

2023

Elementary Teachers' Perceptions of Evidence-Based Practices for Twice-Exceptional Students

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Khadijah Muhammad

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Walden University

2023

Abstract

Elementary Teachers' Perceptions of Evidence-Based Practices for Twice-Exceptional
Students

by

Khadijah Muhammad

MA, University of Phoenix, 2010

BS, Georgia State University, 2006

Project Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

February 2023

Abstract

Twice-exceptional students (2E) are identified as having high aptitude and a disability, as classified by their state of residence. However, elementary school teachers are not consistently implementing evidence-based practices (EBPs) for kindergarten through fifth-grade 2E students, creating a gap in practice. The purpose of this qualitative study was to understand teachers' perspectives regarding the challenges with and needed supports for consistently implementing EBPs for 2E students. Universal design for learning was the conceptual framework and the foundation for the study. A basic qualitative research design was used in this study to address research questions regarding elementary teachers' perspectives on challenges with and supports for consistent implementation of EBPs for 2E students. Data were collected through open-ended semistructured interviews with 10 elementary teachers in a school district in the southeastern United States who have experience implementing EBPs with 2E students. Data were analyzed using open-coding and thematic analysis and six themes emerged: (a) time, (b) classroom dynamics, (c) lack of knowledge, (d) district training, (e) teacher collaboration, and (e) resources. These findings led to the development of a 3-day professional development to increase teacher knowledge, awareness, and capacity to consistently implements EBPs to meet 2E students' strengths and weakness. This research has the potential for implications of positive social change through increased achievement among 2E students, increased understanding of teachers' challenges, improved supports to enhance teaching skills, and an increase in awareness regarding this unique population of students.

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Dedication

This project study is dedicated to my lifelong cheerleaders, my mother Surayya Abdulmateen and my brother Rafiq Abdul-Mateen. Your belief that I can do anything has always allowed me to embark on a never-ending journey of elevation. To my husband, Jamil, thank you for being my patient, sound, and loving captain. And, to my sons, Ibrahim and Musa Muhammad, being your mother remains my greatest accomplishment in life. I love you to infinity and beyond.

Acknowledgments

I would first like to thank Allah for saying be and it is. I want to thank Dr. Tammy Hoffman and Dr. Peggy Cramer for serving as my committee members. To my committee chair, Dr. Hoffman, I truly appreciate your professionalism, timely feedback, and guidance. Dr. Moffett, thank you for being my triple checker throughout the completion of my doctoral capstone. Your extra feedback provided another level of quality to my study.

Throughout my career, I have encountered some phenomenal educators who have helped me grow professionally and personally. I want to acknowledge Dr. Latanya Fanion, my mentor. You have played an integral role in the development of my foundation as an educator. Principal Kathy Wells, thank you for assigning Dr. Fanion as my mentor.

My family, the Abdulmateens and Muhammads, I thank you dearly for holding me down when I was incapacitated due to a spinal condition. Words cannot express my appreciation and gratitude for a family that loves me so deep.

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Section 1: The Problem

Twice-exceptional (2E) students are identified as having high aptitude and a disability as classified by their state of residence (Josephson et al., 2018). The problem is that elementary teachers are not consistently implementing evidence-based practices (EBPs) for kindergarten through fifth grade 2E students in a southeastern state. In section 1, I introduce the local problem, rationale, definition of terms, significance of the study, research questions, review of the literature, conceptual framework, implications, and a summary.

The Local Problem

Teachers in a school district in a southeastern state have been given the opportunity to become certified in gifted education. Certification requires that teachers complete a gifted endorsement program that includes a 2E course. However, many teachers complete the gifted endorsement program and continue to have challenges supporting 2E students (school district coordinator, personal communication, November 30, 2021). Elementary teachers are not consistently implementing EBPs for kindergarten through fifth grade 2E students in a southeastern state (school district coordinator, personal communication, November 30, 2021; elementary teacher, personal communication, February 24, 2022). This gap in practice may be due to teachers' lack of capacity to implement instructional practices to support the strengths and needs of 2E students (Bechard, 2019).

This research is focused on elementary teachers in a southeastern school district that serves over 90,000 students. According to the school district coordinator, many educators are unaware of the 2E concept.

The Council for Exceptional Children (2022) noted the following definition for 2E:

Twice-exceptional (2e) individuals evidence exceptional ability and disability, which results in a unique set of circumstances. Their exceptional ability may dominate, hiding their disability; their disability may dominate, hiding their exceptional ability; each may mask the other so that neither is recognized nor addressed.

Educators have challenges consistently providing EBPs to 2E students in the classroom setting (school district coordinator, personal communication, November 30, 2021). On a larger scale, the lack of consistent implementation of EBPs and the absence of professional learning that focuses on serving students' high aptitude and disability may result in students being denied their educational right to a free and appropriate public education (Bechard, 2019).

Although there is legislation that addresses 2E students, teachers still experience challenges with supporting the needs of these students. The evolution of special education includes progression in the areas of policy, practice, and service. In 1975, the U.S. Congress passed the Education for All Handicapped Children Act, which was later renamed the Individuals with Disabilities in Education Act in 1990 and reauthorized in 1997 and 2004 (Nagro et al., 2019). This federal legislation brought students into public schools who had previously been barred from public education due to their disabilities.

The 2004 reauthorization of the Individuals with Disabilities in Education Act also brought national attention toward students who were 2E. Exploring how teachers implement EBPs could provide some insight into the challenges with and needed support for teachers to effectively support 2E students.

Researchers have found multiple reasons for 2E students' needs not being met. Lee and Ritchotte (2018) found the educational needs of 2E students in local schools were not being addressed because school personnel are not trained to work with unique learners; the researchers also found a lack of understanding of the phenomenon of twice-exceptionality, which leads to 2E students being underserved. Discussions have occurred regarding gifted students with attention-deficit hyperactivity disorder, autism spectrum disorder, and learning disabilities. However, there is limited research on talented students with speech/language impairment, emotional disturbance, or multiple disabilities (Lee & Ritchotte, 2018). Lee and Ritchotte (2018) recommend further research regarding gifted students and disabilities outside of attention-deficit hyperactivity disorder, autism spectrum disorder, and learning disabilities to advance the understanding of twice-exceptionality.

Evidence exists indicating 2E students are not having their instructional needs met. Rowan et al. (2019) found that early career teachers were underprepared to work with diverse learners or a full range of learners; including those who are economically disadvantaged, have a disability, are gifted, or are English language learners. This lack of preparedness can have significant and adverse consequences for 2E students, ranging from boredom, disengagement, and low achievement (Rowan et al., 2019). Rowan et al.

(2019) recommended further research be conducted explores moving teachers beyond the technical understanding of professional knowledge to a constant reflexive knowledge base informed by experience, research and scholarship.

Rationale

Educators have a significant impact on the educational and psychological well-being of students. Teacher practices for effective education of 2E students include interventions tailored to student' strengths and potentials and remediation and support for student needs (Amran & Majid, 2019). All learners deserve an equitable educational opportunity, but providing such a service is challenging for many teachers (Peters, 2022).

According to Kelchtermans et al. (2018), educators constitute a specific category of professionals. Educators need specific expertise in their practice of pedagogy to meet the goals and responsibilities of their jobs, and educators need opportunities to acquire and develop skills. Studying one's practice increases insight into the complexities of teaching (Kelchtermans et al., 2018). According to an elementary school teacher at the study site (personal communication, February 24, 2022), teachers have not been provided with 2E training or resources to support 2E learners in a classroom setting. Furthermore, local school leaders have expressed a lack of 2E training at the local school level (academic coach, instructional support specialist, assistant principal, and principal, personal communication May 28, 2022). The purpose of this qualitative study was to understand teachers' perspectives regarding the challenges and support needed to consistently implement EBPs for 2E students in schools.

Definition of Terms

The following are key terms used in this basic qualitative study.

Evidence-based practices (EBPs): The conscientious, explicit, and judicious use of current best evidence in making decisions about the case of individual students (Byrd & Asunda, 2020, p. 2).

Twice-exceptional (2E): Students who have high aptitude and a disability as classified by their state of residence (Josephson et al., 2018).

Universal design of learning (UDL): “A comprehensive framework that is used to support teachers to address diversity of learning in the classroom” (Carrington et al., 2020, p. 2).

Significance of the Study

This study is significant because it may fill a gap in practice by addressing the problem that elementary teachers are not consistently implementing EBPs for kindergarten through fifth-grade 2E students. This research may help determine factors that contribute to teachers’ challenges with and needed support to teach the unique population of 2E students. This project may offer educational leaders insight and understanding as to how to better support educators’ instructional practices.

The results from this study provide the school district with data on teacher perspectives regarding challenges with implementing EBPs with 2E students and could lead to the identification of resources to overcome the challenges. The research may also provide the local school district with ideas for 2E professional development and mentoring programs for teachers. Differentiated instruction and professional training can

contribute to the academic and behavioral success of 2E students (Lee & Ricthotte, 2018). Further, Akyar (2020) found that having a mentor is one element of good teacher training. Mentor teachers can provide pre service teachers with professional skills by sharing their ideas about performance, instructional skills, and teaching strategies to support diverse learners (Akyar, 2020). Because 2E students have a right to a free and appropriate public education, positive social change occurs when 2E students are provided with consistent EBPs that allow access to a curriculum that includes the effects of their dual exceptionalities.

Research Question

Research questions provide insight into a problem and guide the methodology for a study (Ratan et al., 2019). In this study, I sought to explore the problem of elementary teachers inconsistently implementing EBPs to 2E students and teachers' perspectives regarding the challenges with and needed support for implementing EBPs to 2E students. The following RQs guide this basic qualitative study:

RQ1: What are elementary teachers' perspectives regarding the challenges of consistently implementing EBPs for 2E students in schools?

RQ2: What are elementary teachers' perspectives regarding the needed support for consistent implementation of EBPs for 2E students in schools?

Review of the Literature

In this literature review, I provide a critical review of current (published 2018–2022) peer-reviewed research on teachers' instructional practices with 2E students and diverse learners. In this section, I present the conceptual framework that grounds the

study along with logical connections that emerged from the literature review. Finally, I address the broader problem associated with the local problem.

Conceptual Framework

Rose and Meyer's concept of UDL served as the conceptual framework that guided this study. UDL is drawn from brain research and advances in technology (Moore, 2007). The UDL incorporates and supports current research to teaching, which positively affects learning for 2E or diverse learners. According to UDL, differentiation is provided to students by a set of principles that include multiple means of engagement, representation, and expression (Carter & Flushman, 2020; Chen & Dote-Kwan, 2021). The UDL concept provides information that guides the study, in which I address the use of EBPs through UDL. Key elements of the UDL framework provide an evidence-based approach to improving learning for all students.

Using UDL as the conceptual framework for this basic qualitative study aided in understanding teachers' implementation of EBPs to support the learning of 2E students. A basic qualitative design may be based on the social constructivism theory. Social constructivism suggests that successful teaching and learning is dependent on interpersonal interaction and discussion, with a focus on students' understanding of the discussion (Taylor, 2018). The UDL framework relates to social constructivism as it provides steps for teachers to implement multiple means of representation, action and expression, and engagement to students to optimize understanding.

The RQs in this study focus on teachers' challenges and needed support to implement EBPs to 2E students consistently. The UDL framework provides educators

with evidence-based examples and resources to ensure multiple means of representation, action and expression, and engagement opportunities are available to students. The evidence-based resources and examples from the UDL framework may provide insight into the challenges with consistently implementing EBPs. Furthermore, the UDL framework is informed by feedback from the education field and new research.

The research instrument used to collect data for this study was semistructured interviews with teachers. These semistructured interviews allowed teachers in the field to provide data related to the implementation of EBPs. Adeoye-Olatunde and Olenik (2021) noted that in qualitative research, semistructured interviews allow a researcher to engage in a formal interview while having the autonomy to explore pertinent ideas that may come up in the course of the interview, which can further enhance the understanding of the data being assessed.

Evidence exists suggesting further research into the practices of EBPs. Daniel and Lemon (2018) noted the lack of academic EBPs being used in classrooms for diverse learners as concerning. The lack of consistency creates a gap in practice (Beahm & Cook, 2021; Brock et al., 2020; Movahedazarhouli, 2022). Daniel and Lemon (2018) suggested future research should incorporate teacher feedback in designing or fine tuning EBPs. Also, research should be conducted to better understand how teachers can implement EBPs with fidelity and to understand how schools select professional development opportunities for teachers of students with special needs.

Review of the Broader Problem

A search of peer-reviewed articles was conducted to synthesize the literature for this study. For this basic qualitative study, the searches focused on UDL, EBPs, teacher beliefs about 2E students, teacher capacity, and twice-exceptional. Search terms such as UDL and evidence-based practices, UDL and differentiation, identification of 2E students, teacher capacity, and teacher preparedness for diverse learners were used to locate sources pertinent to this study. The following databases were used: Google Scholar, ProQuest, SAGE, Educational Resources Information Center, and EBSCO Discovery Service. This literature review is organized into EBPs, UDL, and factors that impede teachers' use of EBPs.

Evidence-Based Practices

Under the No Child Left Behind Act (2001), schools were called to use scientifically based research as the foundation for education programs and interventions (Silver, 2020). Since the implementation of the Every Student Succeeds Act (2015), which replaced No Child Left Behind, states and school districts must have a plan for helping schools that have a specific group of students, like those in special education who are struggling. The Every Student Succeeds Act requires states to use EBPs to support student achievement (Slavin, 2020). EBPs are “practices that have been shown to reliably improve an outcome for a population of learners, according to evidence from a body of rigorous, experimental studies” (Cook et al., 2020, p. 6).

