create self-directed experiences	
Life experience	
Learning when in the field	
Using teacher leaders	
Presenters who have been educators	
IEP coaches and directors	
Presenters with classroom experiences	

Related to Theme 1, the lack of professional development on the topic of special

education or how to support students with disabilities, there were only three slightly

discrepant cases. Three teachers stated that they have had a few professional development

experiences around topics that could be applied to an inclusive setting. These cases were factored into the analysis by still summarizing the qualities of these training sessions that were found beneficial into the results of RQ2. Additionally, even though these three participants acknowledged having some type of training associated with working with students with disabilities, all three participants stated that additional training on this topic was still needed and indicated that there is still a lack of professional development offered on this topic overall. Another discrepancy was that one participant, Rosa, shared that she felt support by members of the administrators in part of her interview, but also reflected that she felts she was often left alone to determine what would work best to support students with disabilities in her classroom. This case was factored into the analysis by citing that Rosa felt some levels of support from administrators, but her preferences for additional support through professional development were additionally noted.

I identified 28 key codes related to the responses aligned with RQ2, which addressed teachers' professional development preferences (see Table 5). These codes included terms such as relevancy to the student body and continuous professional development. Five larger themes emerged from these codes which include relevancy (Theme 4), professional development provided by teacher leaders and experts (Theme 5), interactive, hands-on professional development (Theme 6), collaboration with families, teachers, and staff members (Theme 7), and professional development should be continuous and include follow-up sessions (Theme 8). The discrepant cases aligned with Theme 1 were that two participants referred to the training they have received through

their university work when reflecting on their professional development experiences. Both participants were asked to confirm if the perspective shared was related to professional development provided in the field versus their own education program throughout their interviews. Since both participants noted that the professional development was offered solely through their university, these responses were not included in the analysis of the data since the aim of this research study was to better understand the professional development experiences of teachers specifically within the identified school district. I describe the key themes that emerged in this study in more detail later in this chapter in the results section.

Table 5

Key Codes and Themes for RQ2

Codes	Themes
Professional development to align with the students in the class	Theme 4: Relevancy
Relevant trainings	
Relevancy to student body	
Relevancy to location	
Individualized based on IEPs	
Intervisitations in special education classrooms	Theme 5: Professional development provided by teacher leaders and experts
Using teacher leaders	
Presenters who have been educators	
IEP coaches and directors	
Presenters with classroom experiences	
Include a mix of activities	Theme 6: Interactive, hands-on professional development
Clear modeling of practices	
Use of visuals	
Engaging professional development	
Hands-on experiences	
Practice implementing strategies with others	
Make and take activities	
Collaboration with team members	Theme 7: Collaboration with families, teachers, and staff members
Work with paraprofessionals	
Parent collaboration	
Time to work with service providers	
Working with families	
Coaching after professional development sessions	Theme 8: Professional development should be continuous and include follow-up sessions
Follow-through	
Continuous professional development	
Feedback provided	
Professional development offered in cycles	
Consistent opportunities	

Evidence of Trustworthiness

Trustworthiness strengthens the worthiness or value of a research study (Amankwaa, 2016) and includes four components: credibility, transferability, dependability, and confirmability (Ravitch & Carl, 2016). Trustworthiness was achieved through credibility and transferability by providing rich descriptions of participants' responses. Credibility is when the results of a study are aligned with the participants' original responses and that data have been interpreted accurately (Korstjens & Moser, 2018). To establish credibility, rich, thick descriptions were used to provide a detailed account of participants and the themes identified in the study (Creswell & Creswell, 2018). Providing a rich, thick description allows the readers to make a judgment to decide if the concepts are applicable or transferrable to a different setting (Creswell & Creswell, 2018), thus achieving transferability based upon the reader's response.

Credibility was also ensured by using member checking. Participants had the opportunity to review the transcription of the interview and a t-chart that showed the identification of specific quotes from the participants which were aligned with a code using a single word or phrase. Participants had the opportunity to identify errors or any issues of misinterpretation that I may have had when coding their transcripts. Using member checking, allows participants to correct errors or add more information if necessary, so that they are allowed to be part of the data analysis process to establish greater credibility. Along with establishing credibility, member checking established dependability. To provide dependability and consistency, the researcher must perform an audit in which they thoroughly describe every step of the research process by including

detailed records throughout the study (Korstjens & Moser, 2018). Thus, I included a

detailed description of notes and reflections of each step of the research process, which

included participation selection and sampling procedure, data collection methods, and the

data analysis process. Additionally, I tested participants' consistency in their responses

by using member checking as described above and I included a phone call follow-up

interview with each participant to confirm the responses from the first interview and

compared the responses to the follow-up interview.

<div align="center">**Results**</div>

In this section, I first discuss the key themes aligned with the two RQs. I include

specific data to support each finding which may include a summary of a participants'

responses and actual quotes provided by the participants. Ellipses were included when a

portion of the quote was cut out to increase readability in instances when a participant

became side-tracked in their statements and part of the quote was irrelevant. I also

include a table (Table 6) that identifies the participants' preferences of topics focused on

during professional development and an additional table (Table 7) that shows the

participants' preferred modes of professional development delivery.

Research Question 1: Themes

The first RQ is: What past experiences with professional development do early

childhood general education inclusive teachers perceive as being effective and ineffective

in supporting them in implementing evidence-based practices in inclusion classrooms? I

identified three themes from the data analysis. These themes are lack of professional

development about the topics of special education and teaching students with disabilities,

lack of support from administrators, and the need to use informal professional development methods to address knowledge gaps in understanding special education and how to effectively teach students with disabilities.

Theme 1: Lack of Professional Development on the Topic of Special Education or How to Support Students With Disabilities

The first theme that emerged was that 100% of the participants believed they had lacked professional development experiences around the topic of special education or working with students with disabilities. Lydia, who has taught for 18 years said, "I haven't been to any that was basically geared towards that [special education]". Clara, who has taught for 13 years, shared "I'm gonna say none. I've never had not one PD [professional development] about a child with autism or even ADHD for that matter. It's always the equity. It's never about the children." Olivia noted, "but the training is just generalized for any child. Not really about special ed." Three participants explained that the special education teachers in schools often get to go to professional development to learn more about students with disabilities, but these opportunities are not offered to general education teachers. Charlotte stated, "I guess I haven't taken any [professional development about special education], but it's more because of the general education teacher, you know, I work with a special education teacher. I think more special education teachers are prioritized to go." The lack of professional development opportunities aligned with working with students with disabilities was highlighted by all participants.

Half of the participants noted receiving most training on topics like testing, analyzing student data, and learning new curriculum methods. Several participants stated that current professional development during the pandemic has solely focused on social-emotional learning, technology strategies, and equity of education. Maya shared that schools "spent a lot of money on TC [Teachers' College curriculum] people. They get $400 a day just to come in and push in, in the classroom for one period and see all the grades that day. I mean, that's a waste of money." All teachers expressed that they would be interested in and need more professional development to effectively support students with disabilities in their classrooms and therefore changes to the types of professional development offered should be made. Mary explained,

> I feel that we really kind of need more guidance, kind of like tell us what it is that you need instead of like leaving it open-ended. I feel that it's usually: this is what is expected, all students should be blah, blah, blah, blah, but then they don't tell us how to go about it or how we should do it. So, I feel that they need to be a little bit more direct [on how we should work with students with disabilities].

All participants shared that they are eager to attend training to better support students with disabilities in their inclusive classrooms. Yet, rarely have they had the opportunity to do so. From the responses, it is evident the teachers need more opportunities and a more direct explanation of how to best support students with disabilities.

Even when participants noted that they did receive some type of professional development experience that could be transferable to work with students with special

needs, the professional development offered was often ineffective in supporting the teacher in applying the practices in the field independently. Gloria noted,

> They gave us packets and the woman who is our special education coordinator
> stood up there and rushed through the packet. And we didn't really train on the
> FUNdations [curriculum] and after we left, I was like I don't know what to do.
> And you guys want me to do this? It wasn't helpful.

Rosa, who teaches at a different school shared a similar experience and explained that professional development solely focused on academics, grades, and getting students to reach grade-level expectations. She added, "But honestly, all the disabilities is left to you." Participants noted that even if the content of the training could be applied to the topic of special education, the professional development sessions are still ineffective in supporting teachers in working with students with disabilities in their classrooms.

One discrepancy regarding this theme of lack of professional development on teaching students with disabilities is that three teachers (Charlotte, Janice, and Ana) noted receiving some type of professional development on special education. Charlotte said, "I did a couple of years ago, take a workshop in the city, my co-teacher and I both went. So it was for ICT teachers with behavior management. I mean, nothing recently." Charlotte explained the training was about giving students in inclusive classrooms more choice. She explained that the presenter gave specific examples of what choice could look like in the classroom for math and writing and Charlotte was able to implement some of these practices in her classroom. However, although she felt successful in providing choice in math with manipulatives and in writing with paper choices, she did express that she was

unable implement choices through reading and wished she could attend a follow-up workshop on this topic to ask questions about the strategies she was struggling to implement.

Janice admitted she took training to learn about different strategies that can be used to support students with dyslexia or other reading needs. She explained what was beneficial about the training was that different tools were provided to the teachers that they could use in their classrooms with the children. She highlighted that there were reading bookmarks with strategies to decode that she could put on the desk for the students who were struggling with reading. She appreciated that she could readily apply what she learned in the workshop, the very next day in her classroom, yet was still eager to attend additional training on this topic to continue to grow new knowledge and skills.

Ana attended a workshop on calm down techniques for children. Even though the workshop was not geared to special education, Ana commented that she could pull some of the strategies taught and apply it to her work with students with disabilities, especially students with emotional disturbances. Like Janice, Ana appreciated that she had the opportunity to make the cards in the workshop and implement the use of them in her classroom the very next day. However, one child destroyed the cards immediately and Ana then did not feel prepared to take the next steps. When asked if she would have liked that workshop to have a Part II or a follow-up component, Ana explained,

> I would love that so much. For someone to come and see...because I have a kid
>
> that it didn't work, he destroyed it. He destroyed it right in the moment. I said,

okay, whatever, that was a waste of my time. So, you know, it would have been

great to see what technique they would have used with that child.

Through the descriptions of Charlotte and Ana's experiences, it is evident to note that there were some challenges in implementing the strategies taught in the training effectively and independently. The use of follow-up workshops on the same topic would provide them with a more beneficial professional development experience.

Theme 2: Lack of Support From Administrators

Another theme was that seven teachers believed there is a lack of support from administrators at the school when helping teachers work with students with disabilities or special needs. Rosa explained that she approached her administrators for support, and they responded with "Okay, well you have them [students with IEPs] right? Do whatever you can to help them." Referring back to an observation by an administrator, Maya shared, "I've had kids who are very, have the teacher's chair over their head, throwing things and, and you look at a supervisor like for assistance, and they can just ignore it. I can't ignore it. You cannot ignore it." Charlotte explained,

We have, I mean, we have a huge, special ed population, so let's, unfortunately the data shows they're not making as much progress as we want them to. So how do we really push them to get them closer towards where they should be?

Especially after all this what's going to, you know, they're only suffering more.

Charlotte elaborated that there need to be more systems in place to support students with disabilities especially since further obstacles may present themselves during and after the pandemic.

Similarly, Olivia highlighted that she would like more support from administrators in helping her address the needs of her young students. She commented, "And you want to make sure you're giving them [students with disabilities] everything that they need you, you know?" Gloria added,

> I wish they [administrators] would think about those students with disabilities when they are giving us our PDs. I feel like they just think about the general population, especially when it comes to assessments and data...I feel like they really need to focus more on those students with disabilities and give us different ways to capture the data for them.

Gloria explained that the administrators tend to focus more on students without disabilities, but she expressed there is a need to determine ways to support students with disabilities in taking assessments and finding alternative means of assessing these students fairly.

One discrepancy was that Rosa stated at times her administrators such as an IEP coordinator would support her if she had concerns or questions when working with students. Yet, Rosa also explained that at times when she approached administrators to get support, they often replied, "that sounds like a personal problem." Rosa believed that the administrators often think if they hired you as an inclusive teacher, you are equipped to solve your own problems when working with students with disabilities, which she felt was not always the case. The second theme presented here demonstrates an overall lack of support by administrators in ensuring the general education teachers are prepared and confident in working with students with disabilities in inclusive settings.

Theme 3: Self- Advocacy and Informal Professional Development

The third theme that emerged related to RQ1 was that eight of the participants advocated for themselves to receive the support needed to work with students with disabilities through alternative means which include more informal professional development experiences. Two participants explained they would go to the special education coordinator in the school to ask questions and gain clarification on how they could support a child with a disability in their classrooms. Four participants explained that while taking classes towards a master's degree, they strategically took classes that would support them in gaining more knowledge about evidence-based practices when working with students with disabilities. Six participants explained that they would have to do their own self-directed research to learn about the topic of special education and how to best support the students with disabilities in their classrooms; commenting that there is a wealth of information already out there to support teachers.