The use of EBPs is considered an effective strategy for improving student achievement (Alnaim, 2021). According to Leggio et al. and Williamson et al. (2019),

there is a need to improve the quality of learning by providing students with well-educated, quality practitioners who use EBPs in teaching. Leggio et al. (2019) suggested a future study in which teachers of students who have emotional/behavioral disorders are investigated for their use of EBPs and their qualities, knowledge, and teaching skills. Williamson et al. (2019) proposed a future study examining the relationship between the designation of a practice as EBP by any particular criteria and the actual use of and effectiveness of a method by practitioners within widely diverse contexts. EBPs are derived from objective evidence such as educational research or school, teacher, and student performance metrics. Clear evidence of impact based on rigorous research is the leading indicator of quality EBPs that improve student achievement (Williamson et al., 2019).

EBPs are defined into three tiers: strong, moderate, or promising levels of evidence (Eppley, 2018; Schultz-Jones et al., 2018; Slavin, 2020). EBPs with strong evidence have a minimum of one well-designed and implemented experimental study. An EBP with moderate evidence has at least one well-designed and implemented quasi-experimental study. An EBP has promising evidence from at least one well-designed and implemented correlational study with statistical controls for selection bias (Schultz-Jones et al., 2018; Slavin, 2020).

A process is used to identify potential EBPs that fit into strong, moderate, and promising tiers of EBPs. According to Farmer et al. (2018), Kittelman et al. (2020), and Zaheer et al. (2019), school districts and district staff identify critical needs or challenges based on local needs. Next, relevant EBPs are selected. The EBPs should be valued and

contextually fit for the need. Then, an implementation plan is created and educators administer it. District and school teams may assist in implementing the practice to support understanding the actions and process for full implementation of practice at total capacity. Finally, data are assessed, and reflection takes place to continue and improve the implementation of EBPs.

EBPs include activities, strategies, and interventions (Stahmer et al., 2018). EBPs can be used to improve instructional and behavior outcomes for students (Chaparro et al., 2020). Nagro et al. (2019) noted that implementing class-wide evidence-based classroom management strategies supports student engagement in the learning process and decreases problematic behaviors.

Five essential features to effective evidence-based classroom management strategies include:

- (a) physical and instructional predictability, (b) clear expectations that are posted, explicitly taught, reviewed, and enforced, (c) active observable engagement, (d) a continuum of strategies for responding to appropriate behaviors, and (e) a continuum of strategies for responding to inappropriate behaviors. (Nagro et al., 2019, p. 132)

These strategies can be embedded into teacher lesson plans. Teachers can consider which strategy would be most beneficial to 2E students considering their exceptionalities.

According to Nagro et al. (2019), academic or instructional EBPs support students' conceptual understanding and problem-solving skills. However, many educators report they are unprepared for the expectations in teaching (Beutel & Tangen, 2018; Lee

& Ritchotte, 2018). Nagro et al. (2019) noted that it can be challenging to support students with disabilities using the general education curriculum. The individualized needs of 2E students require specialized teaching expertise in assessing, planning, collaborating, and delivering EBPs (Nagro et al., 2019).

Evidence-based instructional approaches include:

(a) whole-group systematic implementation of student responses to increase opportunities for responding, (b) embedding movement into instruction to increase learning endurance, (c) incorporating visual supports to increase structure and improve comprehension, and (d) including opportunities for student choice while meeting learning objectives to promote self-determination, independence, and confidence. (Nagro et al., 2019, p. 132)

Universal Design of Learning

The concept of UDL was developed at the North Carolina State University College of Design in the 1980s. Architects, product designers, engineers, authors, and environmental design researchers established the principles of universal design to guide environment, product, and communication design disciplines (Bodgan & Pass, 2018; Kennette & Wilson, 2019). In the 1990s, the Center for Applied Science and Technology, a nonprofit education research and development organization, created the UDL framework (Bodgan & Pass, 2018; Tobin, 2018). UDL is based on cognitive neuroscience and guides the development of flexible learning and the accommodation of individual learning differences (Bodgan & Pass, 2018).

In the Higher Education Opportunity Act of 2008, UDL was defined as a scientific framework to proactively design a curriculum to address barriers within the learning experience. The Every Student Succeeds Act (2015) endorsed using UDL or personalized learning by encouraging states to design assessments using UDL and to adopt technology that aligns with UDL (Hollingshead et al., 2020). The principles of UDL embrace diverse learning abilities and styles as the norm and not as an exception. The core of UDL is a comprehensive framework that eliminates obstacles to learning and student achievement (Bodgan & Pass, 2018). To ensure that all learners can access and participate in meaningful, challenging learning opportunities, UDL encompasses three guidelines for educators to follow: (a) multiple means of representation, (b) multiple means of expression, and (c) multiple means of engagement (Bodgan & Pass, 2018; Kieran & Anderson, 2019).

Multiple means of representation provide learners with various ways of acquiring information and knowledge (Carrington et al., 2020; Rogers-Shaw, 2018). This strategy recognizes that students differ in their perception and understanding of content. For this principle, educators provide new material in various ways (Carrington et al., 2020; Kieran & Anderson, 2019). This principle also requires initial planning to consider the grouping of individuals and small groups of students. Once students are grouped, teachers can determine what will be used to support learning and student participation through multiple ways of interacting with content. Teachers may use specific language or symbols to enhance comprehension and facilitate shared communication and understanding (Carrington et al., 2020).

Multiple means of expression provide learners with alternatives for demonstrating what they know or are learning (Carrington et al., 2020; Rogers-Shaw, 2018). This strategy allows students with various abilities and disabilities to express their learning with physical activity and different modes of expression or communication (Carrington et al., 2020; Kieran & Anderson, 2019). Educators can design activities that allow the demonstration of course content in various ways to allow learners to succeed.

Multiple means of engagement require teachers to use learners' interest to challenge and motivate students appropriately. Educators can encourage special interest learning to increase student participation and engagement in learning (Carrington et al., 2020; Kieran & Anderson, 2019; Rogers-Shaw, 2018). Providing students with choice, feedback, goals, and varied demands and resources can create increased opportunities for student engagement with diverse learners. Flexible learning environments in which teachers facilitate strategies to cope with challenges and develop strengths also support student engagement (Carrington et al., 2020; Rogers-Shaw, 2018).

The UDL curriculum has four parts: (a) goals, (b) assessments, (c) methods, and (d) materials (Anderson, 2021; Nelson & Brennan, 2019). These components foster learners to be more strategic, goal-oriented, knowledgeable, and motivated to learn (Grove et al., 2018). The UDL goals involve all learners by addressing what is expected from learners and how expectations will be measured and by ensuring each learner is challenged appropriately. Assessments align with students' goals and may be formative or summative. Assessments provide educators with a comprehensive view of a student's performance over time and provide learners with timely constructive feedback.

Instructional methods are diverse, monitored, and adjusted to meet all learners' needs. The UDL methods include shared learning and teaching within a collaborative environment. Varied educational materials are used to engage and access alternative learning, leading to deeper understanding and student achievement. Diversified materials encourage students to be proactive and involved in learning (Nelson & Brennan, 2019).

Factors That Impede Teachers' Use of EBPs With 2E Students

When EBPs are used systematically they can increase student achievement for diverse learners (Lekwa et al., 2019). However, Suhrheinrich et al. (2021) noted that EBPs are not used often or are not used correctly in schools. Teachers' lack of use of EBPs increases the research-to-practice gap (Fink Chorzempa et al., 2019). Suhrheinrich et al. (2021) recommended exploring the influence of leadership on the implementation of EBPs. Fink Chorzempa et al. (2019) suggested a future study that focuses on the practice-based evidence model, a model that was designed to assist teacher candidates in evaluating the effectiveness of the practices they implement to optimize students' learning outcomes. Some factors that impede teachers' use of EBPs with 2E students include (a) identification process of 2E students, (b) teacher preparedness, and (c) teacher capacity.

Identification Process of 2E Students

Educators can support the academic and social-emotional needs of 2E students through EBPs (Chaparro, et al., 2020). However, there is a lack of awareness and an absent 2E identification process (Josephson et al., 2018; Trail, 2021). A lack of an identification process for identifying 2E students can result in educators not providing

appropriate EBPs to support a student's disability and giftedness. A student's gifted abilities and disability have to be identified in order to receive special education services.

There are also different types of 2E students in schools, making it challenging to identify a 2E student (Josephson et al., 2018; Lee and Ritchotte, 2018). Josephson et al. (2018) noted that complications with the identification process of 2E students are due to the students' characteristics. Twice-exceptional students may be identified as gifted but not having an identified disability because their giftedness masks the student's disability. Another type of 2E student is one who has been diagnosed with a disability but not gifted because the student's disability masks their giftedness. The third type of 2E student has not been formally identified as gifted or disabled because components of the student's giftedness and disability mask each other, making characteristics of the student not readily apparent. Twice-exceptional students also tend to create compensatory coping skills making it challenging to identify a student as 2E (Anthony et al., 2021). Once 2E students have been identified, educators can acknowledge a student's exceptional abilities while simultaneously providing appropriate specialized instruction through EBPs (Josephson et al., 2018).

Teacher Preparedness

Teacher training impacts the identification and servicing of 2E students (Lee & Ritchotte, 2018). However, as the number of diverse learners in classrooms continues to increase, there is a concern that teachers are ill-prepared to meet student needs (Rowan et al., 2019). Part of why teachers lack the skills to support diverse learners is teacher

education programs (Beutel & Tangen, 2018). Educators who work with 2E students are often inadequately exposed to 2E student needs (Lee & Ritchotte, 2018).

Research suggests that teachers have little to no preparation for identifying and teaching students who are 2E (Bechard, 2019; Renzulli & Gelbar, 2020). Twice-exceptional students may exhibit identified or unidentified creative gifts and have significant learning challenges that make them eligible for special education (Anthony et al., 2021; Bechard, 2019). Teachers have challenges supporting 2E students because of inconsistencies due to a student's academic strengths and weaknesses (Renzulli & Gelbar, 2020). Renzulli & Gelbar (2020) suggested more research about 2E students, who are at risk of underachieving and failing to thrive and develop their talents.

Evidence exists that shows 2E students require access to appropriate strategies from the special education and gifted education fields. Teachers need skills to develop 2E students' strengths' and remediate areas of difficulty (Gierczyk & Hornby, 2021). Gierczyk and Hornby (2021) recommended addressing gaps on research related to academic self-concept of 2E students, gifted students with emotional and behavioral disabilities, and how school counselors can support 2E students. They further noted future research should include a wider range of teachers and parents of students with twice-exceptionality, as well as different types of school settings.

Quality training in both gifted and special education could support educators in meeting the needs of 2E students (Lee & Ritchotte, 2019). To better prepare educators to work with 2E students, "twice-exceptional training that includes knowledge, skills, and

dispositions should be integrated into personnel preparation programs and professional development (Lee & Ritchotte, 2018, p. 79).

Teacher Capacity

Schools are increasingly required to implement EBPs, but research indicates that EBPs are not consistently implemented (Brock et al., 2020; Lauderdale-Littin & Brennan, 2018; Movahedazarhouli, 2022; Stahmer et al., 2018). Brock et al. (2020) recommended multiple studies for the future which include: an observational method to assess teacher use of EBPs, a national teacher survey on intervention use, a focus on early childhood teachers and the unique challenges related to serving diverse learners, a focus on the degree to which different age groups of students are represented in the research literature, a focus on academic interventions for students with ASD, and situating research questions within a theoretical model to link theory and empirical data. Lauderdale-Littin & Brennan (2018) recommended research on ways to identify EBPs that are most effective in meeting the needs of special needs students with ASD. Movahedazarhouli (2022) recommended research that seeks to understand how literature outside of special education offers relevant insight into the effective implementation and dissemination of EBPs in early childhood special education. Stahmer et al. (2018) suggested research that uses an implementation science framework, to examine relations between system-wide (i.e., region, district, and school) factors and teachers' use of EBPs and student education outcomes.

When EBPs are implemented in schools, implementation fidelity is usually poor and a concern (Melgarejo et al., 2020). Teacher capacity can be defined as a teacher's

knowledge, instructional skills, and professional dispositions (Liu, 2022). Understanding the factors that influence the implementation of EBPs is critical to the sustained use of EBPs and the development of teacher capacity (Melgarejo et al., 2020).

EBPs in education promote student outcomes (Chaparro, et al., 2020; Kallitsoglou, 2020). Teacher capacity or professional disposition on the use of EBPs is related to the successful adoption and implementation of EBPs. Professional attitude refers to the beliefs and opinions of professionals (Kallitsoglou, 2020). An educator's professional attitude towards EBPs can significantly influence the implementation process of EBPs, as educators are vital to the delivery of educational practices (Kallitsoglou, 2020; Stahmer et al., 2018).

The use of EBPs has been identified to meet the needs of multifaceted students (Locke et al., 2019). Implementation strategies can support teachers with the methods designed to enhance EBPs implementation outcomes (Lauderdale-Littin & Brennan, 2018; Merle, 2022). Some essential features to an implementation strategy include: (a) who enacts the strategy, (b) the specific steps that need to be enacted, (c) where and to whom the strategy is delivered, (d) when the strategy is used, (e) the intensity of the strategy, (f) implementation outcome, and (g) justification for choosing the strategy (Merle, 2022).

Implications

Based on the data collection and analysis from teachers of 2E students, a qualitative project study to explore teachers' use of EBPs with 2E students was conducted to add to current literature and address a gap in practice. Lee and Ritchotte

(2019) noted that the Colorado Department of Education is the only department in the United States with customized 2E professional development. Based on the findings gathered from the teachers in this study, a professional development training was chosen as the project deliverable.