Several participants explained that they feel unprepared to work with students with disabilities and they had to really do their own research to help prepare themselves. Maya stated, "I sought things on my own, but from the actual school, no. Isn't that sad? Most of it's your own research, looking into what you could do to help the child rather than the school providing training to do so." Three teachers mentioned that they work directly with the service providers in the school such as the occupational therapist to learn new strategies that can be used to support students with disabilities in their classrooms. Olivia described,

I would have informal training with [name of the speech pathologist], the speech

teacher will come in and say, 'Oh, I'm working with [name of student] with this.

So, these are some things if you want to continue what I'm doing… you might

want to point this out in the classroom.' I'm talking like when she [student] was

getting dropped back over to my room, nothing formal.

These three teachers expressed that collaborating with service providers was genuinely

helpful, yet the time that is provided to collaborate is minimal and thus the collaboration

efforts are not as beneficial as they could potentially be.

Three other teachers explained that they would often brainstorm ideas to support

students with needs in grade team meetings by reflecting on different strategies that they

used to determine what is working, and what is ineffective. Tanya explained,

Sometimes the best advice doesn't come from PD. It comes to me being able to

hold the bathroom door open and go, Ms. T., you know what you gotta do here...I

think that support system supersedes any PD. You know, being able to just kind

of talk to someone who's done it longer than you and who may have more

experience that they could share with you.

These three teachers explained that sharing best practices with colleagues even through

an informal encounter was beneficial in developing new teaching practices and learning

how to best support students with disabilities in their classroom.

Lastly, five teachers noted that you continue to learn new strategies through

experience. Clara started using gestures when teaching sight words and discovered on her

own that the strategy was successful in helping struggling students say the correct word

associated with the gesture. Lydia and two other participants added that a lot of their work with students with disabilities is trial and error. Lydia explained,

> I went into this new curriculum that we're using, and I read up on different things for the children and I tweaked it...So I'll try it and if I think it's working, I'll use it. If I don't think it's working, I'll have to reinvent the wheel again.

Lydia and the two other teachers learned to be flexible when supporting students with disabilities and would try new practices through a trial-and-error approach and would then adapt the practices as needed to continue to learn what approaches would be the best fit for individual students. Some participants explained that they developed new practices through their direct experience working with students with disabilities. Rosa stated, "I've lived more, and I've seen more, and I heard more. I think that any teacher will definitely understand that as the years go by, you grow and become more and more patient and more willing to help the students." The use of trial and error and learning through their own teaching experience was highlighted by half of the participants.

Many participants also took their own initiative to gain new knowledge and learn strategies for working with students with disabilities through other informal means. Some took classes at local universities and others would research a disability and teaching practices associated with it. Some participants found webinars offered online that they would attend on their personal time to continue to develop strategies to best support the students in their inclusive classroom.

Yet not all teachers felt motivated to do their own research or to even know where to go to find specific evidence-based practices that would support a child with an IEP in

their classroom. Clara said, "They [administrators] expect you to research. You can research so much, but that doesn't necessarily mean that you're going to get the right answers." Similar to the findings noted through Theme 2, it is evident through these teachers' responses that more support in helping teachers work effectively with students with disabilities from administrators would be welcomed by participants. In addition to the self-advocacy role the teachers take on to continue to learn new practices through more informal means, their experiences should be coupled with greater support from administrators and more formal professional development opportunities as seen through Themes 1 and 2.

Research Question 2: Themes

In RQ2 I addressed, what professional development practices do early childhood general education inclusive teachers perceive would best support them in implementing evidence-based practices in inclusion classrooms? I identified five themes from the data analysis. These themes are relevancy, professional development provided by teacher leaders and experts, interactive, hands-on professional development, collaboration with families, teachers, and staff members, and professional development should be continuous and include follow-up sessions.

Theme 4: Relevancy

Theme 4, relevancy, aligned with RQ2. Seven participants noted that they would like the content in the professional development sessions to directly apply to their class and school's population. Charlotte explained,

They [professional development providers] come in and do these lessons and it's great, but it's just not realistic. Cause you're talking about the kids at my school. I work at an inner-city area. Kids are very, very, low-performing and then they'd come in and teach these lessons. I'm like, well, that's fantastic. But I'm not on the [location]. I'm not trying to sound like, but I'm just saying my populations are different. What's working at your school over there, is not working in here. So just people, they need to know the population they're talking to.

Similarly, Tanya noted,

They [professional development providers] show videos of these perfect classrooms or they show videos of kids one-on-one and that's not our classroom. I may only have two kids who have an IEP. I have seven who are undiagnosed and then I have the rest of the kids. So, what am I doing with them while I'm giving these tier three interventions to Johnny and Sally?

Tanya also explained that she does not want to observe in schools that have students who are well-behaved and have several paraprofessionals supporting the teacher. The environment is different from her classroom and thus she has a hard time relating to it. Some of the participants expressed that the classroom environment included in the professional development needs to be like their own classroom to make the sessions more relevant.

Additionally, some of the participants would like to directly apply the strategies they are working with to their classroom and students. Olivia explained that during one professional development session the teachers analyzed fake data from a made-up class.

She would have preferred to be looking at the actual data from her students to make the workshop more beneficial for her. Ana said that when she was able to make "calm down cards" during a training, she was more successful in implementing the strategy the very next day in her classroom. Clara expressed that she would like the sessions to be held in her classroom with her actual students to better understand how the strategy being taught could work. She said, "So to come in and see what he, what the student has, what the issues are, and see how they could help me help him during that lesson...some trick that they can give me." Most participants indicated that for professional development to be more beneficial, they should be able to make materials, analyze data, or see strategies with their actual students in action.

To reiterate what was discussed above of the importance of creating professional development based on the students with disabilities in a teacher's classroom, Janice highlighted that the professional development being offered should be aligned with her students. She explained,

> If we know that we have incoming students with certain disabilities, we should be
>
> offered that PD so we are not going into this cold turkey and finding out certain
>
> things so we respond in a way or do something that isn't helpful to the students.

Similarly, Tanya stated, "...making it relevant to what they [teachers] need. Like, don't give me a PD on autism when I have three kids in my class with ED [emotional disturbances]." Professional development should be aligned with and relevant to the students' disabilities present in the teachers' classrooms.

Lastly, teachers want professional development to be transferable to their grade-levels and the content of professional development to align to what they need. Olivia explained that often as a preschool teacher she sits in professional development sessions about state tests, which really only apply to the upper grades, and she finds that to be a waste of time. She would prefer to be able to choose sessions that are more relevant to her. Similarly, Mary also agreed that teachers need more choice in professional development. She stated, "Maybe we'll get the chance to plan for our schedule maybe a month prior and we could choose those training that we kind of need. That would be helpful." Relevancy was a key recurring theme discussed among most of the participants. Relevant professional development opportunities that represent the teacher's environment, students they work with, and their current needs or interests were valued by the teachers.

Theme 5: Professional Development Provided by Teacher Leaders and Experts

Eight participants mentioned that professional development should be provided by experts in the field who are directly working with students with disabilities. Charlotte expressed, "I want someone who has actually been an experienced teacher who has gone through these themselves." She went on to explain, "I'd rather talk to people who do what I do every day, instead of somebody going to give me a lecture...like that's great, but when's the last time you stepped foot in a class?" Similarly, Ana indicated that she wants someone who has been in the field and has worked with students with disabilities like her own students. Tanya expressed,

> I think too often we get PD from people who are, who've been out of the
>
> classroom for 100 years or haven't taught ever and things you know, not all the
>
> time, but sometimes look well on paper and then when you get into classroom it is
>
> a whole other situation.

Having knowledgeable professional development providers who have experience

teaching students with disabilities to present the sessions is important to most of the

teachers.

Four participants indicated that teachers and staff members in their schools are

being underutilized and should lead the professional development sessions as they can

best relate to that school environment and the students the teachers are working with in

their own classrooms. Rosa expressed that learning about the lived experiences from

other special education teachers could support her in working with her students.

Similarly, Janice explained, "I think a teacher in the classroom, knowing those

challenges, has tried something that works, I think you would feel that you can relate a

little bit better." Tanya discussed the strategy of empowering teacher leaders by giving

them a certificate as an expert in a certain area based upon their experiences. She

explained,

> You know just giving that person even a free period twice a month for people to
>
> be able to speak with them or just to get strategies or even paying to send that
>
> person to special conferences so that they can become knowledgeable, just having
>
> that person on hand.

Having professional development providers who have experience, knowledge, and that

the teachers can relate to, was a key theme highlighted by most of the participants.

Theme 6: Interactive, Hands-on Professional Development

Six participants highlighted that professional development should be interactive in

which the presenters are modeling specific practices, there are visual components such as

videos included, and that the teachers can interact with each other and the materials

provided. Doing so will help them better understand and be able to apply the evidence-

based practices being taught. Charlotte explained that she struggled to implement

practices taught during her professional development session because there were few

examples provided and the presentation was mostly lecture-based. She explained,

> I just think you learn best when you're in the moment and you're actually seeing
>
> it. I think anyone could stand in front of someone and say, well, this would work
>
> and try this. And these are great ideas. I appreciate it. But I actually want to see
>
> something take place and learn from there. Plus, you go home from these lectures
>
> or wherever confused.

Charlotte continued to explain that when you are right there in the moment with the

provider and they are modeling the strategies, you can ask questions and get clarification

to better understand the practice being shared.

Similarly, Gloria experienced a training in which the presenter just read a packet

and she would have preferred the chance to practice using the materials or see the

presenter model how to use them. Four participants explained that they need to see visual

representations of information to better understand it. Clara expressed, "I need to see

things not like a lecture. I could not focus on anything in a lecture. I have to be actually

doing it or even getting involved and the teacher telling me what to do." Similarly, Julysa

explained, "Because like I said, I'm not, I'm more of a visual learner and like listening,

just listening for me, it'll probably go in through one ear and out the other." Ana and

Tanya highlighted the importance of creating and using materials during the workshop

itself. Doing so would help them transfer the practices into their classroom more

effectively. Tanya said,

> Like with any PD, you have to give me tangible things. Like don't just tell me
>
> how to do it. Show me, give me the materials...Let me leave the PD with it in my
>
> hand so I can take it back to my room and I can use it tomorrow. That's what's
>
> going to stick with me.

Most participants want professional development to be presented in an engaging, hands-

on way so that they can leave the workshop understanding the evidence-based practices

and how to apply them.

Theme 7: Collaboration With Families, Teachers, and Staff Members

Another key theme noted by six participants was that professional development

should provide ways to collaborate with others. Two participants noted that service

providers such as a social worker should attend the sessions with the teachers so that they

can discuss the strategies being presented and determine how to apply them to support a

student with disabilities who they both work within their classrooms. Gloria noted that if

teachers attend workshops with service providers, "we could match the activities with

what they're [service providers] doing when they're pulled out in the classroom, then

they would be so successful." Doing so, as Olivia explained, could ensure everyone "is on the same page." Collaboration with service providers was valued as an effective professional development practice.

Several participants shared that during professional developments teachers need time to discuss ideas and learn from one another. Julysa explained that most professional development sessions are lecture-based. She explained,

Teachers aren't really given a chance to say anything. It's just more like one person that's talking and everyone else is listening. I feel when you hold a discussion you have more people who are adding their own thoughts or ideas. I feel like that's a great way for people to learn from each other.

Rosa explained, "But learning from a different person, but a different perspective could definitely help me improve." Most participants said sessions should be held in smaller groups, with a specific grade team, or with teachers who have students with similar disabilities in their classrooms. The only discrepancy from most participants requesting small group instruction during professional development was that Mary explained that attending a training as a whole school could also help teachers learn what is happening in other classrooms in their buildings from teachers they normally would not connect with. Regardless, most of the teachers wanted time to work with their colleagues during professional development sessions to continue to learn from one another.

Four participants noted that attending professional development sessions with parents and families would be beneficial. Ana indicated that "You need a village to raise a child. So, if everyone is involved and you have a communication with all the people

who are involved with the child, you can get more out of it." Olivia explained that during the sessions, families and teachers could better understand each other's perspectives and together find the best way to support the child with disabilities. Mary explained that attending professional development collaboratively with families could help demonstrate that "We're all going to do this together. And if you have any questions, we're going to work on those questions together and find a solution. I don't want them to feel like they're doing everything on their own." Two participants explained that during the pandemic, schools used virtual meetings to help support collaboration and that this practice could be used in the future in providing time for teachers to attend professional development sessions with families, other teachers from different locations, and service providers more easily. Half of the participants highlighted collaboration as a key effective practice in professional development.

Theme 8: Professional Development Should be Continuous and Include Follow-up Sessions

Six participants explained that professional development topics should not just be covered in one session, but rather be continuous or take place in cycles. Mary explained that she rarely receives professional development and would prefer if sessions occurred more often so she can continue to develop and grow as a teacher. The participants explained that presenters should follow up with teachers to help them apply the evidence-based practices shared, directly into their classrooms. Charlotte explained it would be helpful to have someone come into her classroom and guide her through the practices. Similarly, Julysa said, "...then have a chance to do it yourself and have someone watch

you and tell you if you did it right." Additionally, Lydia explained, "If you implement a professional development and you want us to really get good quality out of it, come back and see if we're implementing it the correct way or not the correct way." Rosa suggested that the presenters should share their email addresses so teachers could reach out to them with questions they have. It is evident that half of the teachers are eager to implement the practices taught but would like ongoing support to continuously develop effective evidence-based practices to support students with disabilities.

Research Question 2: Professional Development Topics and Modes of Delivery

To further address RQ2, what professional development practices do early childhood general education inclusive teachers perceive would best support them in implementing evidence-based practices in inclusion classrooms, I asked the participants to indicate what topics of professional development they believe will support them in effectively supporting students with disabilities in inclusive classrooms (see Appendix, Question 9). I also asked them what modes of delivery of professional development work best in meeting their learning needs and interests (see Appendix, Question 11). Participants were given the option to provide any topics or modes not listed. In the sections that follow, I present the percentages for the choices selected and include justification for the choice if the participant provided it, as well as connect the choices to what participants said during other aspects of the interviews.

Professional Development Topics

During the interview, a list of 33 topics for professional development was mentioned to the participants (see Appendix). Participants were asked to state yes or no

to acknowledge whether they were interested in a professional development that focuses on that topic and were given the option of providing a justification for their response if they chose to. The percentage of participants who would want professional development on the given topic is indicated in Table 6. The topics of differentiation, literacy, mathematic, and behavioral supports were selected by all participants. Most participants also favored learning about collaboration practices between various stakeholders including co-teachers and service providers and selected the topics of understanding IEPs, building inclusive environments, and learning strategies aligned with attention difficulties as favorable topics. Participants were less interested in learning about how to adapt assessments and data for students with disabilities. Some participants either asked what the Universal Design for Learning was or stated they were unfamiliar with the topic and thus were not interested in learning more about the topic. Other participants explained they have previously heard about the Universal Design for Learning framework but did not know a lot of information on how to apply it. Thus, they indicated that they would be interested in attending professional development opportunities on how to incorporate the Universal Design for Learning framework in their classrooms.

Additionally, all participants wanted to learn about specific disabilities including speech and language and learning disabilities and many participants selected autism, emotional disturbances, multiple disabilities, other health impairments, and hearing impairments as key disabilities they would be interested in learning more about. Notably, several of these disabilities were often present among students in the teachers' inclusive classrooms as noted in Table 3. Participants were less interested in learning about

orthopedic and intellectual impairments as these were disabilities that were rarely present

in their inclusive classrooms.

Table 6

Preferences for Topics for Professional Development

Professional development topic	Number of participants interested in the topic	Professional development topic: specific disability category	Number of participants interested in the topic
Differentiation	12	Learning disabilities	12
Literacy supports	12	Speech and language	12
Mathematic supports	12	Autism	11
Behavioral supports	12	Emotional disturbance	11
Understanding IEPs	11	Multiple	11
Building an inclusive classroom	11	Other health impairments	11
Collaboration with service providers	11	Hearing impairment	11
Collaboration with paraprofessionals	11	Deaf-blindness	10
Family engagement	11	Traumatic brain injury	10
Co-teaching strategies	11	Visual impairment	10
Attention difficulties	11	Intellectual	9
Special education law	10	Orthopedic	8
Monitoring of learning and data collection	10		
Adaptive technology	10		
Referral process	9		
Early intervention	9		
Modification of assessments	9		
Universal Design for Learning	5		

Note. $n = 12$

As noted in Table 6, collaborating with others such as paraprofessionals or service providers was a topic favored by participants. These topic choices align with what some of the participants said in other aspects of the interview. Maya explained that new teachers especially should be taught how to work collaboratively with paraprofessionals explaining "You don't want to tell them [paraprofessionals] what to do because they should have their own supervisor. That's not the job or the role of the teacher, but a lot of times you're kind of forced that." When referring to co-teaching, Rosa explained that she needs support in delegating responsibilities to other staff members in her classroom. Other participants expressed they would want more time to collaborate with service providers so that they could informally learn about the best strategies to support their students with disabilities from the service providers.

There is a relationship between the types of disabilities that participants believe are most prevalent in their classrooms to the topics that participants are most interested in having professional development on. Specifically, 90-100% of participants wanted more training on learning disabilities, speech and language disabilities, autism, and emotional disturbances which were all types of disabilities mentioned as being present among students in their inclusive classrooms (see Tables 3 & 6). During the interviews, seven participants explained that they would want more training on how to support students who have certain disabilities in their current classrooms. Olivia explained that she does not understand a lot of information about each disability and would want more information on what the disability is. Janice highlighted,

Maybe specifically understanding specific disabilities that we have in our students

and some of the repercussions that happen because of it because I feel like it

would help us understand the child and what they are going through. Then we will

know what they need from us so that we can do things to benefit their learning to

make it the best it can be.

Most participants are eager to receive more training on the specific disabilities students in

their classroom have so that they can provide a better, more effective learning experience

for that child.

Most of the participants indicated that if they did not have a student with this type

of disability in their classroom then a professional development training on that specific

disability would not be a priority for them. For example, Maya explained "I think

traumatic brain injury would be more for a special ed teacher. I don't know if they're

inclusive." Table 6 shows that participants were open to learning about most topics

aligned with special education. When a participant felt the topic did not really align with

their student population, the participant was less interested in the topic.

Regarding understanding IEPs, which was a topic selected by 91.66% of the

participants, several participants expressed that reading IEPs can be confusing. Julysa

stated, "And I know how to read an IEP…but when a real one is put in front of you with

all of this information, [it] can be really overwhelming. Mary stated,

I feel like IEPs are very important and I feel like a lot of teachers are not familiar

with them. And they [teachers] might give some input here and there, but we don't

really have to write out any of that information as that is the job of the special ed

teacher and I think that if we were exposed to like every single detail that goes

into the writing, I think it'll give us a clear image of what we're doing for in the

classroom, with the student.

More preparation in understanding a child's IEP was indicated as a need for these

participants.

Eleven participants explained that there were not any other topics other than those

listed that they would want professional development on. However, one participant

explained she would want to learn more about how to prepare for IEP meetings and how

to fill out student reports. Julysa explained, "You have to do a teacher report for the

annual IEP meeting because sometimes those can be a little bit difficult. Like I know I

had to have support when I did mine." Besides indicating providing support on how to

prepare for IEP meetings, the participants agreed that the suggested professional

development topics provided them with sufficient options to select from to address their

needs and interests aligned with teaching students with disabilities.

Professional Development Delivery Modes

A list of 11 modes for professional development was also mentioned to the

participants. Participants were asked to state yes or no to acknowledge whether they were

interested in having professional development delivered through that mode and were

given the option of providing a justification for their response if they chose (see

Appendix, Question 11). The percentage of participants who would want professional

development provided in the different modes of delivery are indicated in Table 7. All

participants found intervisitations and virtual simulations to be effective modes of

participation. Most of the participants agreed that coaching both in-person and virtually

would be effective modes of professional development. Less than half of the participants

thought that lectures or seminars would be an effective way of delivering professional

development.

Table 7

Preferences for Modes of Delivery for Professional Development

Professional development delivery Mode	Number of participants interested in the topic
Intervisitations	12
Virtual simulations	12
In-person coaching	10
Virtual coaching	10
Online modules	9
Book study	8
Watching videos	8
Self-directed through online platforms	7
Self-directed through a research project	7
Online personal learning communities	7
Lecture or seminar	5

Note. $n = 12$

Intervisitations in other classrooms were valued by all participants. Julysa

highlighted, "You know, to be a little fly on the wall in the corner and just watch. It

reminds me of student teaching. That's how pretty much I learned everything that I do

now." Mary, who had experienced intervisitations at a different school in the past

explained, "So I felt like actually being in it and walking through and them explaining to

us how they run their school kind of gave me a new way of seeing things and new ideas

for my school." Mary commented that visiting schools and classrooms that cater to

students with disabilities could give teachers more ideas on how they could best support their students. Teachers valued intervisitations as an effective professional development practice.

Although most of the participants were not familiar with virtual simulations, once I explained this mode of delivery, all participants were interested in receiving this type of professional development. Janice who did have previous experience with simulations in professional development topics unrelated to special education explained,

> I think that was kind of eye-opening as well, to see that there are certain ways you can see things and what their response would be. So that could be something that may be done with okay how do you respond with a student with a disability, how would you teach them, what would you do, click on a scenario and see what their reaction would be.

Virtual simulations could be another promising practice in professional development when supporting teachers in reaching the needs of students with disabilities.

Nine participants explained that there were not any other modes of delivery other than those listed that they would want as professional development offerings. However, Olivia explained she would want to include professional development sessions that had a combination of different modes so that she can keep engaged and learn about the topic in different ways. Having a combination of modes for professional development was also highlighted during the interview by three other participants. Maya explained,

> Maybe have somebody talk, maybe do some breakout groups by grade. Have maybe three or four teachers who don't know each other work with each other.

Maybe guided by a question or an activity that the leader wants to work on. A lot

of times they do show videos of different situations and in different classrooms.

And I always like to see that too. So, if it's really combination, but I don't think

nobody wants to sit and listen to somebody talk the whole day.

Another participant explained the session could start with a lecture and then the presenter

could model the strategy in the next portion of the workshop. One participant also

suggested that a strategy could be modeled in someone's classroom and then a discussion

could be held in small groups afterward to reflect on what was modeled. Using a

combination of effective practices in professional development was valued by most of the

participants.

Lastly, Ana added that professional development modes should include more

collaboration with families and other staff members. One last suggestion made by

Charlotte noted that professional development should take part in cycles, and it should be

one continuous session over time. Both collaboration and continuous professional were

key themes aligned with RQ2 that were explained early in this chapter.

Summary

The focus of RQ1 was to identify early childhood general education inclusive

teachers' experiences with professional development and to understand what they

perceive as being effective and ineffective in supporting them in implementing evidence-

based practices in inclusion classrooms. Participants shared that they believe they have a

lack of quality professional development experiences and lack support from their

administrators in learning about students with disabilities and how to best support them.

Most of the teachers stated that they must often advocate for themselves and do their own research by seeking informal professional development opportunities based on their needs and interests and the needs of the students with disabilities in their classrooms.

The focus of RQ2 was to identify what professional development practices early childhood general education inclusive teachers perceive would best support them in implementing evidence-based practices in inclusion classrooms. Teachers stressed the importance that professional development needs to be relevant and relatable based on their student population and their needs and interests. They also stated professional development should be provided by other teachers and experts who have direct experience in working with students with disabilities. Teachers valued workshops that are interactive, hands-on, and provide opportunities for them to collaborate with other staff members and teachers in the school. Lastly, teachers wanted professional development to be continuous and requested that professional development providers give follow-up sessions to support teachers in better implementing evidence-based practices in the classroom.

In Chapter 5, I interpret the findings relating to the research cited in the literature review. I also discuss the limitations of my study and recommendations for further research on this topic. Lastly, I share the implications of this study, specifically highlighting how the results of this study could bring about positive social change and end Chapter 5 with a concluding thought.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this basic qualitative research study was to understand early childhood general education teachers' perceptions of past professional development experiences when working with students with disabilities and what additional support they may need in implementing evidence-based practices in inclusive environments. Eight key themes emerged from this study (see Tables 4 & 5). Based on the results of this study, teachers indicated there was a lack of professional development on the topic of special education or how to support students with disabilities in their schools (Theme 1) and that there was also a lack of support from administrators (Theme 2). The teachers also believed that they had to use self-advocacy and informal professional development (Theme 3) to learn how to better support the students with disabilities in their inclusive classrooms. The participants favored professional development opportunities that have relevancy (Theme 4) and are provided by teacher leaders and experts (Theme 5). The participants also favored interactive, hands-on professional development (Theme 6) that included collaboration with families, teachers, and staff members (Theme 7). Lastly, participants believed the professional development should be continuous and include follow-up sessions (Theme 8).