In a prior study, Gierczyk and Hornby (2021) found that 2E students can be taught effectively in inclusive education settings, as long as they can access appropriate strategies and programs from special education and gifted education. The data from this study revealed ways for improving educator success when instructing 2E students and creating organizational support and changes in teacher professional development. This study could advance the field of special education by bringing more awareness around the challenges and needed support for educators to implement EBPs for 2E students consistently.

Summary

The problem is that elementary teachers are not consistently implementing EBPs for kindergarten through fifth grade 2E students in a southeastern state. There is much research on EBPs to affect student learning outcomes; however, there is a gap in practice and little research on teachers' perspective when implementing EBPs (Georgiou et al., 2020). This basic qualitative study aimed to understand teachers' perspectives regarding the challenges with and needed support for consistently implementing EBPs for 2E students in schools. The local school district's coordinator, teacher, academic coach, instructional support specialist, assistant principal, and principal shared communication regarding the problem. Studying this problem may be useful to the local education

setting. This section addresses the local problem, rationale, definition of terms, significance of the study, (RQs), review of the literature, conceptual framework, and implications. The next section includes the qualitative methodology used to explore teachers' challenges and needed support to implement EBPs for 2E students. The methodology section is followed by the proposed project, reflection, and conclusion for this study.

Section 2: The Methodology

The purpose of this basic qualitative study was to understand teachers' perspectives regarding the challenges with and needed support for consistently implementing EBPs for 2E students in schools. Open-ended semistructured interviews were used to collect data for this study. Qualitative data were used to explore how elementary teachers are implementing EBPs and their experiences with supporting 2E students with EBPs. The study site for this research was a large school district in the southeastern United States. In Section 2, I address the research design, participants, data collection, data analysis, and limitations are addressed.

Qualitative Research Design and Approach

A basic qualitative design was used to conduct this research to understand teachers' perspectives regarding the challenges with and needed support for consistently implementing EBPs for 2E students in schools. A basic qualitative design is the most common form of qualitative research and focuses on meaning making, processes, and participants' experiences (Dames, 2019). A basic qualitative study may be viewed as generic or interpretive, but it is also investigatory to understand perceptions without generalizing (Lawrence, 2018).

Qualitative research is exploratory, and researchers use it to understand people from their frames of reference (Maher & Neale, 2019). The problem addressed in this study is that elementary teachers are not consistently implementing EBPs for kindergarten through fifth grade 2E students in a school district in a southeastern state. The research questions under investigation in this study support understanding the

personal perspectives of teachers regarding their challenges with and needed support for consistently implementing EBPs for 2E students. Mohajan (2018) noted that qualitative research is a form of social action that emphasizes the interpretation of people and their experiences to make sense of the social reality of individuals. Therefore, to understand the experiences of teachers working with 2E students and EBPs, qualitative research was used to answer questions about the what, how, or why.

For this project study, I considered multiple qualitative research designs. First, I considered a case study approach. Both case study and basic qualitative designs are used to study a phenomenon and seek to understand lived experiences. While both a basic qualitative study and a case study share many similarities, there is one significant difference. Case studies use multiple resources to establish triangulated data of participants' viewpoints. A case study may include archival records, interviews, direct observations, and other data sources to increase study validity (Janakiraman et al., 2019). For this basic qualitative study, one data collection tool was used to answer the research questions.

Ethnography was also considered, but I found the design was inappropriate for this study. The purpose of ethnography is to better understand a specific group's actions within their culture. Ethnography includes immense fieldwork where various data are collected to provide a representative snapshot of the collective values, beliefs, and behaviors of members within a culture (Hampton et al., 2019). An ethnography was not appropriate as this study aimed to understand a phenomenon, not a cultural or social group.

A phenomenological research design was the third research design I considered for this study. According to Qutoshi (2018), phenomenology is based on the interpretations and understanding of the world of human beings at a conscious level. A researcher using a phenomenology design describes the natural way of phenomena to gain insight into lived experiences (Qutoshi, 2018). A researcher using this design also “examines the structure of various types of experience ranging from perception, thought, memory, imagination, emotion, desire, and volition to bodily awareness and embodied action” (Savolainen, 2020, p. 672). This study’s topic is not related to emotion and phenomenology therefore was not the best research design.

Quantitative research was not used for this project study. In quantitative research, analysis is focused on numerical data and inferences are drawn from numbers. A hypothesis is tested against the collected numerical data (Farghaly, 2018). In this study, teachers shared their experiences. To best answer the research questions, a qualitative study design was needed. A basic qualitative design allowed for the understanding of teachers’ perspectives regarding the challenges with and needed support for consistently implementing EBPs for 2E students in schools.

Participants

Purposeful sampling allows a researcher to use judgment to select knowledgeable or experienced participants with the research questions and phenomenon being studied (Stratton, 2019). This was an appropriate strategy for this study as the participants chosen for this study needed to have knowledge and experience with teaching 2E students and using EBPs in the classroom. Purposeful sampling is a common technique in qualitative

research and allows a researcher to interview a participant who has a critical role in the study (Butler et al., 2018). There were 70 elementary schools in the local school district during the 2019–2020 school year. Within these elementary schools, 10 elementary teachers were identified who agreed to participate in the study and who met the specific criteria of having experience with teaching 2E students and using EBPs. Studies with homogeneous populations can reach data saturation within 9–17 interviews (Hennink & Kaiser, 2022).

Elementary teachers identified as meeting the criteria to participate in the study offered insight into the challenges and needed support with consistently implementing EBPs for 2E students. The teachers participated in open-ended semistructured interviews. Interviewing more teachers may have decreased the quality of information collected and may not have granted access to teachers who use EBPs with 2E students. To obtain access to participants with experience teaching 2E students with EBPs, purposeful sampling, a small number of participants, and specific criteria were used.

Once the project study was approved by the local school district's research review board and the institutional review board (IRB) and notice was provided to local principals, access to participants was granted (see Appendix B). Teachers were contacted directly via email with an invitation to participate in the study. The invitation stated that participants for this study must have taught 2E students, are aware of EBPs, and are willing to participate in the study. The university's supervising committee also approved the proposal for this study. Next, the proposal was presented and orally defended.

Once the proposal was defended and IRB approval had been granted, each teacher who agreed to be a participant received a letter to develop the researcher–participant relationship and to describe the project study. Each participant was assured of their rights and privacy for choosing to participate in the study. Participants’ names and characteristics were not included in the data. The letter also noted that participants were protected from mental and physical harm.

This study was conducted in the district where I have been an employee for more than 10 years. Being a long-term employee has made it easy to develop a researcher–participant relationship. However, being an employee in the district could have created researcher bias. Researcher bias occurs when a researcher’s expectations consciously or unconsciously influence a study. Reviewing findings with peers or having participants review results is one way to cope with researcher bias (Romano, 2020).

Data Collection

Qualitative research is used when there is limited understanding of a phenomenon, an issue is being considered from a new perspective, or if current knowledge is fragmented (Kyngäs, 2020). Clark and Vealé (2018) noted that qualitative research is used to understand aspects of social life, which results in data being reported in words or pictures rather than in numbers. Qualitative data best answered the RQs of this study. “When a qualitative approach is a better fit than quantitative for purpose and research questions and when unexpected themes emerge, qualitative research can broaden the knowledge base and even breathe new life into scholarship in a field” (Peterson, 2019, p. 148). Therefore, a qualitative research method was used to understand the

experiences and attitudes of elementary teachers regarding their challenges with and needed support for consistently implementing EBPs for 2E students in school.

Individual interviews were used to collect data to better understand teachers' challenges and support needed to implement EBPs with 2E students consistently.

Semistructured interviews were conducted and lasted approximately 45 minutes. A semistructured interview was used to allow for natural conversation that contributes to the objectivity and trustworthiness of the study (Mahat-Shamir et al., 2021).

Semistructured interviews offer a loose structure of open questions that allow the interviewer or interviewee to pursue an idea in more detail (Hoffmann, 2021). Interview questions were created to answer the research questions (see Appendix C).

Interviewing is a standard method for gathering qualitative data. Interview protocol and audio recordings were used to gather data. Interviews give the participant a voice, allowing participants to express their perspectives in their own words, reducing the chance that a researcher will impose their perspective on the topic (Thelwall & Nevill, 2021). In-depth interviews cover one or two issues, but with great details that provide deep insight into an issue (Hoffmann, 2021).

Structured interviews were not used for this study. In structured interviews, an interviewer follows scripted questions in a particular sequence. The interviewee chooses their response to questions from a range of fixed options coded quantitatively. The data are often analyzed via a deductive analysis for hypothesis testing (Roulston, 2021).

Structured interviews were not appropriate for data collection in this study. The

flexibility in questioning offered in semistructured interviews was needed to answer the RQs in this study.

The teachers who met the criteria for this study and volunteered to participate in the study were contacted via email (see Appendix D). In the email, I introduced myself as the researcher and introduced the purpose of the study. I provided a consent form with the participants' rights and safeguards and role. Once participants' consent forms were signed and received, I contacted participants to schedule individual interviews. Interviews were conducted via phone.

I am an educator with more than 10 years of experience in education, and the participants were educators in my local school district. My prior work experience in the local school district aided in positive researcher–participant relationships. As the researcher, my role includes being the reporter, interviewer, and analyzer. I avoided leading questions and used questions that eliminated the potential for researcher bias. Interviews were recorded, transcribed, and coded. Google Drive and electronic systems such as Audext, Microsoft Word, and Microsoft Excel were used to keep track of data and emerging understandings. Audext, an audio to text software, was used to record and transcribe interviews. An Excel spreadsheet was used to log transcriptions. Data analysis took place after data had been logged.

Data Analysis

To gain a comprehensive view of teacher perspectives regarding the implementation of EBPs with 2E students, a qualitative analysis of data collected from open-ended semistructured teacher interviews was conducted using open coding and

thematic analysis. According to Chauvette et al. (2019), qualitative data can capture participants' lived experiences through words from interviews. After each teacher interview, transcriptions were entered into an Excel spreadsheet. The Excel spreadsheet included tabs across the bottom that correlated with each interview question asked of participants. Each sheet had rows labeled as Teacher 1 to Teacher 10. Additionally, across the top of each sheet there were columns labeled RQ, transcription, 1st cycle descriptive, 1st cycle concept, and 2nd cycle patterns and themes. An additional demographic tab was added to the bottom of the Excel spreadsheet to include the participants' number of teaching years and their highest degree earned.

Member checking took place after transcribing to ensure accuracy and credibility. Member checking is part of creating validity and trustworthiness in qualitative research and aids in addressing discrepant cases in the data analysis process (Candela, 2019). The member checking process required each participant to examine transcriptions from the interview to ensure the data were accurate and resonated with their experiences. Participants' transcripts were returned to them via email. Participants were provided with an agreed upon period to respond to their comments from the interviews and confirm accuracy.

To ensure data saturation, adequate time for each interview transcription and coding was given. Saturation occurs when no new data relevant to the study are found or additional data do not lead to new emergent themes. Saturation is linked to content validity and assurance that further data collection would yield similar results, thus confirming current themes and conclusions (Saunders et al., 2018). Hennink and Kaiser

(2022) found that studies reach saturation within a narrow range of nine and 17 in-depth interviews. Positionality refers to a researcher's position within a study, which can influence how research is conducted and the researcher's outcomes and results (Holmes, 2020). To avoid researcher bias, I maintained active awareness of my position in the district I recoded interviews, and I used member checking. Coding took place after interviews were transcribed, member checked, and logged. Coding is a process in qualitative research that provides an organized platform for data to be assembled, categorized and thematically sorted to serve the purpose of a study (Williams & Moser, 2019). The data went through multiple cycles of analysis.

Descriptive coding was the first cycle of analysis. During this cycle, data were summarized (in a word or phrase) using nouns to code according to the topic (Adu, 2019). Second, a concept cycle of coding was completed. Concept coding allows for interpretations and identifying relationships (Williams & Moser, 2019). The third analysis cycle was coding for patterns and themes with each RQ and participant. A theme in coding constructs meaning from findings and categorization and is expressed in longer phrases or sentences (Williams & Moser, 2019). Color coding was used in the Excel spreadsheet to organize patterns and themes. The process of coding should provide answers to the RQs. Using descriptive coding, concept coding, pattern coding, and analysis allowed for a deeper understanding of teachers' challenges and support needed to consistently implement EBPs for 2E students. Lastly, an analysis of the data took place. Data were assembled or reconstructed in a meaningful manner that was transparent, thorough, and aligned to participants' accounts. The themes generated from

coding categories or subcategories were reviewed. Labeling themes allows for exemplars or compelling examples to be identified that provide evidence of the theme and relate to the research question (Scharp & Sanders, 2019).

Limitations

This research may be limited as the study focuses on elementary school teachers. The findings may not be generalizable to middle and high school teachers, or other elementary teachers beyond those who participate in the study. Though data were collected from multiple elementary schools, another possible limitation to this study was that data may not be representative of schools from every region in the local school district. The triangulation of data across the school districts' regions may not be allowed due to limited data. Another possible limitation to this study was researcher bias due to my role at the research site. As a previous special education teacher and current multi-tiered system of support specialist, there was potential for bias. However, every effort to eliminate bias was taken. Maintaining an objective stance on the topic was evident through audio recording interviews and member checking.

Data Analysis Results

The problem that prompted this basic qualitative study is that elementary school teachers are not consistently implementing EBPs for kindergarten through fifth grade 2E students. The purpose of this qualitative study was to understand teachers' perspectives regarding the challenges and needed support with consistently implementing EBPs for 2E students. Teachers who met purposeful sampling criteria of having knowledge and experience with teaching 2E students and using EBPs were invited to participate in the

study. These teachers worked in elementary schools and had experience with implementing EBPs with 2E students within the local school district. Teachers from fifteen elementary schools were invited to participate. Of the fifteen schools contacted, ten teachers from five elementary schools agreed to participate in this research project.

The following RQs guided this basic qualitative study:

RQ1: What are elementary teachers' perspectives regarding the challenges of consistently implementing EBPs for 2E students in schools?

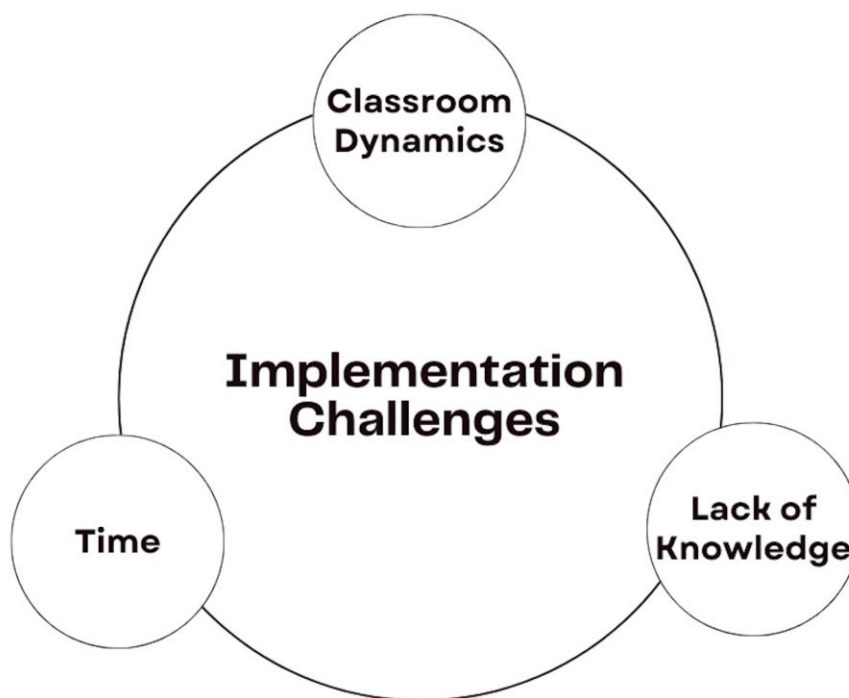
RQ2: What are elementary teachers' perspectives regarding the needed support for consistent implementation of EBPs for 2E students in schools?

Open-ended semistructured interviews produced data that were used to answer the RQs. Participants had the choice to participate in the interviews via Zoom or phone. Participants chose to interview through a recorded conference call. Rev Call Recorder was used to record the conference calls. Audext, an audio to text software was used to transcribe interviews. Once the transcribed interview was exported into a Word document using Audext, I listened to each interview again to ensure accuracy and amend transcriptions as needed. Then, in 72 hours or less, I emailed participants a copy of their transcribed interview for member checking. After each participant confirmed the accuracy of interview transcripts, I pasted the transcriptions into the corresponding sections of the Excel spreadsheet that answered the interview question. Next, participant responses were coded. Then participants were contacted to hear initial coding results and interpretations from the transcriptions. This allowed participants to share any feedback.

Ten open-ended semistructured interviews produced the findings for this study. Of the eleven questions in the interview protocol (Appendix D), questions three, eight, and nine were designed to answer RQ1: What are elementary teachers' perspectives regarding the challenges of consistently implementing EBPs for 2E students in schools? Three themes appeared during this research (see Figure 1).

Figure 1

Themes for Implementation Challenges



Theme 1: Time

During the data analysis, time was a theme that surfaced. Approximately half of the participants mentioned that a lack of time made it challenging to implement EBPs with 2E learners. Teacher 2 said that it takes much time to implement EBPs, and since

teachers are limited on time, 2E students do not always get everything they need. Teacher 2 communicated that she often only has the time to touch on one part of the student's needs. If a student is gifted and autistic, she works on the autistic exceptionality rather than incorporating EBPs to address the student's giftedness or both exceptionalities. Teacher 1 shared that having the time to provide support and be there for the students is always a challenge. Teacher 1 explained, "It's better though when you have a co-teacher, or you have support in the classroom, but I was just thinking of it as one person, you know, providing support, make sure you have time." Teacher 8 shared, "I would say time, time makes it challenging." She shared that it takes time to implement strategies and techniques needed to help 2E students. Teacher 10 said that as a specialist teacher, it takes a lot of time to implement EBPs for 2E students as she teaches hundreds of children a day.

Theme 2: Classroom Dynamics

The second theme of classroom dynamics emerged during the interviews. Participants noted that it was challenging to implement EBPs for 2E students because each classroom has different dynamics due to different student strengths and needs. Eight of ten participants communicated the challenge of accommodating students' individual needs. Teacher 9 shared,

I know one thing that makes it challenging and I'm trying to make this specific to twice-exceptional learners is sometimes what the twice-exceptional learner might need or might be ready for may not align with a certain school or district pacing guide. So sometimes, the teacher may notice that a student might be ready for X,

Y, and Z. However, it might be off of course of the pacing guide. So I think that might be a challenge in how do I stick within this framework of what I'm expected to teach when I've noticed this student is beyond that and ready for something more.

Teacher 6 responded,

Well, since every student is different and since they have different needs, I feel like it can be tricky to find the right strategy or the right practice or the right method for each student, you know, because things might work one day and then the next, they might not work.

Teacher 5 explained, "You think of a kid who is in gifted, and you think that they're good at everything, right? And then you're given this kid who is really gifted in math, but they can't read." Teacher 5 shared that you have to get in the mindset that the student is not gifted across the board and you have to make adjustments when you are teaching 2E students. She also stated, "You have so many different levels, and that becomes a challenge in itself, and you're trying to differentiate, right, for all the kids, so I think it's just, it's a lot of work."

Teacher 7 communicated,

The needs change so frequently. The students grow and learn. Something that may have been a challenge one year may not be a challenge again, and something that they have excelled in they may kind of plateau, and you have to be able to basically meet that student where they are and still provide for them.

Teacher 4 shared,

You think you kind of figured it out like you know something that is working with him, and it might work for like a week or two, and then that doesn't work for them anymore. Oh, that's another thing, and then trying to, you know, follow the IEP, along with implementing a whole lesson that's tailored to them, but also tailored to the rest of the classroom at the same time. Their IEPs are changing so consistently. It is a lot changing up the way you teach them. So that is a struggle sometimes, feeling like you've gotten somewhere with them, and it's not working anymore.

Teacher 2 expressed that it is challenging to focus on both of a student's exceptionalities. Teacher 3 shared that addressing her 2E student's strengths was never a problem but addressing student weaknesses was challenging. She had to prioritize the student's weaknesses by looking at what would make the most significant impact on the student moving forward. Teacher 1 communicated that it is the students and the dynamics of the classroom and being able to make sure all student needs are met.

Theme 3: Lack of Knowledge

A third theme that materialized from the participant interviews was a lack of knowledge. The participants shared that having a lack of knowledge or expertise on 2E students makes it challenging to implement EBPs and best serve this unique population.

Teacher 3 stated, "I try not to get too bogged down or get the 2Es confused. We found ourselves sometimes trying to figure out which was more important." She further expressed that 2E is not discussed enough. Teacher 3 elaborated, "I don't think it's

something that's seen often enough that people understand it enough." Teacher 8 explained that not fully understanding their disability makes it challenging to implement EBPs. Teacher 9 stated,

It's just an overall lack of general understanding. It's easy to classify a student as gifted. It's easy to classify a student as being autistic. It's easy to classify a student as having maybe a learning disability, but when you're starting to cross intersect these labels, you know, I don't, maybe educators, maybe it's kind of new in education. Maybe it's, you know, there hasn't been as much research done. Maybe, educators, educators are still trying to figure out how to cross these paths to meet two different sets of needs within one student."

Teacher 1 shared that it's important not to assume that just because a teacher has a degree or many years of teaching that the teacher is equipped to support 2E learners.

Teacher 9 elaborated on her college courses in undergraduate school, and she expressed that she took special education courses, but 2E was not a topic discussed. Similarly, Teacher 5 shared that she had never heard about 2E in school. She further expressed that it would be helpful to have someone in the school building which was knowledgeable about 2E.

Teachers shared that they have to do their research to learn which practices best support 2E students. Teacher 5 shared, "I absolutely have to do my own research for twice-exceptional learners." Teacher 2 noted that she has to research things online through educational sites to support her with EBPs for 2E students. She further expressed,

I guess that they need to understand that students can be twice-exceptional.

Number one, because that's really important because I think a lot of times they don't even understand that a child who has autism or down syndrome or anything like that can actually be gifted too. So I think number one, they need to understand that, you know, children do exist that you know, have more than one type of learning and sometimes they're high and low and sometimes they're both. I think it's important that they just know it, and I think it's important to get the support that they need if they never taught a child that is twice exceptional. But just basically education on how to work with these children so that they get all the services they need, not, you know, for autism or not just for gifted either, but normally it's, you know, they would get served for autism or something like that rather than gifted. So just knowing that these children exist and that they need to know how and where to look for evidence-based practices to help them.

Teacher 4 stated, "I Google a lot." Teacher 6 shared, "I look online for articles that are, of course .gov or .org." Teacher 7 expressed, "Over the years, I've been able to look up different articles that have information that I can use or pull from and have different strategies that have been used for twice-exceptional students."

Teacher 6 expounded,

I mean, I definitely don't hear the district talking about twice-exceptional very often. I also think a lot of people don't know what that means. As a special education teacher, I do know, but I think the general ed teachers don't know what that stands for, what it means. So I think overall, I mean, I've heard of it from

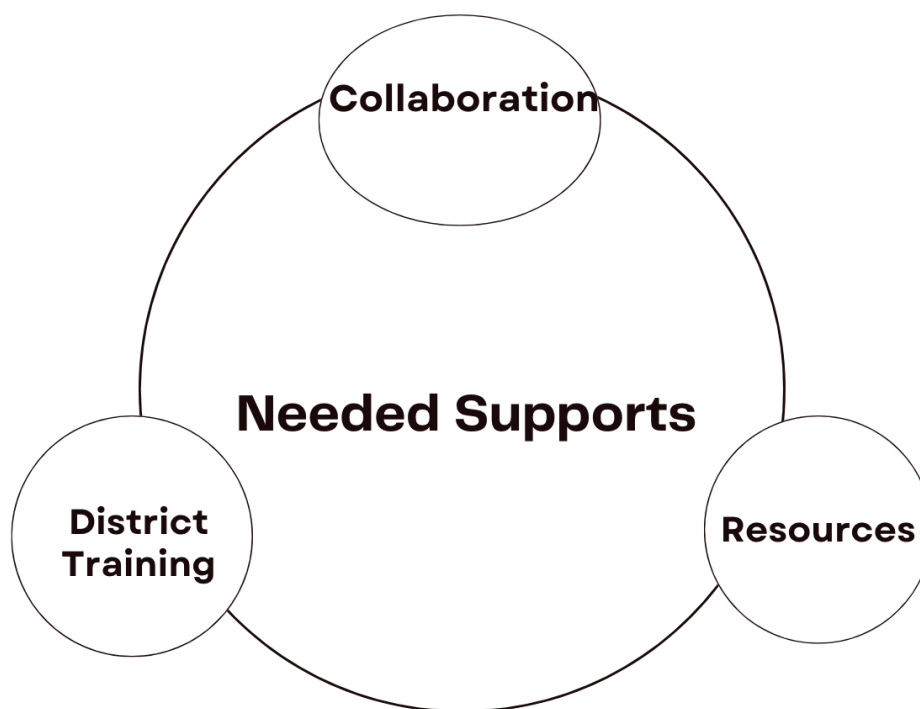
college like I started, you know, learning in college, but I just, I feel like maybe the district has talked about in a professional development video, but they don't dive into it. But to be honest, I don't recall anything, but I'm just assuming because, you know, some people do know what it is, but not every teacher does.

When teachers were asked if they were receiving the support they needed to support 2E learners, Teacher 5 explained that she is not receiving the support she needs, and she thinks it is because you do not hear about 2E within the local school district. Teacher 7 stated, "I think information needs to be readily available, and consistent, and it needs to be more of a norm."

Needed Supports

Of the 11 questions in the interview protocol (Appendix D), questions 7, 10, and 11 were designed to answer RQ 2- What are elementary teachers' perspectives regarding the needed support for consistent implementation of EBPs for 2E students in schools?

The following themes emerged during data analysis: district training, teacher collaboration, and resources (see Figure 2).

Figure 2*Themes for Needed Supports***Theme 1: District Training**

District training was a theme that materialized from the research. Throughout the interviews, most participants conveyed their belief that district training on supporting 2E students with EBPs was needed. Many participants learned about 2E after completing the district's gifted endorsement program. However, the district gifted endorsement program is not a required professional training; it is voluntary. Teacher 1 explained that her local school district does not offer specific 2E related training to schools. She stated, "The only time I have learned is from the gifted classes about um twice-exceptional. And it's just from, and it's also a lot of self-learning through experience with my own classes and my students." She then explained that the only teachers who would take the gifted classes

were those pursuing gifted certification. Teacher 2 explained that sometimes the district has exceptional education training and does not hone in on 2E students. She also shared that she became gifted certified through the local school district's gifted endorsement program, but the certification is not required.