Interpretation of the Findings

In this section, I describe the ways my findings confirm, disconfirm, or extend knowledge in this discipline by comparing the findings with what previous researchers have found in the peer-reviewed literature reviewed in Chapter 2. I also analyze and interpret my findings in relation to the conceptual frameworks of this study. The first

conceptual framework I used was Knowles's (1984) adult learning theory stating adult learners should have input in the content and process of what they are learning, and that learning should be built on the individual's prior knowledge, motivation, and readiness to learn. The second conceptual framework I used was Vygotsky's (1978) social constructivist theory stating that learning is co-constructed through an apprenticeship-like experience. Connections between these frameworks and the themes will be made when appropriate.

RQ1: Past Experiences With Professional Development

RQ1 focused on the past experiences with professional development that early childhood general education inclusive teachers perceive as being effective and ineffective in supporting them in implementing evidence-based practices in inclusion classrooms. In this section, I describe how the three themes tied to RQ1 both confirm and extend knowledge in this discipline in relation to the studies discussed in Chapter 2. I also discuss how Theme 3 relates to the adult learning theory.

Theme 1: Lack of Professional Development on the Topic of Special Education or How to Support Students With Disabilities

The participants explained that they rarely, or at times, never, took part in professional development sessions around the topic of students with disabilities. Seminal research on the topic of professional development associated with working with students with disabilities indicated that there is a lack of professional development provided to teachers to support students with disabilities in their classrooms (Buell et al., 1999). More recent research also indicated that early childhood teachers feel ill-prepared to work with

students with disabilities and believe more professional development focusing on special education is needed (Dinnebeil et al., 2019; Majoko, 2018; Zagona et al., 2017). In this study, 100% of the participants believed that more professional development opportunities should be provided that align with working with students with disabilities and special needs. These findings confirm the previous findings of other researchers including Bemiller (2019), Zagona et al. (2017), and Stites et al. (2018), as the participants in all the studies believed that they need more support in developing practices to support students with disabilities. These findings also extend the findings of prior researchers by specifically indicating that early childhood inclusive teachers in this school district have had a lack of professional development related to working with students with disabilities and they believe more training around the topic of special education should be offered by this school district.

McLeskey and Waldron (2002) explained that traditional lecture-based seminars were ineffective in supporting teachers in implementing evidence-based practices. The findings in this study confirmed these results based on the teachers' perspectives. For those teachers who had some type of training that connected to working with students with disabilities, they often explained the approaches to professional development were ineffective. For example, some teachers explained that the content was delivered through a lecture style that did not support the teachers in truly understanding the content or strategy and how to apply it. Other, more informal approaches to professional development were found to be more effective among teachers in this study, which confirms the research of Kyndt et al. (2016) and Bentley and Cason (2019). Kyndt et al.

and Bentley and Cason explained that informal professional development can include reflection, experimentation, overcoming difficulties, and collaboration between teacher professionals, which were professional development practices favored by teachers.

Theme 2: Lack of Support From Administrators

Even though the teachers have identified their professional development needs, many participants in this study found that the administrators rarely consider the teachers' needs and interests when planning professional development nor offer enough opportunities for the teachers to attend sessions on the topic of students with disabilities. Similarly, Klingner et al. (2003) stated that administrators are reluctant to provide professional development that would effectively support teachers in implementing evidence-based practices because these types of professional development are too time-consuming and not feasible for many reasons including budgeting. In this study, participants confirmed that the teachers in their schools are offered professional development on other topics such as implementing a particular literacy curriculum. The teachers explained that administrators should prioritize training around the special education topic in schools. Over the last 20 years, researchers such as Buell et al. (1999), Dinnebeil et al. (2019), Majoko, (2018); and Zagona et al. (2017) indicated a need for school leaders to provide more professional development to inclusive teachers around the topic of special education. The perceptions shared by the teachers in this study confirm those same findings and extend this knowledge by identifying the need for school leaders to support teachers in working with students with disabilities in this school district.

Theme 3: Self- Advocacy and Informal Professional Development

Several of the participants mentioned that they advocate for themselves to find the support they need in working with students with disabilities more informally through conversations with colleagues, through their own research, and by using strategies through a trial-and-error approach. This conclusion is aligned with part of Knowles's (1984) theory of adult learning that states learners should be able to self-direct their learning, which in term would motivate them to learn. Many of the participants in this study noted that when they do their own research on a child and their disability, they are not sure if they are understanding the information correctly or may struggle to put the practices learned independently into action. This finding confirms the work of Sam et al. (2018) who explained that self-directed learning is not the best fit for all teachers and that some teachers need more support.

Kyndt et al. (2016) explained that more informal approaches to professional development that can occur daily, rather than in one lecture, can be beneficial in supporting teachers. In Kyndt et al.'s study, several teachers confirmed that conversations with colleagues and service providers helped them informally learn strategies that could be applied in their classrooms. Other participants explained that they would research disabilities and strategies by reading articles, books, and review other resources to support their understanding. The informal, more self-directed use of professional development somewhat supported the teachers' needs, yet they still believed they needed more support from experts to ensure the information obtained was accurate and effective. Thus, they confirmed the findings of Cook et al. (2017), who noted that individual

research by teachers using such platforms as social media can cause more harm than good if the strategies are not used properly by the teachers. This idea aligns with what many participants in this study preferred. They wanted the professional development providers to model the evidence-based practices and learn from experts so that they know they are implementing the strategies effectively or can get support with implementation as needed through ongoing professional development.

RQ2: Additional Supports Teachers Need

RQ2 focused on understanding what additional supports teachers need to implement evidence-based practices for students with disabilities. In this section, I describe how the five themes tied to RQ2 confirm, disconfirm, or extend knowledge in this discipline in relation to the studies discussed in Chapter 2. I also interpret my findings in Themes 4 and 8 related to the adult learning theory and Themes 5 and 6 in connection with Vygotsky's (1978) social constructivist theory.

Theme 4: Relevancy

The participants noted that they need more professional development opportunities that are aligned with their individual needs and related to the students with disabilities in their classrooms. Thus, confirming the importance of prioritizing professional development that is aligned with the needs of the teachers and students in the teacher's classroom presented by other researchers (Attard, 2017; Martin et al., 2019; McLeskey & Waldron, 2002; Muccio & Kidd, 2018). Muccio and Kidd (2018) stated that teachers want to acquire knowledge about the specific disabilities that students may have and the best practices to support these students, which was like what was stated by most

of the participants in this study. In this study, the findings also confirmed what has previously been cited in research, which is that professional development providers should also consider the complexity of the school, classroom, and teacher and tailor instruction to those topics so that the content is relevant (see Buysse & Hollingsworth; Jimenez & Barron, 2019; McLeskey & Waldron, 2002).

The relevancy theme (Theme 4) also connects to the adult learning theory focusing on the concept. Adult learning is most effective when based on the uniqueness, interests, circumstances, and experiences of the individual learner and their circumstances are considered (Knowles et al., 2011). In this study, teachers highlighted that it would be important to provide professional development aligned with the students that they are working with and that the topics of professional development offered are relevant to their experiences, needs, and interests. The current experiences of the teachers in working with students with disabilities should be considered when planning professional opportunities for them. Bair et al. (2019), Ring et al. (2019), and Sato and Haegele (2017) created professional development sessions aligned with the adult learning theory in which the sessions incorporated self-direction, built on the teachers' individual prior experiences, and used multimodal learning to support teachers in learning about the concept in different ways. The researchers found that when professional development was developed around the key components of the adult learning theory, teachers were more satisfied with the training and were able to apply the practices in their classrooms (Bair et al., 2019; Ring et al., 2019; Sato & Haegele, 2017). This study confirms that teachers also believe professional development should be offered in a way that incorporates the

components of adult learning theory by building off teachers' prior experiences, allowing them to choose topics for professional development, and providing the training through different modalities so that the content is more relevant to the teachers.

The adult learning theory emphasizes that participants need to be part of the decisions being made about their learning so that their needs are met, and that the instruction aligns with their goals (Bash, 2003; Harper & Ross, 2011). The participants' responses focusing on relevancy aligned with the adult learning theory by requesting to be provided with choices in which professional development opportunities they receive and how these sessions are presented. The findings in this study also extend the previous research by noting that teachers in this school district prefer that professional development is relevant to them and the student body that they teach.

Theme 5: Professional Development Provided by Teacher Leaders and Experts

Just like some of the participants had indicated, researchers have found that teachers should be supported by experts in the field in implementing the instructional practices (Dinnebeil et al., 2019; Ravet, 2018). Participants in this study wanted professional development to be led by experts currently in the field or teacher leaders with expertise in special education from their schools and districts. Extending the findings of previous research, the participants requested intervisitations to learn from experts in real-life settings by observing evidence-based practices and then gaining support and coaching in implementing these practices independently. This process is connected to the social constructivist theory if one explores the theory from the lens of adult learning. Based on the social constructivist theory, Vygotsky (1978) explained that

for learners to learn best, an apprenticeship should be created so that the expert can model the skill and provide guidance and support to the learner to support the learning in abstaining new knowledge of skills. The participants indicated in this study that the apprenticeship approach is valuable, as most participants explained they would like to learn from special education experts who are still teaching in the field so that they can be taught and guided through implementing evidence-based practices in their classrooms. Thus, the professional development provider or teacher leaders become the mentor and the teachers become the apprentice.

Theme 6: Interactive, Hands-on Professional Development

Teachers in this study highlighted the importance of hands-on professional development in that they are provided with visuals like videos, modeling from experts, and discussions with others as effective professional development practices that are like the results of several other studies. Researchers Majoko (2017), Park et al. (2018), and Young (2018) suggested that hands-on learning during professional development is the best way to support teachers in transferring the skills taught to the field, that was an idea highlighted by several participants in this study. Less than half of the participants considered the use of lecture and seminars as effective practices in supporting them in connecting theory to practice that is similar to the conclusions made by Bentley and Cason (2019) who explained that traditional modes of professional development such as a workshop are types of training that teachers receive rather than experience and can be ineffective. The participants echoed this statement by explaining that they must see and experience the strategy or concept being taught to support their learning and application.

However, these findings do extend the findings of previous research by indicating the ways that the participants feel they learn best in this specific school district.

Leatherman (2007) explained that through the lens of Vygotsky's social constructivist theory, teachers can support students with disabilities in growing, interacting, and building new relationships with their peers and adults through social interaction, scaffolding, and support. Using this lens concerning adult learning, the teachers in this study expressed a need for social situations to understand new concepts with other teachers and experts. Their learning also needs to be scaffolded by having experts model and explain key concepts while also supporting the teachers in implementing the strategies effectively. Vygotsky as well as other researchers stressed the importance of social context, direct experiences, and scaffolding as key elements that benefit the learner's growth that was confirmed by the participants in this study (Mallory & New, 1994; Walker, 2007).

Theme 7: Collaboration With Families, Teachers, and Staff Members

Building on the idea of apprenticeships, teachers stated that they would like opportunities to collaborate and learn from others who have had similar experiences to their own. Hoppey et al. (2018) explained when collaboration among staff members and families is used in inclusive settings, all parties make a unified commitment to supporting students with disabilities. This study extends this knowledge as participants noted that they valued collaboration as a key professional development practice by learning from others and ensuring everyone holds a cohesive vision on how to best support the students. Participants not only want to learn how to collaborate with others when supporting

students with disabilities, but also request that professional development is delivered in a way that teachers have opportunities to interact and learn, support, and problem-solve with each other. Similarly, Murphy (2018) acknowledged that when leaders and groups of teachers share a common vision, they can then support each other, and problem-solve to face challenges together. My findings extend Murphy's research by indicating that collaboration should also include families. Families should join teachers during some professional training so that they can learn new approaches together and everyone is focused on best supporting students with disabilities collaboratively. Additionally, participants added that through new discoveries of how to connect with others from the pandemic, school leaders can reinvent the ways teachers and other stakeholders can collaboratively take part in professional development opportunities such as through using online conferencing.

Theme 8: Professional Development Should be Continuous and Include Follow-up Sessions

Lastly, the participants expressed that professional development should be a cyclical process and that feedback and additional, continuous support from the providers is necessary to ensure their needs are met and they are appropriately applying the strategies that confirms previous research. Researchers have indicated that effective professional development should include ongoing, continuous training to best support teachers (McLeskey & Waldron, 2002; State et al., 2019; Woodcock & Hardy, 2017). Woodcock and Hardy (2017) defined continuous professional development as sessions that take place throughout the school year, rather than just during one workshop and take

place in different settings. Half of the participants noted that they would want continuous professional development and at the very least follow-up sessions to a professional development training so that they can ask the provider questions and work with the provider to implement the strategies effectively in their classrooms. Extending on the findings of previous research, several participants preferred professional development take place in different settings besides where the training was initially presented. They preferred that presenters share the information first and then the providers could model strategies in classrooms or coach teachers in their current classroom to help the teachers better understand how the evidence-based practices can be applied in their classrooms. This finding confirms previous researchers' claims that teachers need to receive sustained professional development so that they are provided with multiple opportunities to learn and apply new ideas with the support of experts (Daniel & Lemons, 2018) while adding a specific framework of how professional development could be presented in a more cyclically through an introduction of the skill or concept and then including follow-up coaching or modeling sessions provided within the teachers' classrooms.