Teacher 4 received her gifted endorsement from another school district. She expressed that she is unaware of any 2E training or professional learning offered by her current school district. Teachers 3 and 5 received their gifted endorsement from the local school district and were unaware of whether their school district offered 2E professional learning. Teachers 7, 8, and 9 explained that they had no district-level professional learning or training outside of the gifted endorsement program. The teachers noted that the gifted program is voluntary. Teacher 8 elaborated on her experiences with the gifted endorsement program and shared,

When I took that gifted class, it was more at the beginning of the gifted endorsement. So not a lot of individuals were aware of 2E exceptional kids. So that class was the first introduction for me that identified 2E students. So it made me more aware of the students, and what separated them or made them, I wouldn't say different, but what separated them from our general ed students and seeing all the different steps or seeing all the traits of a gifted child even though they may have an IEP."

Teacher 8 expressed professional learning on 2E students is needed to consistently implement EBPs. Teacher 6 stated, "So definitely more professional

development courses or learning. Anything that the district can provide us to get you know updated and learn new evidence-based practices.” Teacher 9 explained,

Honestly, I think teachers would benefit from having ongoing professional development and professional training instead of just a one time, you know, one time course or here’s a hand out, a front back sheet of paper that gives you pointers and tips for what to do. So, ongoing training, I think it would be beneficial because, you know, there’s always new trends and things in education.

Teacher 9 expressed that 2E is a topic within one of the district’s gifted endorsement courses, maybe one to two weeks of discussion. Teacher 9 stated,

Out of all of the topics that were covered in the gifted endorsement, the twice-exceptional was the one that was I felt most beneficial to me because in 20 years of teaching everything, all of my training and PD, very little had ever, you know, attention been given to that topic. So for me, that was the week worth of information that I thought I gained the most from.

Teacher 10 shared that once you volunteer to take the gifted endorsement program, that’s the only time you learn about 2E learners.

Theme 2: Collaboration

A second theme that appeared in the research was collaboration. The participants often talked about needing to be able to collaborate with other educational professionals to serve 2E students better. They shared that often there may be a general education teacher, special education teacher, and gifted teacher supporting a student. Collaboration

amongst all the professionals who support the student would be helpful in the implementation of EBPs for 2E students. Teacher 1 explained,

In my situation, it was you know, a special ed teacher and a gifted teacher, and then me and the three of us never sat down together, you know. But I would meet with the gifted teacher and I would meet with the special ed teacher, but then to my knowledge, I mean maybe outside of me the special ed and gifted teacher, but I doubt it. And so that, to me was the communication piece of getting all of us on the same page and making sure that you know, then we all saw the same, that we were all meeting his needs, you know, that we all were discussing it and seeing the same things.

Teacher 4 said she was looking forward to having a new staff member this year who would support diverse learners. She shared her thoughts on being able to collaborate with the new staff member and stated, “So it gives this sounding board of they might see something with the students, they might do something with the students that I haven’t thought about um, or I might do something that, you know, they hadn’t thought about.” Teacher 6 expressed that collaborating with other teachers could provide her with EBPs that have worked for her colleagues.

Teacher 6 continued,

Just asking teachers, so maybe like collaboration with teachers to see some things. I know no kid is the same, kids are all different, but strategies can be similar. So asking teachers who are who might have had more experience with twice-exceptional students or something that has worked for them in the past.

Teacher 7 expounded,

Definitely, collaborating with team members, anyone else who services, any building psychologists, any LTSEs, anyone else who comes in contact with that student and helps in their education process. I need to know what their knowing, you know. I need to know what they know so that I am investing and I'm best informed to help that student.

Teacher 2 expressed how collaboration is one tool she would use to draw upon or engage in informed instructional practices and decision-making when using EBPs with 2E learners. Teacher 2 stated,

Um, well, well, basically talking. The first place I would go to would be my team. Like if I was, you know, working in a school with a child and I wasn't sure what I needed, I would talk to a team member or someone at school who had dealt with a student that you know was like the one that I had. And then sometimes I just talk to the parents to figure out what they do at home, what they think their child would like or learn better and kind of base some stuff on that too.

Teacher 4 also shared how collaboration between parents and students is needed to support 2E learners. She stated,

I think the MTSS process is huge when it comes to involving parents. And that's like I know a lot of times, you know, in meetings with parents. They'll say like they see their child doing this at home, but we don't see it at school, or we see something at school that they don't see at home. And I think having that open revolving door and, you know, really having a close connection to those parents.

It's gonna help the students in the long run. I think that the students also need to be aware of their ability and what we as educators are trying to help them get to, and how you know what opportunities they have through the school district through the school. Personally, understanding, I think they need to understand what their abilities are and know what their deficits are in the same you know regard so they understand what they're working towards, and it's not just why am I receiving this extra help? Or why is this you know I feel like this is happening to me more than the other kids. I feel like a lot of kids just aren't aware all the time of their exceptionality.

Teacher 9 shared,

Your colleagues, other teachers as resources are very helpful. They may have had experiences that might be first time for me as an educator. So tapping into what strategies and practices they've used is also helpful a lot of times in teaching.

Teacher 1 also explained how collaboration is needed to support for consistent implementation of EBPs with diverse learners. She stated,

If teachers can come together and discuss what do you use and everybody shares ideas, there might be some ways that one teacher uses that someone else may not know about. So I guess collaboration among teachers to show what or how they have used evidence-based practices in their classrooms and even across grade levels that you can basically learn from each other.

Teacher 10 expounded on using collaboration to address a student's strengths and weaknesses, "So maybe having conversations or being able to have conversations with

previous teachers or even if teachers are able to write narratives about the students that they kind of passed on to the future teacher.”

Theme 3: Resources

Having resources to consistently implement EBPs with 2E students was a third theme that emerged from the research. According to Teacher 1, the local school district should ensure teachers have resources to implement EBPs with 2E learners. She further stated,

“Make sure that whatever the school, you know the resources are different from school to school, to make sure that teachers are aware of what resources are there and how to use them.” Teacher 3 expressed how there are no resources readily available to support diverse learners and that she has to gather her resources. Teacher 6 mentioned that it would be helpful for the district to provide resources on EBPs. She mentioned, “Just being able to understand and know where to find and making sure it’s a reliable resource.”

Teacher 7 shared that she is not aware of any resources for general education teachers to support 2E learners. She explained,

I feel like we get resources and information for our general ed students all the time, but we’re not getting as much information on students that again if I’m not designated as a special education exclusively a special education teacher, those resources of that nature are not always readily available, and they should, I think that they should be.

Teacher 10 expressed the need for an easy-to-use platform to monitor the effectiveness of EBPs. Teacher 8 stated, “Technology would be good to support students and more manpower to support students.” Teacher 2 expressed that more resources are needed to implement EBPs.

Teacher 5 expressed some frustration with implementing EBPs and having resources to ensure she is implementing the practice with fidelity. She stated,

Well, you need to be very familiar with the evidence-based practices, right? This is something that always drives me crazy, like I’m told what to do, but a lot of times I would like to see it. Like, see someone doing it. You know what I mean. A model, right? It’s like, you know, like you need to do the lesson plans this way.

Well then, just show me exactly what you want me to do because I can follow directions, you know what I mean? But you just tell me, oh just do this, no I think you know I need to see it happening. That’s what I think, and then if I see it, you know, I can do it.

Similarly, Teacher 9 expressed the need for a resource to ensure EBPs are being implemented correctly. She stated,

The first thing you want to be able to do in order to effectively implement them is to make sure you have a solid understanding of those strategies. You want to make sure that you’re using or presenting the strategies in the right way. You want to do it with fidelity.

Teacher 8 expressed a need for resources on EBPs. She explained,

First, resources to understand what evidence-based practices are, that’s one, and

then to actually implement it into the classroom, make it part of their lesson. So it shouldn't be something that's separate. It should be part of the lesson. It should be ingrained into their lessons, so whatever their opening is, that practice should be part of the opening, it should be part of the work period, it should be part of the closing, it should be part of the instruction.

Salient Data and Discrepant Cases

I reviewed the transcription data multiple times to ensure emerging themes were presented in the findings. After the data analysis, no discrepant cases were found. There were times when a theme was not mentioned by each participant. However, there were no inconsistencies in the themes that emerged in the research findings. The participants conducted a member check by reviewing a typed interview transcript to ensure accuracy and make corrections if needed. Member checking aids in addressing discrepant cases in the data analysis process (Candela, 2019). The participants also spoke to the researcher to hear initial coding and interpretations from the transcripts. This process of gathering data assisted in ensuring valid and trustworthy findings.

Evidence of Quality

Repeated efforts were made to ensure that the data collected were reported accurately. Before beginning research, I received IRB approval. In addition to receiving IRB approval, I completed the local school district's research review board application process, which granted permission to conduct research within the local school district's teachers (Appendix B). After receiving IRB and research review board approval, emails

were sent to possible participants based on the purposeful sampling criteria. I sent email correspondence introducing myself and the purpose of the study (Appendix D).

Efforts were made to maintain a positive researcher-participant relationship. As the interviewer, leading questions were avoided. To eliminate researcher bias, I did not contact participants from my current school even though they met the purposeful sampling criteria. I remained open to all findings and participants were coded as Teacher 1 through Teacher 10 (see Table 1).

Table 1

Participant Demographics

	Degree	Teaching experience
Teacher 1	Master's in education	20 years or more
Teacher 2	Bachelor's in education	8–13 years
Teacher 3	Specialist of education	14–19 years
Teacher 4	Master's in education	8–13 years
Teacher 5	Bachelor's in education	20 years or more
Teacher 6	Master's in education	8–13 years
Teacher 7	Master's in education	14–19 years
Teacher 8	Master's in education	20 years or more
Teacher 9	Doctor of education	20 years or more
Teacher 10	Doctor of education	14–19 years

The data collected will continue to be stored and secured on my personal laptop, which I only have the password to access. There is also a screen lock which requires re-

entering the password after the device is idle for two minutes. Data will be kept for the next five years as required by the university. Rev Call Recorder was used to conduct and record the open-ended semistructured phone interviews. The recorded interviews were uploaded and transcribed through Audext. Within three days or less of the interviews, the participants were emailed a copy of their interview transcript for member checking. Any feedback received from the participants was applied, then the transcription for each interview question was copied into an Excel document for coding. Data collected went through three cycles of coding: descriptive, concept, and patterns and themes. To ensure accuracy, trustworthiness, and validity, data were analyzed many times.

Limitations

Research from this study may be limited as the study was only conducted with elementary school teachers. The findings may not be generalizable to middle and high school levels. Another limitation of this study was that these data only represent one region within the local school district. There was no triangulation of data due to limited data collection. Researcher bias was another possible limitation of this study. As a former special education teacher, gifted liaison, and current Multi-Tiered System of Supports specialist, there was potential for bias. Nevertheless, efforts were made to remain objective and eliminate researcher bias.

Summary

The purpose of this basic qualitative study was to understand teachers' perspectives regarding the challenges and needed support with consistently implementing EBPs for 2E students. Through this basic qualitative design, an exploration of teachers'

challenges and needed support was conducted. Using the UDL as the conceptual framework for this basic qualitative study aided in understanding teachers' implementation of EBPs to support the learning of 2E students. Qualitative data were gathered through open-ended semistructured interviews of elementary school teachers with experience implementing EBPs with 2E students within the local school district. Interviews were transcribed and coded. This research design supplied data that informed the RQs for this project study.

According to the findings of this study, time, classroom dynamics, and lack of knowledge were the themes that emerged guided by RQ 1. When analyzing results for RQ 2, district training, teacher collaboration, and resources emerged as themes. Based on the project findings, professional development was used for the project deliverable. In section 3 of this project study, the project rationale, literature review, description, evaluation plan, and implications are discussed.

Section 3: The Project

Introduction

In this basic qualitative study, I explored teachers' perspectives regarding the challenges with and needed support for consistently implementing EBPs for 2E students. The data and current literature align with the professional development project deliverable. As the project deliverable, I created a 3-day professional learning regarding 2E learners. The project components include (a) purpose, goals, learning outcomes, and target audience; (b) outline, timeline, trainer notes, and module formats; (c) materials, implementation plan, and evaluation plan; and (d) hour-by-hour detail of 3-day training. The project deliverable aimed to acquaint educators and specialists with the characteristics of 2E students and supports to serve this student population.

Rationale

In Section 2, I discussed the findings from this basic qualitative study, which were the determining factor in choosing a professional development project deliverable. Through the research, teachers' challenges and needed support to implement EBPs with 2E students emerged. Due to the findings showing a lack of knowledge and a need for resources and training, I designed this professional development to provide teachers with knowledge and tools to support 2E learners in the classroom.

This deliverable was appropriate for the project because professional development at the local level is needed to increase educators' capacity to meet the strengths and weaknesses of 2E learners. Working with 2E learners requires specialized training as well as ongoing professional development. Professional development is needed as 2E learners

are more likely to spend their instructional time in the general education setting, and general education teachers need to understand how to serve these students (Lee & Ritchotte, 2019). To build teacher capacity, this professional development can support educators in meeting the needs of 2E students.

Review of the Literature

In Section 1, I discussed my conceptual framework, Rose and Meyers' UDL, EBPs, and factors that impede teachers' use of EBP. Analysis of the data collected in this study indicated multiple themes. For RQ1, three themes emerged: (a) time, (b) classroom dynamics, and (c) lack of knowledge. For RQ2, three additional themes emerged: (a) district training, (b) collaboration, and (c) resources. To address the findings of the study and develop an appropriate project deliverable, I conducted a second literature review.