Knowles (1984) stated that new learning should be built on and relevant to one's prior experiences and include active learning involving problem-solving strategies. By utilizing continuous professional development sessions as the teachers indicated, the content of the sessions can build upon previous skills and content taught by transferring the learning directly into the field. Teachers suggested they can collaborate with the providers to problem solve when a practice is not successful with their students using

continuous feedback, support, and active coaching that aligns with the adult learning theory.

Professional Development Topics

When identifying teachers' experiences with professional development, Sato and Haegele (2017) found that the participants were motivated to partake in professional development when topics were of interest. I expanded on this research by asking participants to clarify what specific topics of interest related to students with disabilities would best support themselves as early childhood inclusive teachers in this school district. These topics included differentiating instruction and developing specific academic and behavioral strategies that can be used to best support students with disabilities across subject areas. Referring to the adult learning theory, Knowles et al. (2011) highlights that learning should relate to one's prior experiences, readiness to learn, and intrinsic motivation to do so. The findings confirmed this theory as teachers requested more professional development that is related to their individual needs and interests when working with students with disabilities. They were eager to best support their students and thus were motivated to continuously learn new teaching approaches through effective professional development opportunities.

Stites et al. (2018) found that pre-service teachers often want to learn more about ways to differentiate instruction and provide support for students with disabilities. However, Stites et al. explained that more studies should be done to compare the perceived needs of teachers in inclusive environments with special education teachers. The findings in this study extend the findings of other researchers by identifying that

general education teachers, like the pre-service teachers in the Stites et al. study, prefer to learn about the topic of differentiation and how to best support students' academic needs across subject areas as well as supporting their behavioral and attention needs and better understanding how to use the students' IEP effectively. Teachers also cited they have a preference in learning more specifically about the disabilities that students have in their current classrooms. These findings confirm previous research that highlights that teachers want more professional development on the types of disabilities and the classroom management and academic supports that would align to the disabilities (see Bemiller, 2019; Muccio & Kidd, 2018; Yu, 2019).

Professional Development Delivery Modes

Researchers have noted that more research should be conducted to focus on general education teachers' views of what types of effective professional development are needed (Daniel & Lemons, 2018; Woodcock & Woolfson, 2019). The findings of this research extend the previous knowledge in finding that specifically early childhood inclusive teachers prefer professional development through the modes of intervisitations, simulations, and direct coaching in this school district. The findings also confirm previous researchers' findings that professional development should be embedded into the field through more authentic experiences (Darling-Hammond, 2017; Robinson, 2017; Woodcock & Hardy, 2017). Coaching whether virtually or in person has previously been identified as an effective practice to help teachers implement evidence-based practices (Coogle et al., 2018; Gürgür, 2017; Rakap, 2017; Tekin-Iftar et al., 2017), that was confirmed by the findings in this study. Goodyear et al. (2019) and Rosell-Aguilar (2018)

found that online platforms and social media are valued professional development practices by teachers. This study disconfirmed these findings as about half of the participants would not be interested in using online platforms as a mode of professional development.

Limitations of the Study

The first limitation of this study was that the participants had very little or no experience in attending professional development sessions focusing on working with students with disabilities. Therefore, it is not clear what specific practices were effective and ineffective in supporting inclusive teachers' needs in working with students with disabilities across the sample group. Although some participants were able to make connections to different workshops that could slightly align to the special education topic, few participants were able to give detailed, rich descriptions of workshops that were most beneficial concerning working with students with disabilities.

Another limitation was the participants represented a specific demographic. They were teachers who taught in preschool through second grade and from public elementary schools in one district in one city. Middle and high schools, as well as elementary schools located in different settings such as rural areas, may not be able to transfer the same results of this study to a different school setting. Additionally, the sample size was small, including only 12 general education early childhood teachers. Special education teachers, service providers, staff members, and specialty teachers such as physical educators were not included in this study. Thus, generalizations about the professional development

experiences of all teachers and stakeholders cannot be made, nor can the findings represent the collective view of the population of teachers in this school district.

Recommendations

This research study supports and extends existing research on the topic of professional development for teachers who work with students with disabilities. I identified eight overall themes from the data gathered from interviews with early childhood inclusive teachers in understanding their past experiences with professional development and what additional types of professional development would best support them in teaching students with disabilities effectively. Based on the research results, there are eight recommendations for ways school administrators and leaders can help provide more effective professional development opportunities for early childhood teachers who work with students with disabilities in inclusive environments.

1. I recommend that the administrators begin to prioritize implementing professional development opportunities aligned with special education to better support the teachers in the field in implementing evidence-based practices to support students with disabilities.

2. I recommend that administrators differentiate professional development opportunities by content in allowing teachers to choose the relevant types of professional development content they need and are interested in receiving so that they can better support students with disabilities in their classroom (see Table 6).

3. I recommend that administrators ensure that the content, examples, and strategies presented in professional development sessions align with the actual student population in their schools. Administrators should consider the specific disabilities or needs of the students in the teachers' inclusive classrooms. By aligning the professional development to the types of disabilities and students' needs present in the teacher's classroom, teachers can learn and apply more relevant strategies for these students (Theme 4).

4. I recommend that administrators work collaboratively with teachers to design a professional development plan for each teacher so that they can continue to learn and grow based on their goals, needs, and interests. Administrators should send out surveys, give a list of optional professional development opportunities teachers can select from, or meet individually with teachers to choose the content and process for professional development sessions that would best fit each teacher or staff member's needs (see Table 5 & 6).

5. I recommend that administrators select staff members who are experts on certain topics in special education to become teacher leaders in the school. These teacher leaders can implement professional development sessions sharing their expertise with other staff members (see Theme 5). Additionally, administrators should ensure that outside workshop providers are experts in the field of special education and have had direct experience in working with students with disabilities. It is important that the professional development providers can relate to the experiences of the teachers and the teachers can

relate to the experiences of the provider, thus creating more relevant

professional development experiences (see Theme 4).

6. I recommend that administrators plan for ways to differentiate the way

    professional development is delivered and offer professional development

    using multiple modalities including discussions, modeling, application

    practice, simulations, and readings. Teachers need to receive the content of the

    sessions in varied ways to increase their understanding and ability to

    implement evidence-based practices into the field. Whenever possible,

    professional development should be interactive and take place within settings

    where teachers can learn and then transfer the practices being reviewed directly

    into their classrooms (see Theme 6).

7. I recommend that administrators consider providing more time for teachers to

    actively collaborate and learn from one another to problem solve, share best

    practices, and support one another in developing strategies to address the needs

    and strengths of students with disabilities through formal and informal

    professional development opportunities. Since the pandemic, educators and

    school leaders have learned that meetings and training sessions can be held

    virtually, that may help to revolutionize the way professional development is

    offered. Administrators could utilize virtual options for professional

    development so that families, service providers, staff members, and teachers

    can easily attend training sessions to work together to learn new evidence-

based practices to support students with disabilities through a more collaborative approach (see Theme 7).

8. I recommend that administrators prioritize continuous professional development for teachers and staff members working with students with disabilities and ensure the professional development sessions build upon one another to deepen the teachers' understanding of the content and evidence-based practices. Each session should be followed up with opportunities for coaching, feedback, and reflection under the guidance of the provider (see Theme 8).

These eight recommendations can help ensure that professional development opportunities for early childhood inclusive teachers is better aligned with the teachers' needs, interests, and learning preferences. These recommendations were based on the findings of this study specifically focusing on early childhood general education inclusive teachers. However, these recommendations may be transferrable to teachers across grade levels to help improve professional development opportunities for all teachers working with students with disabilities in inclusive settings.

Implications

Creating professional development opportunities based on teachers' individual needs, interests, and learning styles can lead to positive social change. High-quality teachers of early childhood education inclusive classrooms incorporate strategies to create and implement developmentally appropriate adaptations and modifications to the environment, instruction, and curriculum resources to engage and support all learners

(Warren et al., 2016). Teachers' competency involving their knowledge and skill set has a direct effect on the success of student learning and growth in inclusive classrooms (Cate et al., 2018). If teachers receive the support and professional development based on their needs, interests, and unique learning styles, social change could be created by increasing teachers' competency levels so that they can better support their students and their students make greater developmental and academic progress.

Positive Social Change: School District

The potential impact of social change for this study is that it can improve the overall quality of district-provided professional development in this large, urban school district. In this study, the teachers noted that they there is a lack of professional development on the topic of working with students with disabilities provided in their schools. Additionally, the teachers highlighted that even when there is professional development provided on this topic, the training provided does not fully support them in effectively implementing the evidence-based practices discussed in their own classrooms. The findings of this study could potentially be used by administrators to guide them in planning more effective professional development opportunities for early childhood general education teachers teaching in inclusive environments within this school district more often to create social change. Based on these findings, this school district can begin to prioritize professional development that is based on relevant learning topics that include collaborative, active, and hands-on learning experiences using continuous, ongoing professional development. If teachers are better prepared to meet the needs of students with disabilities through the implementation of effective, evidence-based

practices then their students can continue to make developmental progress through the quality instruction being provided. Social change occurs as the students begin to make greater developmental progress across disciplines, based on the expertise the teachers have developed from more effective professional development being provided.

According to the Department of Education website in the northeastern city where I conducted the research, approximately 85% to 90% of students with disabilities are performing well below or slightly below grade-level standards in math and 80% to 90% of students with disabilities are performing well below or slightly below grade-level standards in ELA. Although these data are reflective of the level of students in Grades 3-8, they may show that that the early mathematical and literacy needs of students with disabilities are not being effectively met and thus there is a gap for students in understanding early key mathematical and literacy skills as they progress through grade-levels. Early childhood teachers working with students with disabilities from ages 3-8 need to be better equipped with the knowledge and skills needed to address the strengths and needs of their young students so that their students can develop the foundational skills needed to continue to make progress across grade levels.

Through effective professional development social change can be impacted as the early childhood inclusive teachers may be better prepared in this district to meet the needs of students with disabilities across subject areas. In turn, these students can develop the early mathematical and literacy skills needed to reach academic achievement levels across grades closing the long-standing achievement gap for students with disabilities in this specific school district. Effective professional development has been tied to positive

student achievement. Students with disabilities need highly trained teachers who are adept at meeting students' individualized needs. The effective use of professional development is a promising way to help teachers become highly qualified in best supporting students with disabilities so that these students receive the support needed to continue to make progress. Addressing the needs of students at the early childhood level, can influence their learning across grade levels to lead to greater success and positive student outcomes throughout their education.

Positive Social Change: Other School Districts

School administrators across school districts can use the findings of this study to plan more effective professional development experiences for their teachers by gathering responses from the teachers and other stakeholders as to what topics of professional development are most important for them to receive and how that professional development session should be delivered. Developing sessions aligned to their specific teachers' needs and interests will bring about social change as teachers' needs would be met and then they may develop the skills of highly-qualified teachers who would be more prepared to better support students with disabilities in their classrooms so these students can reach their individual goals with the teachers' supports.

Administrators can also consider actively involving teachers during the planning and designing stages of professional development so that the teachers' needs and interests are met by allowing them to have opportunities to choose the content and delivery of professional development. These actions can bring about social change because by teachers taking a more active role in creating professional development sessions aligned

to their needs and interests. Having an active role can make teachers feel more empowered and thus they may be more motivated to continue to be life-long learners who will add new evidence-based practices to their pedagogy to better support the students in their classrooms. Differentiating what and how professional development is offered specifically for teachers working with students with disabilities in inclusive settings can bring about social change as teachers become better prepared to work with these students and thus these students may experience more academic and developmental growth as a result of the changes to professional development and the stronger preparation of the teachers in working with students with disabilities.

Methodological Implications

Due to the nature of this basic qualitative study, similar studies may be conducted in other school districts and across other grade levels to determine the best way to approach professional development so that teachers are better prepared to implement evidence-based practices when working with students with disabilities. The extension of this study to other grade levels and school settings, may provide researchers with more information about teachers' experiences and perspectives of professional development when working with students with disabilities. In turn, a collection of findings could help to identify the specific topics around special education that teachers prefer to learn about and identify what practices for the delivery of professional development are most appropriate to use when providing professional development opportunities for teachers who work with students with disabilities. Further qualitative and quantitative studies could explore if the teachers' perceptions of effective professional development practices

actually support them in implementing the evidence-based practices more often and more effectively and if these practices then in turn produce greater student outcomes.

Theoretical Implications

The adult learning theory, attributed to the work of Knowles (1984) has five main tenets that state that adults: (a) prefer to be self-directed, (b) have life experiences that should be used to support learning, (c) are naturally primed for learning about new topics and new situations, (d) are interested in solving new problems, and (e) are intrinsically motivated to learn. This theory supports the use of more differentiated professional development opportunities for teachers that was cited in the findings aligned to RQ2. For example, in this study, participants expressed that they would like to take an active role in planning the content and delivery of professional development that aligns to the tenet of self-direction. Through that process the teachers would be more interested in the learning experiences that align to the tenet of intrinsic motivation to learn. Additionally, the teachers requested relevant professional development that ties to the tenet that the teachers are naturally primed to learn new content based upon their previous learning. The findings of this study closely align the theory of adult learning.

According to the social constructivist theory, Vygotsky (1978) highlighted the importance of building on one's prior knowledge through social interactions and active learning opportunities. Through the lens of professional development, the teachers in this study, requested that professional development should be more relevant to their own needs and their students' backgrounds, thus building on their prior knowledge. The teachers also wanted the sessions to include more authentic, hands-on learning

approaches through the use of ongoing professional development with feedback. This finding aligns with an apprenticeship model, that is part of the social constructivist theory. In the apprenticeship model, the master (professional development provider) guides the new apprentice (the teacher) through learning opportunities that can be modeled and practiced by the teacher. Feedback and coaching are continuously given by the providers, so the teachers have success in implementing the evidence-based practices in the field. The findings in this study align to both the adult learning theory and the social constructivist theory.

Conclusion

In this study, I explored early childhood general education teachers' perceptions of past professional development experiences for working with students with disabilities and what additional types of support teachers may need in implementing evidence-based practices in inclusive environments. Many of the teachers' experiences exemplified findings in previous researchers' findings on professional development, indicating teachers are ill-prepared to support students with disabilities in inclusive classrooms and often lack the professional development opportunities needed to best support students with disabilities.

Teachers are often required to differentiate instruction for students with disabilities and learning needs. However, instruction for teachers through professional development is often provided through a one-size-fits-all approach. Administrators and school leaders must differentiate the professional development being offered in their schools by the content and mode of delivery so that these professional development

opportunities better support early childhood inclusive teachers' individual needs, interests, and learning preferences. If school leaders better support early childhood teachers through more effective professional development, they will be better equipped to implement evidence-based practices that address the needs and strengths of young students with disabilities in inclusive settings. This will result in greater learning outcomes for students and will help students acquire early foundational skills.

References

Al Otaiba, S., Folsom, J. S., Wanzek, J., Greulich, L., Waesche, J., Schatschneider, C., & Connor, C. M. (2016). Professional development to differentiate kindergarten Tier 1 instruction: Can already effective teachers improve student outcomes by differentiating Tier 1 instruction? *Reading & Writing Quarterly*, *32*(5), 454–476. https://doi.org:10.1080/10573569.2015.1021060

Alexander, S. T., Brody, D. L., Muller, M., Ziv, H. G., Achituv, S., Gorsetman, C. R., & Miller, L. (2016). Voices of American and Israeli early childhood educators on inclusion. *International Journal of Early Childhood Special Education*, *8*(1), 16–38. https://doi.org:10.20489/intjecse.239574

Amankwaa, L. (2016). Creating protocols for trustworthiness in qualitative research. *Journal of Cultural Diversity*, *23*(3), 121–127.

Anderson, E. M., & Lindeman, K. W. (2017). Inclusive prekindergarten classrooms in a new era: Exploring the perspectives of teachers in the United States. *School Community Journal*, *27*(2), 121–143.

Artiles, A., & Kozleski, E. B. (2016). Inclusive education's promises and trajectories: Critical notes about future research on a venerable idea. *Education Policy Analysis Archives*, *24*(43/44), 1–25. https://doi.org/10.14507/epaa.24.1919

Attard, K. (2017). Personally driven professional development: reflective self-study as a way for teachers to take control of their own professional development. *Teacher Development*, *21*(1), 40–56. https://doi.org/10.1080/13664530.2016.1218363

Bair, M., DeFrance, N., Diarrassouba, N., & Stockton, T. (2019). Developing a

    professional vision: The role of faculty learning labs as a peer-mentoring

    model. *Journal of Faculty Development*, *33*(1), 15–24.

Barton, E. E., Pokorski, E. A., Gossett, S., Sweeney, E., Qiu, J., & Choi, G. (2018). The

    use of email to coach early childhood teachers. *Journal of Early*

    Intervention, *40*(3), 212–228. https://doi.org:10.1177/1053815118760314

Bash, L. (2003). Adult learners in the academy. Anker Publishing.

Bemiller, M. (2019). Inclusion for all? An exploration of teacher's reflections on

    inclusion in two elementary schools. *Journal of Applied Social Sciences*

    (19367244), *13*(1), 74–88. https://doi.org:10.1177/1936724419826254

Bentley, E., & Cason, K. (2019). Tailor-made professional development to nurture

    preservice and early career teachers. *English Leadership Quarterly*, *41*(3), 14–18.

Bhroin, Ó. N., King, F., & Prunty, A. (2016). Teachers' knowledge and practice relating

    to the individual education plan and learning outcomes for pupils with special

    educational needs. *Reach*, *29*(2), 78–90.

Bickman, L., & Rog, D. J. (2009). *The SAGE handbook of applied social research*

    methods. SAGE. https://doi.org:10.4135/9781483348858

Brock, M. E., Seaman, R. L., & Gatsch, A. L. (2018). Efficacy of video modeling and

    brief coaching on teacher implementation of an evidence-based practice for

    students with severe disabilities. *Journal of Special Education Technology*, *33*(4),

    259–269. https://doi.org/10.1177/0162643418770639

Brodzeller, K. L., Ottley, J. R., Jung, J., & Coogle, C. G. (2018). Interventions and

adaptations for children with autism spectrum disorder in inclusive early

childhood settings. *Early Childhood Education Journal*, *46*(3), 277–286.

https://doi.org:10.1007/s10643-017-0859-5

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.

Buell, M. J., Hallam, R. A., & Gamel-McCormick, M. (1999). A survey of general and

special education teachers' perceptions and inservice needs concerning

inclusion. *International Journal of Disability, Development & Education*, *46*(2),

143–156. https://doi.org/10.1080/103491299100597

Buli-Holmberg, J., & Jeyaprathaban, S. (2016). Effective practice in inclusive and special

needs education. *International Journal of Special Education*, *31*(1), 119–134.

Buysse, V., & Hollingsworth, H. L. (2009). Program quality and early childhood

inclusion recommendations for professional development. *Topics in Early

Childhood Special*, *29*(2), 119–128. https://doi.org:10.1177/0271121409332233

Caelli, K., Ray, L., & Mill, J. (2003). 'Clear as mud': Toward greater clarity in generic

qualitative research. *International Journal of Qualitative Methods, 2*(2).

https://doi.org/10.1177/160940690300200201

Carmouche, M., Thompson, J., & Carter, L. (2018). Effects of professional development

and videoconferencing on the increase of opportunities to respond and the on-task

behavior of students with emotional behavior disorders. *Journal of Information

Technology Education*, *17*, 127–157. https://doi.org/10.28945/4060

Carpenter-Aeby, T., & Aeby, V. G. (2013). Application of Andragogy to Instruction in an

    MSW Practice Class. *Journal of Instructional Psychology*, *40*(1–4), 3–13.

Cate, I., Markova, M., Krischler, M., & Krolak-Schwerdt, S. (2018). Promoting inclusive

    education: The role of teachers' competence and attitudes. *Insights on Learning*

    Disabilities, *15*(1), 49–63.

Ceylan, R. T., & Aral, N. (2016). The opinions of classroom teachers and normally

    developing children on inclusive practice. *International Online Journal of*

    Educational Sciences, 8(2), 12–22. https://doi.org/10.15345/iojes.2016.02.002

Chan, S. (2010). Applications of andragogy in multi-disciplined teaching and

    learning. *Journal of Adult Education*, *39*(2), 25–35.

Chitiyo, M., Hughes, E. M., Chitiyo, G., Changara, D. M., Itimu-Phiri, A., Haihambo, C.,

    & Dzenga, C. G. (2019). Exploring teachers' special and inclusive education

    professional development needs in Malawi, Namibia, and

    Zimbabwe. *International Journal of Whole Schooling*, *15*(1), 28–49.

Coogle, C., Ottley, J. R., Rahn, N. L., & Storie, S. (2018). Bug-in-ear eCoaching: Impacts

    on novice early childhood special education teachers. *Journal of Early*

    Intervention, *40*(1), 87-103. https://doi.org/10.1177/1053815117748692

Cook, R. J., Jones-Bromenshenkel, M., Huisinga, S., & Mullins, F. (2017). Online

    professional learning networks: A viable solution to the professional development

    dilemma. *Journal of Special Education Technology*, *32*(2), 109.

    https://doi.org/10.1177/0162643417696930

Council for Exceptional Children. (2019). CEC 2020. Retrieved from

   https://exceptionalchildren.org/convention

Creswell, J. W., & Creswell, J. D. (2018). *Research design: qualitative, quantitative, and*

   mixed methods approaches (4th ed.). SAGE.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing*

   among five approaches (4th ed.). SAGE.

Cunningham, M. P., Huchting, K. K., Fogarty, D., & Graf, V. (2017). Providing access

   for students with moderate disabilities: An evaluation of a professional

   development program at a catholic elementary school. *Journal of Catholic*

   Education, 21(1), 138–170. https://doi.org/10.15365/joce.2101072017

D'Amico, M. M., Correa, V. I., Muharib, R., Algozzine, K., Algozzine, B., Swart, K., &

   Godfrey-Hurrell, K. (2019). Reflections on infusing evidenced-based inclusion

   practices in early childhood community college programs through a collaborative

   professional development model. *Journal of Early Childhood Teacher Education*,

   1-20. https://doi.org/10.1080/10901027.2018.1516704

Daniel, J., & Lemons, C. (2018). Teacher perspectives on intervention sustainability:

   Implications for school leadership. *School Leadership & Management*, *38*(5),

   518–538. https://doi.org/10.1080/13632434.2918.1439465

Darling-Hammond, L. (2017). Teacher education around the world: What can we learn

   from international practice? *European Journal of Teacher Education*, *40*(3), 291–

   309. https://doi.org/10.1080/02619768.2017.1315399

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development.* Learning Policy Institute.

Dinnebeil, L. A., Weber, A., & McInerney, W. F. (2019). The challenges of itinerant early childhood special education: The perspectives of practitioners. *International Journal of Early Childhood Special Education*, *11*(1), 18-30. https://doi.org/10.20489/intjecse.583501

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. A*merican Journal of Theoretical and Applied Statistics, 5*(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11

Evans, L. (2019). Implicit and informal professional development: What it 'looks like', how it occurs, and why we need to research it. *Professional Development in Education*, *45*(1), 3–16. https://doi.org/10.1080/19415257.2018.1441172

Faragher, R., & Clarke, B. (2016). Teacher identified professional learning needs to effectively include a child with down syndrome in primary mathematics. *Journal of Policy & Practice in Intellectual Disabilities*, *13*(2), 132–141. https://doi.org/10.1111/jppi.12159

Franco, M. S. (2019). Instructional strategies and adult learning theories: An Autoethnographic study about teaching research methods in a doctoral program. *Education*, (3), 178-186. https://www.projectinnovation.com/

Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report, 20*(9), 1408.

Gaines, T., & Barnes, M. (2017). Perceptions and attitudes about inclusion: Findings

across all grade-levels and years of teaching experience. *Cogent Education*, (1).

https://doi.org/10.1080/2331186X.2017.1313561

Gartland, D., & Strosnider, R. (2017). Learning disabilities and achieving high-quality

education standards. *Learning Disability Quarterly*, *40*(3), 152–154.

https://doi.org/10.1177/0731948717696277

Gelinas, L., Pierce, R., Winkler, S., Cohen, I. G., Lynch, H. F., & Bierer, B. E. (2017).

Using social media as a research recruitment tool: Ethical issues and

recommendations. *American Journal of Bioethics*, *17*(3), 3–14.

https://doi.org/10.1080/15265161.2016.1276644

Gilmour, A. F. (2018). Has inclusion gone too far? Weighing its effects on students with

disabilities, their peers, and teachers. *Education Next*, *18*(4), 8–16.

Goodyear, V. A., Parker, M., & Casey, A. (2019). Social media and teacher professional

learning communities. *Physical Education & Sport Pedagogy*, *24*(5), 421.

https://doi.org/10.1080/17408989.2019.1617263

Grenier, M. (2006). A social constructionist perspective of teaching and learning in

inclusive physical education. *Adapted Physical Activity Quarterly, 23*(3), 245-

260. https://doi.org/10.1123/apaq.23.3.245

Griffin, C., Dana, N. F., Pape, S. J., Algina, J., Bae, J., Prosser, S. K., & League, M. B.