The literature review indicated that professional development would be an appropriate project deliverable for this study. Elementary school teachers at the local school district are not consistently implementing EBPs for kindergarten through fifth-grade 2E students, which is creating a gap in practice. Teachers are often unable to use EBPs to support 2E learners consistently. If teachers are to aid 2E students' diverse needs, they must become knowledgeable in identifying and supporting their strengths and weaknesses (Ronksley-Pavia, 2020; Reis & Renzulli, 2021). Professional development at the local school district is needed to grow teachers' capacity for supporting 2E students.

A review of the literature was conducted to validate the project content. The following databases were used in the literature review: Google Scholar, ProQuest, SAGE, Educational Resources Information Center (ERIC), and EBSCO Discovery Service. This

literature review is organized into professional development, time, classroom dynamics, lack of knowledge, district training, collaboration, and resources. Key search terms were professional learning, professional development, lack of time for educators, educator responsibilities, diverse classrooms, lack of 2E knowledge, school training, collaboration, professional learning communities, collaborative inquiry, 2E best practices, and 2E resources.

Professional Development

Professional development is imperative in improving student outcomes. Professional development can be described as processes and activities delivered to improve teachers' professional knowledge, skills, and attitudes to enhance students' learning (Parkhouse et al., 2019; Sancar et al., 2021). Professional development is part of lifelong learning and is influenced by social constructivist and inquiry-based approaches (Sancar et al., 2021). To provide effective professional development, a facilitator must first understand the process by which teachers grow professionally and the conditions that support and promote that growth (Bragg et al., 2021; Sancar et al., 2021).

The following levels are used to measure the effectiveness of teacher professional development: (a) teacher acceptance, (b) teacher satisfaction, (c) teacher learning, (d) teacher classroom practice, and (e) student learning (Bragg et al., 2021; Kalinowski et al., 2019). Teacher acceptance relates to a teacher's ability to understand and construct meaning related to the ideas and approaches they encounter in professional development activities (Kalinowski et al., 2019; McChesney & Aldridge, 2021). According to Wasserman and Migdal (2019), the success of some professional development depends

on the teacher acceptance. Teachers are more accepting of professional learning that has immediate relevance to their job or problem (Ajani, 2019; Wasserman & Migdal, 2019).

Bragg et al. (2021) noted peer-to-peer discussion contributes to teacher satisfaction. Professional development that provides activities that include peer-to-peer discussion and that fosters participant interactions contributes to participant satisfaction. Collaboration and communication increase teacher knowledge, skills, and goal making (Bragg et al., 2021; Sancar et al., 2021). Structured activities, space, and time are necessary for teachers to communicate and share their experiences (Sancar et al., 2021).

Teacher learning includes changes in educators' professional knowledge, attitudes, and beliefs (Kalinowski et al., 2019; Vermunt et al., 2019). Teacher knowledge can be changed through cognitive, affective, regulative, and social learning activities. Activities may require participants to interact with colleagues, tackle challenging or new tasks, and reflect on or evaluate their work experiences (Vermunt et al., 2019). Three learning patterns that may result from professional development are application-oriented patterns, meaning-oriented patterns, and problematic learning patterns. Application-oriented learning patterns relate to when teachers want to apply new ideas in their teaching and experiment with new practices but stay within the boundaries of their existing theory of practice. Meaning-oriented learning is when teachers want to know why things work, look for reasons behind new practices, and try to extend their understanding of their practices. Problematic learning patterns are when teachers struggle with educational innovation and have negative emotions or avoid learning about the innovation (Amador et al., 2021; Endedijk et al., 2020; Vermunt et al., 2019).

A facilitator should emphasize what the participants will practice within the professional development design. Teacher practice allows participants to apply the skills they are learning or lacking (Bragg et al., 2021). Learning may not be meaningful for teachers without the opportunity to practice newly taught skills. Teachers need opportunities to receive feedback on the implementation of new knowledge in the classroom, along with periods of reflection on the new practices. Real-world application of acquired knowledge and skills through sharing and modeling creates more effective professional development (Bragg et al., 2021; Kalinowski et al., 2019; Vermunt et al., 2019).

Professional learning can positively impact student learning. Student learning is the acquisition of knowledge and skills by students. Professional development that leads to an increase in teacher knowledge and a change in teachers' beliefs can lead to a change in instructional practices. Changes in instructional practices to better serve students can improve student learning and achievement (Kalinowski et al., 2019; Sancar et al., 2021; Vermunt et al., 2019).

Time

Meeting the needs of diverse learners is a time-consuming task (Brigandi et al., 2019; Johnson & Kaul, 2019; Mofield, 2020; Winebrenner, 2020). High-quality inclusion classrooms not only engage students and foster interaction but address students' cognitive and social-emotional strengths and challenges. Students with special needs require access to quality educational programs with proper and appropriate support and interactions (Hashimoto, 2019). Many educators believe that supporting 2E students' strengths and

challenges is highly challenging, often hindered by time limitations (Brigandi et al., 2019; Johnson & Kaul, 2019; Mofield, 2020; Verlie et al., 2021).

Johnsen and Kaul (2019) and Mofield (2020) found time constraints to be a barrier to supporting diverse learners. Coteaching in differentiated classrooms has positively affected 2E student engagement and interest levels (Mofield, 2020; Strogilos & King-Sears, 2019). However, many educators report not having enough time to meet and collaborate because of individualized educational plan meetings, faculty meetings, and data meetings. The lack of time for intentional lesson planning and collaboration often hinders educators from meeting student needs (Johnsen & Kaul, 2019; Mofield, 2020). Educators have reported that special education teacher planning time does not always coincide with general education teacher planning time (Mofield, 2020). Administrative support is needed to address the need for sufficient planning time among general education and special education teachers (Johnsen & Kaul, 2019; Mofield, 2020). Structured time to plan and communicate must be built into the local school's schedule (Mofield, 2020).

Brigandi et al. (2019) and Johnsen and Kaul (2019) found that teachers need time to implement differentiation, such as above-level curriculum, assessments, and other materials for personalizing instruction. Educators are more likely to implement differentiation practices in schools where the administration team provides time to plan and gather resources. When there is a lack of time, teachers express the absence of tiered or differentiated assignments (Brigandi et al., 2019; Johnsen & Kaul, 2019). Johnsen and Kaul (2019) noted that much of an educator's time is dedicated to supporting students

who are performing below grade level. Many teachers believe they have no time for students performing on and above grade level. Moreover, many interventions being delivered in the classroom are geared toward lower-performing students (Johnsen & Kaul, 2019). Teacher planning does not allow instructors ample time to differentiate for all core content areas, resulting in a lack of enrichment or advanced academic material and student engagement (Brigandi et al., 2019; Johnsen & Kaul, 2019).

Classroom Dynamics

Classroom dynamics are interactions or behaviors between students and teachers. These dynamics include teachers' ways of presenting educational materials, students' interactions with teachers, and students' interactions with other students (Licorish & Lötter, 2022). Many classrooms have different dynamics due to different student strengths and needs.

The dynamic interaction between a teacher and a group of students is fundamental to classroom learning and can affect academic achievement (Abacioglu et al., 2019; Bevilacqua et al., 2019; Farmer et al., 2019). Teaching and learning are joint actions between the teachers and students. The partnership between teacher and student is treated as stimuli in a reciprocal exchange (Bevilacqua et al., 2019). Diverse or 2E learners bring their learning and personal characteristics to the classroom (Celik, 2019). According to Celik (2019), diverse students influence the classroom atmosphere, time management, teaching content, and educator teaching style. Multiple instructional or differentiated methods should be applied to meet all learners' needs and improve their strengths (Celik, 2019; Foley-Nipcon & Teriba, 2022). When all students are engaged in the learning

environment and instructional methods are adapted to suit learners, teachers establish an inclusive classroom environment regardless of classroom dynamics (Celik, 2019; Minott, 2019).

Classroom social integration among teachers, students, and their peers strongly influence motivation, learning, and student success (Abacioglu et al., 2019; Farmer et al., 2019). Students can benefit from social interactions with peers who are different in multiple ways (Farmer et al., 2019). Farmer et al. (2019) noted that teachers need strategies to leverage positive peer dynamics and promote an engaged classroom climate for all students. Classrooms with a diverse range of student characteristics and instructional needs require teacher strategies that support the involvement and adjustment of all students. Educators are positioned to support the social adaptation of diverse learners but require an understanding of classroom dynamics (Farmer et al., 2019).

Lack of Knowledge

While there has been progress in understanding the 2E phenomenon, there continues to be a lack of knowledge on how to support 2E students in educational settings (Cain et al., 2019; Dimitriadi et al., 2021; Parr & Stevens, 2019; Ronksley-Pavia et al., 2019). Cain et al. (2019) noted that most educators lack the knowledge to identify 2E students. This results in students' strengths and limitations not being appropriately accommodated. When educators are unaware of the possibility of a student being gifted and possessing a disability, it is common for a 2E student's talents to go unnoticed and behaviors misunderstood (Cain et al., 2019).

Ronksley-Pavia et al. (2019) noted that research is scarce in relation to the twice-exceptional phenomenon. Limited research is a significant problem. Without knowledge and understanding of 2E students, teachers and policymakers are limited in their ability to adequately meet the needs of 2E students (Cain et al., 2019; Ronksley-Pavia et al., 2019). Increasing teacher knowledge and understanding of 2E students can build the capacity of teachers who interact with 2E students (Ronksley-Pavia et al., 2019).

Dimitriadi et al. (2021) noted that 2E students often do not have the opportunity to overcome their weaknesses and reach their full potential. This can be attributed to educational professionals' lack of knowledge about 2E students. Educators require knowledge and understanding of a student's ability and disability (Cain et al., 2019; Dimitriadi et al., 2021; Ronksley-Pavia et al., 2019). A lack of knowledge may cause teachers to misdiagnose a student's special needs (Dimitriadi et al., 2021). Giftedness amongst 2E learners may not be recognized because attention may be focused on observed behaviors related to a student's disability. Missed diagnosis of either a strength or weakness within twice-exceptionality often occurs because some strengths and weaknesses mask each other (Dimitriadi et al., 2021). With a lack of knowledge and understanding of the twice-exceptional phenomenon, teachers and other educational professionals may be unable to differentiate in a manner that supports the student's strengths and challenges (Cain et al., 2019; Dimitriadi et al., 2021; Ronksley-Pavia et al., 2019).

Collaboration

Collaboration has been identified as crucial when addressing support for 2E learners. Collaboration allows for shared ownership for student success (Foley-Nicpon & Assouline, 2020; Klingner, 2022; Pereles et al., 2021). Cormier (2022) and Fowler et al. (2019) noted that deep and meaningful collaboration occurs when general education and related service personnel discuss instructional practice, specialized instruction, and levels of systems support. Collaboration is a practice that is considered most effective in supporting the learning and engagement of 2E learners (Fowler et al., 2019).

Fowler et al. (2019) and Klingner (2022) noted that collaboration is critical in supporting educational professionals. Collaborative approaches are essential for including 2E learners in general education settings. Fowler et al. (2019) found special education supervisors and administrators more prepared to support teachers of students with twice-exceptionalities than general education district administrators or building principals. This highlights the need for more collaboration between general and special education supervisors and administrators to better understand and support the success of teachers who work with students who have multiple exceptionalities (Fowler et al., 2019). Collaborative working relationships among teaching partners and administrative support are the basic building blocks for successful instructional practices (Abi Villanueva & Huber, 2019; Cormier, 2022; Fowler et al., 2019).

In collaboration, partners seek to transform knowledge and practice. Family-school collaboration is another factor contributing to 2E students' success (Gerdes et al., 2022; Klingner, 2022). When families and schools collaborate effectively, parents and

teachers have an opportunity to co-create a supportive learning environment. The exchange between teachers and parents represents the student's life in different domains. Teachers and parents exchange student information, skills, and perspectives across home and school environments. This exchange can expand knowledge to support 2E learners on both sides (Gerdes et al., 2022).

A collaborative support system is needed to build educator capacity and address the need to implement practices that effectively teach students with exceptionalities (Bishop et al., 2019; Fowler et al., 2019). Specialized teaching is complex and involves the skilled use of instructional practices that are improved by collaborating with others (Cormier, 2022; Fowler et al., 2019). Creating a collaborative infrastructure is a collective process that includes all stakeholders: special and general educators and support staff, general and special education administrators, families, and community members, as well as policymakers (Foley-Nicpon & Teriba, 2022; Fowler et al., 2019; Franke et al., 2020; Klingner, 2022).

Resources

Various resources are needed to support instruction for 2E students, but special education and gifted programs tend to stretch their resources (Johnsen & Kaul, 2019; Walrod, 2022). Ritchotte and Zaghlawan (2019) noted that teachers lack the resources to help 2E students overcome learning barriers. According to Johnsen and Kaul (2019), educators do not implement best practices with diverse learners because of limited resources. In order to provide 2E learners with differentiated instruction that addresses their strengths and weaknesses, educators need access to above-level curriculum,

assessments, and other resources for personalizing their instruction (Johnsen & Kaul, 2019).

Tailoring instruction to individual student strengths and needs often requires above-level, formative and ongoing assessments. Some teachers do not have the skills or time to develop assessments, which decreases the likelihood that practices such as different learning experiences and acceleration are implemented (Johnsen & Kaul, 2019). Teachers need to be provided with alternative assessments that are above level to determine what a gifted student knows and does not know within a domain (Johnsen & Kaul, 2019; Wu et al., 2021). Once assessment data is available, teachers must have above-level materials, technology, and other resources to differentiate the curriculum for diverse learners (Johnsen & Kaul, 2019).

A solid and flexible curriculum can transform teaching and educators (Johnsen & Kaul, 2019; Volungevičienė, 2020). School districts that require teachers to use the same curriculum with strict pacing guides and close monitoring by administrators limit the educator's autonomy to provide for students who have needs for above-level curriculum and faster pacing (Avalos et al., 2020; Johnsen & Kaul, 2019). Johnsen and Kaul (2019) found that a lack of resources is the most frequently cited barrier when educators were asked to identify barriers that may have prevented them from implementing best practices in their classrooms. Yenioğlu et al. (2022) found that teachers use internet resources to support 2E students academically. Teachers from the study conducted by Johnsen and Kaul (2019) noted a need for district-provided strategies and resources as the teachers expressed they do not have resources or staff to help meet all of their students' needs.

One solution to a lack of teacher resources proposed by Johnsen and Kaul (2019) was a district database designed for differentiated learning activities that could serve as an example for teachers and be included in a bank of online resources.

Human resources are just as vital as material resources when implementing best practices for 2E students. School districts and administrative support are critical in supporting the needs of diverse learners (Cross & Cross, 2021; Johnsen & Kaul, 2019). Teachers in schools where principals provide time, support, and human and material resources are more likely to implement differentiation practices to support learners (Johnsen & Kaul, 2019; Pace et al., 2020).

District Training

Metcalf and Perez (2020) noted that educational training could help participants decipher between what is working and what is not and provides an opportunity for educators to learn from their mistakes. However, many undergraduate students generally do not receive training in giftedness (Al-Mamari et al., 2020; Wellisch, 2021). When teachers are trained to deliver and apply pedagogy to students' learning, they can use more creative teaching practices that benefit all students (Al-Mamari et al., 2020; Fowler et al., 2019; Reis et al., 2021; Siddiqui et al., 2021).

Fowler et al. (2019) found that district support for collaboration and enhancing instructional practice is essential. School districts have the power to enhance and expand collaborative instructional approaches, coaching opportunities, and teacher-to-teacher partnering (Fowler, 2019; Miled, 2019). District training can increase educational administrators' preparedness level when supporting educators who teach students with

special needs. Furthermore, a school district's organizational development of systems can support the diverse educational needs of all students while strengthening partnerships (Fowler et al., 2019).

According to Gupta and Guang-Lea (2020) and Al-Mamari et al. (2020), training that targets the professional development of teachers increases teacher quality. When teacher quality increases, student learning increases (Gupta & Guang-Lea, 2020). However, many educational trainings do not focus on special education and gifted for general education teachers. This lack of training may negatively affect the performance of teachers who instruct students with multiple exceptionalities (Al-Mamari et al., 2020). School districts should frequently use professional development training to improve student learning (Gupta & Guang-Lea, 2020). Teachers of 2E students could benefit from district training that supports educators in using effective teaching strategies and building teacher knowledge and awareness around educating 2E students (Al-Mamari et al., 2020). School districts must have a clear framework for designing and implementing district training. Teachers are constantly given additional tasks, and the expectations can be challenging to meet without proper training (Gupta & Guang-Lea, 2020).

Project Description

To meet the purpose of the study, I explored elementary school teachers' perspectives regarding the challenges and needed support with consistently implementing EBPs for 2E students. Due to a gap in practice in consistently implementing EBPs for kindergarten through fifth-grade 2E students at the local level, the findings of this research, review of the literature, and this professional development were created. This

project was designed to increase teacher knowledge, awareness, and capacity to consistently implement EBPs to meet 2E students' strengths and weaknesses. This three-day professional development was designed to begin with a first day of training that will acquaint educators with the characteristics and needs of 2E students. The second and third days include understanding disability areas, problem-solving, and implementing EBPs to support 2E students.

The implementation of this project is proposed for fall of the 2023–2024 school year. In order to implement this project, multiple actions must be taken. I will attend a meeting with the district's continuous school improvement department to share my project and gain consent to implement my project. Based on the strategic goals of the district office and their interest in student success with equity and access, stakeholder engagement and communication, staff effectiveness, and culture and climate, the permission and support from the local school district will likely be attained.

With the support of the continuous school improvement department, I will identify teachers from every elementary school within the district. Each training session will begin at 8:30 a.m. and end at 3:30 p.m. The local school district will not have any financial responsibilities. Project materials include the following: (a) conference room that can accommodate 40–60 participants; (b) computers; (c) smart board or projector screens; (d) microphone; (e) chart paper; (f) sticky notes; (g) markers, pens, and highlighters; and (h) copies (daily agenda, daily sign-in sheet, icebreaker activities, 2E scenario and action plan handout, 2E characteristics handout, professional development evaluation survey link).

The current state of education was a potential barrier. The COVID-19 pandemic created new challenges and stressors for educators. Teachers are expected to provide academic instruction, social-emotional support, and build relationships with stakeholders. In education, there has been an increase in teacher anxiety, stress, burnout, and teacher turnover (Robinson et al., 2022). Therefore, getting teachers to engage in this professional development may be challenging.

Project Evaluation Plan

The type of evaluation planned for this project deliverable was a goal-based evaluation. A goal-based evaluation allows individuals to set goals based on their priorities and measure progress to determine the extent to which a program has achieved its goals (Giovannetti et al., 2021). The overall goal of this project was to increase teacher knowledge and awareness of 2E learners by providing teachers with information and resources to consistently implement EBPs with 2E learners in the classroom. The key stakeholders of this evaluation are classroom teachers. On day three of the training, survey data will be collected from participants. The overall goal of the evaluation was to rate the effectiveness of the professional development. The post-professional development survey will be included in (Appendix A). Survey ratings include: strongly agree, agree, undecided, disagree, and strongly disagree. Participants will rate their level of degree to which they agree with the statement. This researcher-created survey assesses the attainment of the goal of this project.

Project Implications

Local Community

This study focuses on teachers' challenges and the support needed for consistently implementing EBPs for 2E students. The project deliverable was designed to meet the needs of teachers through professional learning activities in identifying characteristics of 2E students and supports to serve 2E students. Findings from this study may result in positive social changes within the continuous improvement department of the local school district. Implementing twice-exceptional teacher professional development may increase the awareness and achievement of 2E students. This project could aid in understanding teachers' challenges with implementing EBPs for 2E students and providing educators with the support needed to enhance their teaching capacity through professional development. Research indicates that professional development can contribute to instructional improvement and support teachers in developing their knowledge base and confidence (Liu, 2022). This was especially important for educators who support 2E students. Twice-exceptional professional learning is a way to increase educators' knowledge and skills by engaging in specialized methods where educators learn to identify and provide advanced and remedial educational opportunities to support diverse learners (Lee & Ritchotte, 2019). This project has the potential to create positive social change for multiple stakeholders at the local level; students, teachers, administrators, parents, and the community.

Far Reaching

In addition to creating positive social change at the local level, there are opportunities for positive social change implications that are far-reaching. This project deliverable could be shared with other school districts in the state of Georgia as a model for increasing teachers' awareness, understanding, and use of EBPs with 2E students. Through effective professional learning, teachers may become more equipped to support the strengths and weaknesses of diverse learners. Researchers may use this study as a resource for future studies by accessing ScholarWorks.

Conclusion

This basic qualitative study aimed to understand teachers' perspectives regarding the challenges and needed support with consistently implementing EBPs for 2E students. Based on the findings, the project deliverable for this study resulted in a 3-day professional training for teachers within the local school district. In this section, I included a description of the project, the purpose, the goals, the learning outcomes, the target audience, the outline components, the timeline, the activities, the trainer notes, the module formats, the PowerPoint, the implementation plan, the evaluation plan, the specific hour by hour detail of the training, the project implications, the rationale, and the review of the literature. In Section 4, I discuss the strengths and limitations of this project, recommendations for alternative approaches, scholarship, project development, leadership and change, reflection on the importance of the work, implications, applications, and directions for future research.

Section 4: Reflections and Conclusions

This qualitative study aimed to understand teachers' perspectives on the challenges with and support needed to consistently implement EBPs for 2E students in schools. The problem addressed in this study was that elementary school teachers are not consistently implementing EBPs for kindergarten through fifth-grade 2E students. This lack of consistency has created a gap in practice at the local level. Two RQs guided this project study. The first RQ addressed elementary teachers' perspectives regarding the challenges of consistently implementing EBPs for 2E students in schools. The second RQ addressed elementary teachers' perspectives regarding needed support for consistently implementing EBPs for 2E students in schools. Ten teachers participated in this basic qualitative design project study. Data were collected through open-ended semistructured interviews. Open coding and thematic analysis were used to conduct a qualitative analysis. Through the research, multiple themes emerged regarding challenges and supports needed to consistently implement EBPs for 2E students. I designed a 3-day professional development to increase teacher knowledge, awareness, and capacity to consistently implement EBPs to meet 2E students' strengths and weaknesses.

Project Strengths and Limitations

In Section 3, I presented the goals of the project deliverable based on the findings of the data analysis and the literature review. The professional development project addresses the inconsistent use of EBPs at the local school level. Throughout my research, I found that the use of EBPs has positive effects on student achievement. Using EBPs in teacher instruction and student activities can increase student outcomes (Alnaim, 2021;

Cook et al., 2020; Leggio et al., 2019; Williamson et al., 2019). However, many teachers report they are unprepared for the expectations in teaching (Beutel & Tangen, 2018; Lee & Ritchotte, 2018). Supporting students with disabilities using the general education curriculum can be challenging. Individualized needs of 2E students require specialized teaching expertise in assessing, planning, collaborating, and delivering EBPs (Nagro et al., 2019).

The strengths of this project deliverable are aligned to the research conducted and the analysis of the findings. This project gives teachers learning opportunities outside the current special education training. This professional development provides all teachers, not just special education teachers, the opportunity to engage in learning about the characteristics of 2E students and supports to serve this student population. The information learned in the professional development will allow for a more collaborative workspace between general and special education teachers who often are responsible for meeting the needs and strengths of 2E learners. Through the activities within the professional development, educators will engage in collaborative conversations about twice-exceptional characteristics and supports. Collaboration has been identified as essential when addressing support for 2E learners. Collaboration allows for shared ownership for student success (Foley-Nicpon & Assouline, 2020; Klingner, 2022; Pereles et al., 2021).

Another strength of the project is that through the presentation and activities, general education and special education teachers will be provided with 2E learners' characteristics and supports to help diverse learners succeed in the classroom setting.

Teachers will become more familiar with evidence-based instructional practices. Finally, the project has been designed to be redelivered at each participant's local school. This allows the content of the professional development to reach other educators.

Time is one limitation of this project. The project I developed for the school district requires educators to dedicate 3 consecutive preplanning days. Therefore, timing may be a limitation to this project as many teachers may already feel that time is limited at the beginning of the year. Furthermore, Brigandi et al. (2019) and Mofield (2020) expressed that educators are hindered by time when supporting 2E students.

Recommendations for Alternative Approaches

As described in Section 1, the problem involved elementary school teachers' inconsistent use of EBPs for 2E kindergarten through fifth-grade students. Alternative approaches could have been used to address this gap in practice. A different approach could have been to interview the instructional coaches in each school who support teachers with implementing EBPs to better understand teacher challenges and support needed to consistently implement EBPs. Exploring the perceptions of multi-tiered system of support specialists in this district who serve as instructional support for local schools was another approach to analyzing the study's problem.

Scholarship, Project Development and Evaluation, and Leadership and Change

As a scholar, pursuing this doctoral degree has taught me another level of perseverance. Before beginning this journey, my highest degree earned was a master of education in special education. I did not have to engage in any action research for that program. However, the rigor of this doctoral journey prepared me for the research

process and project study. I have grown from a writer to a researcher through this doctoral program. Engaging in a systematic research process has allowed me to focus on improving education. This process involved action, evaluation, and reflection and has allowed me to gather evidence to implement change in instructional practices.

As a result of this project study, I was able to expand my research into professional development. Before this project study, I had only experienced planning and implementing professional development at the local school level. As a researcher, I created a project that would create learning opportunities for classroom teachers across the school district. I intentionally created this professional development based on evidence-based instructional practices for teaching diverse learners. As I developed this project, I was mindful of my experiences with professional development. Time for collaboration was built into the professional development to allow teachers time to reflect on their learning and instructional experiences. When considering how to evaluate this project, I intentionally aligned the goals of the project and ensured the evaluation aligned with the professional development activities.

As a leader and agent for positive change, I feel more prepared to positively impact social change within my local school district and beyond. As a doctoral student at Walden University, I have grown as a scholar, practitioner, and advocate for teachers, students, and parents. The knowledge gained at Walden will support me in my pursuit of becoming a district coordinator and college-level instructor. When I began at Walden, my lens and scope to support teachers were limited, but now I have a voice grounded in

research and broad experiences. Being able to contribute to the twice-exceptional research has positively affected my ability to be a leader in positive social change.

Reflection on Importance of the Work

This qualitative project study was guided by Rose and Meyer's conceptual framework of UDL (Moore, 2007). Through exploring elementary teachers' instructional practices, I learned about the challenges and support needed to provide EBPs to 2E students at the local school level. Research has indicated that most teachers do not know how to support diverse or 2E learners (Cormier, 2022; Gierczyk & Hornby, 2021; Klingner, 2022). Through this process, I learned the importance of collaboration, training, and resources for teacher success in supporting diverse learners. Time, lack of knowledge, and classroom dynamics are challenges that prevent educators from consistently implementing EBPs with 2E learners. Teachers must have the time and knowledge to support the diverse needs of their students (Cain et al., 2019; Dimitriadi et al., 2021; Nurlaily et al., 2019; Reeve, 2020). Overall, human and material resources are essential for teachers to consistently implement EBPs with diverse learners (Johnsen & Kaul, 2019; Pace et al., 2020).