(2018). Prime Online: Exploring Teacher Professional Development for Creating

Inclusive Elementary Mathematics Classrooms. *Teacher Education & Special

Education*, *41*(2), 121–139. https://doi.org/10.1177/0888406417740702

Gürgür, H. (2017). Analyzing the coaching based professional development process of a

    special education teacher. *Educational Science-Theory & Practice, 17*(5), 1783–

    1813. https://doi.org/10.12738/estp.2017.5.0418

Hagiwara, M., Amor, A. M., Shogren, K. A., Thompson, J. R., Verdugo, M. Á., Burke,

    K. M., Uyanik, H., & Aguayo, V. (2019). International trends in inclusive

    education intervention research: A literature review. *Education & Training in*

    Autism & Developmental Disabilities, *54*(1), 3–17.

Halpern, R., & Tucker, C. (2015). Leveraging adult learning theory with online

    tutorials. *Reference Services Review*, *43*(1), 112–124.

    https://doi.org/10.1108/RSR-10-2014-0042

Harper, L., & Ross, J. (2011). An application of Knowles' theories of adult education to

    an undergraduate interdisciplinary studies degree program. *Journal of Continuing*

    Higher Education, *59*(3), 161–166.

    https://doi.org/10.1080/07377363.2011.614887

Haug, P. (2016). Understanding inclusive education: Ideals and reality. *Scandinavian*

    Journal of Disability Research, (3), 206.

    https://doi.org/10.1080/15017419.2016.1224778

Hoppey, D., Black, W. R., & Mickelson, A. M. (2018). The evolution of inclusive

    practice in two elementary schools: Reforming teacher purpose, instructional

    capacity, and data-informed practice. *International Journal of Educational*

    Reform, (1), 22-44.

Jamero, J. (2019). Social constructivism and play of children with autism for inclusive early childhood. *International Journal of Early Childhood Special Education*, *2*, 154. https://doi.org/10.20489/intjecse.670475

Jimenez, B. A., & Barron, T. (2019). Learner-centered professional development: A model to increase inclusion for students with moderate intellectual disability. *Inclusion*, *7*(2), 125–139. https://doi.org/10.1352/2326-6988-7.2.125

Jimenez, B. A., Mims, P. J., & Baker, J. (2016). The effects of an online data-based decisions professional development for in-service teachers of students with significant disability. *Rural Special Education Quarterly*, *35*(3), 30–40. https://doi.org/10.1177/875687051603500305

Jordan, A. C. (2018). The supporting effective teaching project: 1. Factors influencing student success in inclusive elementary classrooms. *Exceptionality Education International*, *28*(3), 10–27.

Kahlke, R. (2014). Generic qualitative approaches: Pitfalls and benefits of methodological mixology. *International Journal of Qualitative Methods*, *13*, 37-52. https://doi.org/10.1177/160940691401300119

Kennedy, M. J., Rodgers, W. J., Romig, J. E., Lloyd, J. W., & Brownell, M. T. (2017). Effects of a multimedia professional development package on inclusive science teachers' vocabulary instruction. *Journal of Teacher Education*, (2), 213. https://doi.org/10.1177/0022487116687554

Kennedy, M. J., Rodgers, W. J., Romig, J. E., Mathews, H. M., & Peeples, K. N. (2018). Introducing the content acquisition podcast professional development process:

Supporting vocabulary instruction for inclusive middle school science teachers. *Grantee Submission*, *41*(2), 140–157.

Kirby, M. (2017). Implicit Assumptions in Special Education Policy: Promoting Full Inclusion for Students with Learning Disabilities. *Child & Youth Care Forum*, *46*(2), 175–191. https://doi.org/10.1007/s10566-016-9382-x

Klingner, J. K., Ahwee, S., & Pilonieta, P. (2003). Barriers and facilitators in scaling up research-based practices. *Exceptional Children*, *69*(4), 411–429. https://doi.org/10.1177/001440290306900402

Knowles, M. S. (1984). *Andragogy in action: Applying modern principles of adult learning.* Jossey-Bass.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2011). *The adult learner: The definitive classic in adult education and human resource development* (7th ed.). Elsevier Inc.

Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing, *European Journal of General Practice, 24*(1), 120-124. https://doi.org/10.1080/13814788.2017.1375092

Kosko, K. W., & Wilkins, J. L. M. (2009). General educators' in-service training and their self-perceived ability to adapt instruction for students with IEPs. *Professional Educator*, *33*(2), 1–10.

Kurniawati, F., de Boer, A., Minnaert, A., & Mangunsong, F. (2017). Evaluating the effect of a teacher training programme on the primary teachers' attitudes, knowledge and teaching strategies regarding special educational

needs. *Educational Psychology*, *37*(3), 287–297.

https://doi.org/10.1080/01443410.2016.1176125

Kwon, K. A., Hong, S. Y., & Jeon, H. J. (2017). Classroom readiness for successful

inclusion: Teacher factors and preschool children's experience with and attitudes

toward peers with disabilities. *Journal of Research in Childhood*

Education, *31*(3), 360–378. https://doi.org/10.1080/02568543.2017.1309480

Kyndt, E., Gijbels, D., Grosemans, I., & Donche, V. (2016). Teachers' everyday

professional development: Mapping informal learning activities, antecedents, and

learning outcomes. *Review of Educational Research*, *86*(4), 1111–1150.

https://doi.org/10.3102/0034654315627864

Leatherman, J. M. (2007). "I just see all children as children": Teachers' perceptions

about inclusion. *The Qualitative Report*, *12*(4), 594-611.

Liao, Y. C., Ottenbreit-Leftwich, A., Karlin, M., Glazewski, K., & Brush, T. (2017).

Supporting change in teacher practice: Examining shifts of teachers' professional

development preferences and needs for technology integration. *Contemporary*

Issues in Technology & Teacher Education, *17*(4), 522-548.

Liu, L. (2016). Using generic inductive approach in qualitative educational research: A

case study analysis. *Journal of Education Learning, 5,* 129-135.

https://doi.org/10.5539/jel.v5n2p129

Louws, M. L., Meirink, J. A., van Veen, K., & van Driel, J. H. (2017). Teachers' self-

directed learning and teaching experience: What, how, and why teachers want to

learn. *Teaching and Teacher Education*, *66*, 171–183.

https://doi.org/10.1016/j.tate.2017.04.004

Lowrey, K. A., Hollingshead, A., Howery, K., & Bishop, J. B. (2017). More than one way: Stories of UDL and inclusive classrooms. *Research & Practice for Persons with Severe Disabilities*, *42*(4), 225–242.

https://doi.org/10.1177/1540796917711668

Lundqvist, J., Allodi-Westling, M., & Siljehag, E. (2016). Characteristics of Swedish preschools that provide education and care to children with special educational needs. *European Journal of Special Needs Education*, *31*(1), 124–139.

https://doi.org/10.1080/08856257.2015.1108041

Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *AISHE-J: The All Ireland Journal of Teaching & Learning in Higher Education*, *9*(3), 3351–33514.

Maheady, L., Rafferty, L. A., Patti, A. L., & Budin, S. E. (2016). Leveraging change: Influencing the implementation of evidence-based practice to improve outcomes for students with Disabilities. *Learning Disabilities -- A Contemporary Journal*, *14*(2), 109–120.

Majoko, T. (2017). Mainstream early childhood education teacher preparation for inclusion in Zimbabwe. *Early Child Development and Care*, *187*(11), 1649–1665.

https://doi.org/10.1080/03004430.2016.1180292

Majoko, T. (2018). Teachers' concerns about inclusion in mainstream early childhood development in Zimbabwe. *International Journal of Special Education*, *33*(2), 343–365.

Malik, M. (2016). Assessment of a professional development program on adult learning theory, *The John Hopkins University Press, 16*(1), 47–70. https://doi.org/10.1353/pla.2016.0007

Mallory, B. L., & New, R. S. (1994). Social constructivist theory and principles of inclusion: Challenges for early childhood special education. *The Journal of Special Education*, *28*(3), 322–337. https://doi.org/10.1177/002246699402800307

Mangope, B., & Mukhopadhyay, S. (2015). Preparing teachers for inclusive education in Botswana: The role of professional development. *Journal of International Special Needs Education*, *18*(2), 60–72. https://doi.org/10.9782/2159-4341-18.2.60

Martin, L. E., Kragler, S., Quatroche, D., & Bauserman, K. (2019). *Transforming schools: The power of teachers' input in professional development*. *ScholarWorks*.

Matović, N., & Spasenović, V. (2016). Teacher professional development in the field of inclusive education: The case of Serbia. (English). *Journal of Contemporary Educational Studies / Sodobna Pedagogika*, *67*(1), 80–95.

Matsumura, L. C., Correnti, R., Walsh, M., Bickel, D. D., & Zook-Howell, D. (2019). Online content-focused coaching to improve classroom discussion quality. *Technology, Pedagogy & Education*, *28*(2), 191–215. https://doi.org/10.1080/1475939X.2019.1577748

Maxwell, J. A. (1992). Understanding and validity in qualitative research. *Harvard Educational Review, 62*(3)*,* 279-300.

McLeod, R. H., Kim, S., & Resua, K. A. (2019). The effects of coaching with video and email feedback on preservice teachers' use of recommended practices. *Topics in Early Childhood Special Education*, *38*(4), 192–203. https://doi.org/10.1177/0271121418763531

McLeskey, J., Rosenberg, M. S., & Westling, D. L. (2018). *Inclusion: Effective practices for all students (*3rd ed.). Pearson.

McLeskey, J., & Waldron, N. L. (2002). Professional development and inclusive schools: Reflections on effective practice. *Teacher Educator*, *37*(3), 159. https://doi.org/10.1080/08878730209555291

Meissel, K., Parr, J. M., & Timperley, H. S. (2016). Can professional development of teachers reduce disparity in student achievement? *Teaching & Teacher Education*, *58*, 163–173. https://doi.org/10.1016/j.tate.2016.05.013

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation.* Jossey-Bass.

Morningstar, M. E., Allcock, H. C., White, J. M., Taub, D., Kurth, J. A., Gonsier-Gerdin, J., & Jorgensen, C. M. (2016). Inclusive education national research advocacy agenda. *Research & Practice for Persons with Severe Disabilities*, *41*(3), 209–215. https://doi.org/10.1177/1540796916650975

Muccio, L. S., & Kidd, J. K. (2018). "I'm the one with the child with a disability:" Head start teachers' perspectives on inclusive education. *Journal of School Connections*, *6*(1), 36–70.

Murphy, C. R. (2018). Transforming inclusive education: Nine tips to enhance school leaders' ability to effectively lead inclusive special education programs. *Walden Scholarworks.*

National Association for Education of Young Children. (2018). *Higher education.* https://www.naeyc.org/our-work/higher-ed

Navarro, S. B., Zervas, P., Gesa, R. F., & Sampson, D. G. (2016). Developing teachers' competences for designing inclusive learning experiences. *Educational Technology & Society, 19*(1), 17–27.

Nilholm, C., & Göransson, K. (2017). What is meant by inclusion? An analysis of European and North American journal articles with high impact. *European Journal of Special Needs Education*, *32*(3), 437–451. https://doi.org/10.1080/08856257.2017.1295638

Nonis, K., Chong, W. H., Moore, D. W., Tang, H. N., & Koh, P. (2016). Pre-school teacher's attitudes towards inclusion of children with developmental needs in kindergartens in Singapore. *International Journal of Special Education*, *31*(3).

Oddone, K., Hughes, H., & Lupton, M. (2019). Teachers as connected professionals: A model to support professional learning through personal learning networks. *International Review of Research in Open & Distance Learning*, *20*(3), 102–120. https://doi.org/10.19173/irrodl.v20i4.4082

Office of Head Start. (2019). *Head Start Programs.* U.S. Department of Health and

Human Services. Administration for Children and Families.

https://www.acf.hhs.gov/ohs/about/head-start

Palinkas, L., Horwitz, S., Green, C., Wisdom, J., Duan, N., & Hoagwood, K. (2015).

Purposeful sampling for qualitative data collection and analysis in mixed method

implementation research. *Administration and Policy in Mental Health, 42*(5), 533-

544. https://doi.org/10.1007/s10488-013-0528

Pandey, S., & Patnaik, S. (2014). Establishing reliability and validity in qualitative

inquiry: A critical examination. *Jharkhand Journal of Development and

Management Studies, 12,* 5743-5753.

Park, M., Dimitrov, D. M., & Park, D. Y. (2018). Effects of background variables of

early childhood teachers on their concerns about inclusion: The mediation role of

confidence in teaching. *Journal of Research in Childhood Education*, *32*(2), 165–

180. https://doi.org/10.1080/02568543.2017.1417926

Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and

practice* (4th ed.). SAGE.

Pelatti, C., Dynia, J., Logan, J., Justice, L., & Kaderavek, J. (2016). Examining quality in

two preschool settings: Publicly funded early childhood education and inclusive

early childhood education classrooms. *Child & Youth Care Forum*, *45*(6), 829–

849.

Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in

psychology. *The Qualitative Report*, *20*(2), 76-85.

Peterson-Ahmad, M. B., Hovey, K. A., & Peak, P. K. (2018). Pre-Service teacher

    perceptions and knowledge regarding professional development: Implications for

    teacher preparation programs. *Journal of Special Education Apprenticeship*, *7*(2).

Powell, K. C., & Kalina, C. J. (2009). Cognitive and social constructivism: Developing

    tools for an effective classroom. *Education*, *130*(2), 241–250.

Prast, E. J., Van de Weijer-Bergsma, E., Kroesbergen, E. H., & Van Luit, J. (2018).

    Differentiated instruction in primary mathematics: Effects of teacher professional

    development on student achievement. *Learning & Instruction*, *54*, 22–34.

    https://doi.org/10.1016/j.learninstruc.2018.01.009

Rakap, S. (2017). Impact of coaching on preservice teachers' use of embedded

    instruction in inclusive preschool classrooms. *Journal of Teacher Education,*

    68(2), 225-245. https://doi.org/10.1177/0022487116685753

Ravet, J. (2018). 'But how do I teach them?' Autism & initial teacher

    education (ITE). *International Journal of Inclusive Education*, *22*(7), 714–733.

    https://doi.org/10.1080/13603116.2017.1412505

Ravitch, S. M., & Carl, N. M. (2016). *Qualitative research: Bridging the conceptual,*

    theoretical, and methodological. SAGE.

Ring, E., O'Sullivan, L., O'Keefe, S., Ferris, F., & Wall, E. (2019). Transforming the

    lives of early childhood teachers, autistic children and their families: Findings and

    recommendations from an evaluation of a programme of continuing professional

    development. *Adult Learner (0790-8040)*, 118–147.

Robinson, D. (2017). Effective inclusive teacher education for special educational needs

and disabilities: Some more thoughts on the way forward. *Teaching & Teacher Education*, *61*, 164–178. https://doi.org/10.1016/j.tate.2016.09.007

Rosell-Aguilar, F. (2018). Twitter: A professional development and community of practice tool for teachers. *Journal of Interactive Media in Education*, (1). https://doi.org/10.5334/jime.452

Rubin, H. J., & Rubin, I. S. (2005). *Qualitative interviewing: The art of hearing data.* http://ebookcentral.proquest.com/

Sam, A. M., Kucharczyk, S., & Waters, V. (2018). Online tools to support the delivery of evidence-based practices for students with ASD. *Teaching Exceptional Children*, *50*(3), 141–152. https://doi.org/10.1177/0040059917745654

Sato, T., & Haegele, J. A. (2017). Professional development in adapted physical education with graduate web-based professional learning. *Physical Education & Sport Pedagogy*, *22*(6), 618-631. https://doi.org/10.1080/17408989.2017.1310832

Seidman, I. (2005). *Interviewing as qualitative research* (3rd ed.). Teachers College Press.

Sempowicz, T., Howard, J., Tambyah, M., & Carrington, S. (2018). Identifying obstacles and opportunities for inclusion in the school curriculum for children adopted from overseas: Developmental and social constructionist perspectives. *International Journal of Inclusive Education*, *22*(6), 606–621. https://doi.org/10.1080/13603116.2017.1390004

Soukakou, E., Evangelou, M., & Holbrooke, B. (2018). Inclusive classroom profile: A pilot study of its use as a professional development tool. *International Journal of*

Inclusive Education, *22*(10), 1124–1135.

https://doi.org/10.1080/13603116.2017.1416188

State, T. M., Simonsen, B., Hirn, R. G., & Wills, H. (2019). Bridging the research-to-practice gap through effective professional development for teachers working with students with emotional and behavioral disorders. *Behavioral Disorders*, *44*(2), 107–116. https://doi.org/10.1177/0198742918816447

Stites, M. L., Rakes, C. R., Noggle, A. K., & Shah, S. (2018). Preservice teacher perceptions of preparedness to teach in inclusive settings as an indicator of teacher preparation program effectiveness. *Discourse & Communication for Sustainable Education*, *9*(2), 21–39. https://doi.org/10.2478/dcse-2018-0012

Tekin-Iftar, E., Collins, B. C., Spooner, F., & Olcay-Gul, S. (2017). Coaching teachers to use a simultaneous prompting procedure to teach core content to students with autism. *Teacher Education & Special Education*, *40*(3), 225–245. https://doi.org/10.1177/0888406417703751

U.S. Department of Education. (2017). *Common core of data (CCD): State non-fiscal survey of public elementary/secondary education.* https://www2.ed.gov/programs/osepidea/618-data/state-level-data-files/index.html

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Walker, S. (2007). The social participation of young children with developmental

    disabilities in inclusive early childhood programs, *Electronic Journal for*

    Inclusive Education, 2 (2).

Walker, S., & Berthelsen, D. (2008). Children with autistic spectrum disorder in early

    childhood education programs: A social constructivist perspective on

    inclusion. *International Journal of Early Childhood*, *40*(1), 33–51.

    https://doi.org/10.1007/bf03168362

Walker, V. L., DeSpain, S. N., & Thompson, J. R. (2019). Supporting educators to

    implement Mand training for a student with multiple disabilities.

    Exceptionality, *27*(4), 262-277. https://doi.org/10:1080/09362835.2018.1480947

Warren, S. R., Martinez, R. S., & Sortino, L. A. (2016). Exploring the quality indicators

    of a successful full-inclusion preschool program. *Journal of Research in*

    Childhood Education, *30*(4), 540–553.

    https://doi.org/10.1080/02568543.2016.1214651

Westling, D. L. (2019). Inclusion in the United States: Correlations between key state

    variables. *International Journal of Inclusive Education*, *23*(6), 575–593.

    https://doi.org/10.1080/13603116.2018.1441340

Woodcock, S., & Hardy, I. (2017). Probing and problematizing teacher professional

    development for inclusion. *International Journal of Educational Research*, *83,*

    43–54. https://doi.org/10.1016/j.ijer.2017

Woodcock, S., & Woolfson, L. M. (2019). Are leaders leading the way with inclusion?

    Teachers' perceptions of systemic support and barriers towards inclusion.

International Journal of Educational Research, *93*, 232–242.

https://doi.org/10.1016/j.ijer.2018.11.004

Yeong, M. L., Ismail, R., Ismail, N. H., & Hamzah, M. I. (2018). Interview protocol refinement: Fine-tuning qualitative research interview questions for multi-racial populations in Malaysia. *Qualitative Report*, *23*(11), 2700–2713.

Young, K. (2018). CO-CREATE: Teachers' voices to inform special education teacher education. *Issues in Educational Research*, *28*(1), 220–235.

Yu, S. (2019). Head start teachers' attitudes and perceived competence toward inclusion. *Journal of Early Intervention*, *41*(1), 30–43.

https://doi.org/10.1177/1053815118801372

Zagona, A. L., Kurth, J. A., & MacFarland, S. (2017). Teachers' views of their preparation for inclusive education and collaboration. *Teacher Education and Special Education*, *40*(3), 163–178. https://doi.org/1177/0888406417692969

Zhukova, O. L. (2018). Novice teachers concerns, early professional experiences and development: Implications for theory and practice. *Discourse & Communication for Sustainable Education*, *9*(1), 100–114. https://doi.org:10.2478/dcse-2018-0008

Zide, L., & Mokhele, M. L. (2018). Enlisting on teacher professional development: Reflections of Teachers' Experiences. *E-BANGI Journal, 15*(4), 36-47.

Appendix: Interview Protocol

Introduction:

Hello. My name is Susie Metscher and I am completing my dissertation focusing on the topic of professional development. Thank you for agreeing to participate in this research study. The purpose of this study is two-fold: First, to understand early childhood general education teachers' perceptions of past professional development experiences for working with students with disabilities, and second, to understand what additional supports they may need to implement evidence-based practices in inclusive environments that support students with disabilities. You have identified yourself as an early childhood general education teacher who has taught in inclusive environments for a minimum of three years. Today I will be interviewing you regarding your experience working with and receiving training on students with disabilities. As described in the informed consent form that you signed, I will be audiotaping this interview so I can refer to it later. We can stop the recording at any time. Is that okay with you?

Continue upon consent.

Do you have any questions or concerns before we begin?

Background Information

1.   What is your current position at your school?

2.   How many years have you been teaching? How many of those years have you had

        students with disabilities in your classroom?

Classroom Context

3.   How many students with individualized education plans (IEP) do you currently

        have in your classroom? What types of disabilities do these students have?

4.   Describe the types of disabilities students have had in your previous classrooms.

5. What is your most effective strategy (or strategies) for working with students with disabilities in an inclusive classroom? Where did you learn this strategy?

Professional Development Experiences

6. Tell me about some of the professional development experiences you have had that specifically align to working with students with disabilities and/or special needs? (RQ1)

    a. What was the most memorable or helpful professional development session you attended? What was beneficial about this/these experience(s)?

    b. What was the least helpful professional development session you attended? What challenges did you face during this/these experience(s)?

    c. What would you have changed about any of these experiences to better align to your needs and interests?

7. Tell me about some of the teaching strategies and practices reviewed during these professional development sessions that you were able to implement in the field. (RQ1)

    a. Were you able to implement these practices successfully? What helped you to do so?

b. How did these practices have an effect in your classroom or on your teaching? *(How did these practices affect how you plan instruction? Teach? Respond to students' need? Manage behaviors?)*

c. What challenges did you face in implementing these practices? How come?

d. What would have supported you to better implement these practices more successfully?

8. What types of professional development experiences would be most beneficial for you to attend in supporting students with disabilities in your classroom? (RQ2)

a. Who should provide these trainings? Why do you think that?

b. Where should these trainings take place? Why do you think that?

c. How should these trainings be delivered? Some examples may include individual coaching, modeled lessons, online trainings, observations, workshops, etc.

d. What topics of professional development would best support your needs? Why do you think that?

e. How long should these trainings be?

f. What else would be helpful to add to these professional development sessions?

9. I am going to list a few professional development topics. Would you be interested in
   attending these sessions? Reply with "yes" or "no." (RQ2)

Professional Development Topics

   a) Special Education Law

   b) Understanding individualized education plans (IEP)

   c) The referral process

   d) Building an inclusive school/classroom culture

   e) Collaboration with service providers

   f) Working with paraprofessionals

   g) Family engagement for students with disabilities

   h) Co-teaching strategies

   i) Using the Universal Design Framework

   j) Differentiation Strategies

   k) Knowledge and strategies for specific disabilities (indicate the disabilities
   you would want more knowledge about, strategies for, or both)

   o autism

   o deaf-blindness

   o deafness

   o emotional disturbance

   o hearing impairment

   o intellectual disability

   o multiple disabilities

   o orthopedic impairment

   o other health impairment

   o specific learning disability

   o speech or language impairment

   o traumatic brain injury

o   visual impairment (including blindness)

o   Other :_____

m) Early intervention

n) Modification of assessments

o) Monitoring learning and data collection

p) Literacy supports for students with disabilities

q) Mathematical supports/strategies for students with disabilities

r) Behavioral supports/strategies for students with disabilities

s) Technology supports/strategies for students with disabilities

t)   Strategies for working with students with attention difficulties

Other:_____

10. Why did you select _____ as a topic you would like to know more about? (RQ2)

11. I am going to review a few professional development modes of delivery

options. Please respond yes or no if you would be interested in receiving professional

development in this way. (RQ2)

Professional Development Modes of Delivery

a) Lecture or seminar

b) Watching videos

c) Online module

d) In-person coaching with an expert in special education

e) Virtual coaching with an expert in special education

f)   Online Professional Learning Network (ex. *Twitter*, *Wiki*, *Instagram*)

g) Self-directed learning through an online multi-media platform

h) Self-directed learning through a research project

i)   Virtual simulations

j)   Book study group

k)   Inter-visitations with peer teachers

l)   Other:_____

12. Why did you select _____ as a mode of delivery that would interest you? (RQ2)

13. Is there anything else you would like to share?

Thank you so much for your time and the information you shared. If you have any questions after this interview, do not hesitate to contact me. I may follow-up with you just to confirm the accuracy of your responses, would that be okay? What would be the best way to reach you? Thank you and have a great day.