Implications, Applications, and Directions for Future Research

When teachers improve their instructional practices, there is the potential for an increase in student achievement and positive change. This project study has the potential to impact teachers' instructional practices, which could increase student achievement.

Social change may take place if teachers apply strategies from this professional development into their instructional practices with 2E learners. At the individual level,

understanding and addressing teachers' challenges may provide educators with the support needed to enhance their teaching skills. This project study may be beneficial at the local level as findings from this study may result in positive social changes within the continuous improvement department of the local school district. Further, this study can potentially have a positive effect beyond the local level as it provides awareness of the twice-exceptional phenomenon and insight into teachers' instructional challenges. It notes support needed to consistently implement EBPs with 2E learners that could be transferred to other school districts and states.

Beyond the aforementioned social change implications, there are empirical implications. Teachers who do not have the opportunities to attend professional learning or lack resources at their local schools may use this study for EBPs and instructional strategies to support 2E learners. This study adds to the literature on teachers' challenges and support needed for consistently implementing EBPs with 2E learners. To get a broader understanding of teacher perspectives, the research could be conducted in middle and high schools, or at other elementary schools beyond the schools in this study, as the focus of this study was elementary school teachers from one region of a local school district. Future research on teacher challenges and support needed to consistently implement EBPs with 2E learners will add to the themes of this study.

Conclusion

Due to educational legislation, regulations, guidance, and other policies, there has been a focus on the achievement of specific groups of students, like those in special education who are struggling (Slavin, 2020). Meeting the needs of diverse learners has

become a focus for school leaders. This has led to an emphasis on teachers' instructional practices. However, simply telling teachers to differentiate instruction and learning for 2E students does not mean that they will know how to or have the tools to address a student's weaknesses while developing their talents. Many teachers lack the knowledge to support 2E learners (Cain et al., 2019; Dimitriadi et al., 2021; Parr & Stevens, 2019; Ronksley-Pavia et al., 2019). This is because the individualized needs of 2E students require specialized teaching expertise in assessing, planning, collaborating, and delivering EBPs (Nagro et al., 2019). In order to provide 2E students with personalized instruction, teachers need opportunities to grow in their use of EBPs. Universal Design for Learning is a comprehensive framework that provides teachers with EBPs to help meet the ever-changing needs of 2E learners and support student achievement (Slavin, 2020).

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Appendix A: The Project

Agenda at a Glance

Twice-Exceptional Learner PD DAY 1		
Audience: General & Special Education Elementary Teachers	Location: Board Room	Presenter:
Time	Session Title	
8:00-8:30	Arrival/Sign In	
8:30-9:30	Welcome Introduce Facilitators Agenda Purpose Learning Outcomes Norms Logistics Getting to Know You BINGO	
9:30-10:15	Defining 2E	
10:15-10:25	Break	
10:25-12:15	2E Knowledge, Characteristics & Awareness	
Lunch Break 12:15-1:15		
Time	Session Title	
1:15-2:00	Gifted Education	
2:00-3:00	Understanding Disability Areas	
3:00-3:30	Wrap Up & Day 1 Twice-Exceptional Learner Training	

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Getting to Know You BINGO

Directions: Find someone who fits the description and have them write their first name and school. Each participant can only sign your card once. You are not allowed to sign your own card.

I have taught in 3 or more GA school districts.	I've taught middle or high school previously.	I've never flown in an airplane.	I have the same number of children as you.	My strongest core area is Reading.
I've confiscated a student's toy and played with it.	I'm an only child.	I am celebrating my birthday this month.	I am a high school graduate in [REDACTED]	I was born outside of the United States.
I have a pet.	I am fluent in another language.	FREE SPACE	I prefer tea over coffee.	I have taught more than 20 years.
I am new to [REDACTED] School district.	I have broken a bone.	My favorite place to shop is Amazon.	I've only taught in the state of Georgia.	I have been a co-teacher before.
I have freckles.	I traveled outside the country during Summer break.	I can play a musical instrument.	I love to wake up early.	My strongest core area is Math.


Day 1

To Do	<ul style="list-style-type: none"> • Make copies of sign-in sheets, agenda, Getting to Know You BINGO • Ensure sign in station is set up • Check technology (display, sound, microphone) in board room • Secure board room • Appropriate seating in board room for number of participants • Communication sent to teachers to bring their district laptops • Chart paper, icebreaker activity, agendas, and 2E characteristics handout placed on each round table • Sticky notes, markers, pens, and highlighters in a basket for each table • Professional Development Evaluation Survey Link available through QR code
Materials	<ul style="list-style-type: none"> • Laptop • Microphone
Detailed Agenda	
8:00-8:30	Arrival/Sign In
8:30-9:30	<p>Welcome Introduce Facilitators Purpose Learning Outcomes Logistics Norms Agenda Getting to Know You BINGO</p> <ol style="list-style-type: none"> 1. The facilitator welcomes and introduces (name, title) all participants. 2. The facilitator shares the purpose of the 3-day training. The purpose of the 3-day training is to increase teacher knowledge and awareness of 2E learners and provide educators with evidence-based practices to consistently implement with 2E learners. 3. The facilitator shares the professional development learning outcomes. At the end of the PD, educators will have increased their understanding and capacity to consistently support 2E

	<p>learners in the classroom.</p> <ol style="list-style-type: none"> The facilitator shares the logistics, norms, and agenda. The facilitator introduces the ice breaker “Getting to Know You BINGO” and participants engage in the task.
9:30-10:15	<p>Defining 2E</p> <ol style="list-style-type: none"> The facilitator will ask participants to write down on the sticky note the answer to the following question: Have you taught 2E learners? How do you define 2E learners? Tables will share their definitions.
10:15-10:25	Break
10:25-12:15	<p>2E Knowledge, Characteristics & Awareness</p> <ol style="list-style-type: none"> The facilitator will talk about the 2E phenomenon using information from presentation slides. The participants will use chart paper and sticky notes to group characteristics that they have observed of 2E students using Double Bubble Thinking Maps. The participants will share their thinking maps amongst each other before tables share out.
12:15-1:15	Lunch
1:15-2:00	<p>Gifted Education</p> <ol style="list-style-type: none"> The facilitator will use corresponding slides to talk about gifted education and providing gifted content to students. Participants will watch Bloom’s Taxonomy Video https://sites.google.com/site/qepcafe/modules/overview/bloom The participants will use Bloom’s Taxonomy presentation slide to match reading and math activities under the appropriate Bloom’s Taxonomy Cognitive Circle within a Tree Thinking Map. Answers to the task will be shared out
2:00-3:00	<p>Understanding Disability Areas</p> <ol style="list-style-type: none"> Participants will write on a sticky note the answer the following questions: How many years have you co-taught? resource teacher? What are some of the disability areas of students you have taught? Participants will discuss results with someone in the room they have not spoken to yet.

	<ol style="list-style-type: none"> 3. Participants will return to their tables and share out with room. 4. The facilitator will use corresponding slides to talk about special education, disabilities, and best practices for supporting students with exceptionalities. 5. Participants will watch Special Education Category Video https://www.youtube.com/watch?v=cFtg2xub10E 6. The participants will use the special education categories slide to match activities under the appropriate special education category using chart paper and markers at their table.
3:00-3:30	<p>Wrap Up & Day 1 Twice-Exceptional Learner Training Survey</p> <ol style="list-style-type: none"> 1. The facilitator will answer any of the participants' questions. 2. The facilitator will remind participants of the meeting time for day 2 of the PD. 3. The participants will be provided with QR code to complete Day 1 survey.

Day 1 Twice-Exceptional Learner Training Survey

School:
Region of Your School:
How was the training today? 
What was your one nugget you took from today?
What is one area you still feel like you need more support on?

Twice-Exceptional Learner PD		
DAY 2		
Audience: General & Special Education Elementary Teachers	Location: Board Room	Presenter:
Time	Session Title	
8:00-8:30	Arrival/Sign In	
8:30-8:40	Welcome Review Norms Agenda Quote Activity	
8:40-10:40	Challenges to Implementing EBPs for 2E Students: Classroom Dynamics, Time, Lack of Knowledge	
10:40-10:50	Break	
10:50-12:30	Part 1-Supports to Implement EBPs w/2E Learners: Overview of UDL	
Lunch Break 12:30-1:30		
Time	Session Title	
1:30-3:00	Part 2-Supports to Implement EBPs w/2E Learners: Trainings, Data, Collaboration (Grade Level/Building Level), Resources	
3:00-3:30	Wrap Up & Day 2 Twice-Exceptional Learner Training Survey	


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Day 2

To Do	<ul style="list-style-type: none"> ● Make copies of sign-in sheets, agenda, and Quote activity ● Ensure sign in station is set up ● Check technology (display, sound, microphone) in board room ● Secure board room ● Appropriate seating in board room for number of participants ● Communication reminder sent to teachers to bring their district laptops ● Chart paper and agendas placed on each round table ● Sticky notes, markers, pens, and highlighters in a basket for each table ● Professional Development Evaluation Survey Link available through QR code
Materials	<ul style="list-style-type: none"> ● Laptop ● Microphone
Detailed Agenda	
8:00-8:30	Arrival/Sign In
8:30-8:40	<p>Welcome Review Norms Agenda Quote Activity</p> <ol style="list-style-type: none"> 1. The facilitator welcomes participants, reviews norms, and agenda 2. The facilitator introduces the ice breaker “Quote” and participants engage in the task.
8:40-10:40	<p>Challenges to Implementing EBPs for 2E Students: Classroom Dynamics, Time, Lack of Knowledge</p> <ol style="list-style-type: none"> 1. The participants will write down what they believe to be challenges to implementing EBPs to 2E students. 2. The facilitator will share some common challenges found in a study. 3. The facilitator will talk about the challenges to implementing EBPs for 2E students using information from presentation slides.

10:40-10:50	Break
10:50-12:30	<p>Part 1-Supports to Implement EBPs w/2E Learners: Overview of UDL</p> <ol style="list-style-type: none"> 1. Participants will watch UDL at a Glance Video https://www.google.com/search?q=udl+video&oq=UDL+video&aqs=chrome.0.0i512j0i22i30l7j0i390l2.2817j0j4&sourceid=chrome&ie=UTF-8#fpstate=ive&vld=cid:01ab1c2e,vid:bDvKnY0g6e4 2. The facilitator will use corresponding slides to talk about the UDL 3. Participants will review scenario cards and as a team determine the best instructional practice for the scenario. 4. Tables will share responses with the room.
12:30-1:30	Lunch
1:30-3:00	<p>Part 2-Supports to Implement EBPs w/2E Learners: Trainings, Data, Collaboration (Grade Level/Building Level), Resources</p> <ol style="list-style-type: none"> 1. The facilitator will use corresponding slides to talk about ongoing training, levels of collaboration, and teacher resources
3:00-3:30	<p>Wrap Up & Day 2 Twice-Exceptional Learner Training Survey</p> <ol style="list-style-type: none"> 1. The facilitator will answer any of the participants' questions. 2. The facilitator will remind participants of the meeting time for day 3 of the PD. 3. The facilitator will ask participants to bring resources/materials to plan instruction/activities for the first few weeks of school that will support the learning of ALL students in the classroom. 4. The participants will be provided with QR code to complete Day 2 survey.

Day 2 Twice-Exceptional Learner Training Survey

School:
Region of Your School:
How was the training today? 
What was your one nugget you took from today?
What is one area you still feel like you need more support on?

Twice-Exceptional Learner PD		
DAY 3		
Audience: General & Special Education Elementary Teachers	Location: Board Room	Presenter:
Time	Session Title	
8:00-8:30	Arrival/Sign In	
8:30-8:40	Welcome Agenda Review Norms	
8:40-9:40	Possible Scenarios & Problem Solving	
9:40-9:50	Break	
9:50-12:15	Planning & Work Session	
Lunch Break 12:15-1:15		
Time	Session Title	
1:15-3:00	Planning & Work Session continued	
3:00-3:30	Wrap Up & Day 3 Twice-Exceptional Learner Training Survey	

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Day 3

To Do	<ul style="list-style-type: none"> ● Make copies of sign-in sheets, grade level numbers, and agenda ● Ensure sign in station is set up ● Check technology (display, sound, microphone) in board room ● Secure board room ● Appropriate seating in board room for number of participants ● Reminder communication sent to teachers to bring their district laptops and materials for planning ● Chart paper, grade level numbers, and agendas placed on each round table ● Sticky notes, markers, pens, and highlighters in a basket for each table ● Professional Development Evaluation Survey Link available through QR code
Materials	<ul style="list-style-type: none"> ● Laptop ● Microphone
Detailed Agenda	
8:00-8:30	<p>Arrival/Sign In</p> <ol style="list-style-type: none"> 1. As participants sign in, the facilitator will ask them to sit at a table with their appropriate grade level.
8:30-8:40	<p>Welcome Review Norms Agenda Kahoot it!</p> <ol style="list-style-type: none"> 1. The facilitator welcomes participants, reviews norms, and agenda 2. Kahoot it! QR code on presentation slide for participants to take part in a review game
8:40-9:40	<p>Possible Scenarios & Problem Solving</p> <ol style="list-style-type: none"> 1. The facilitator will share scenarios from the presentation slides where teachers have to work in a group and create a skeleton lesson plan for the students in the scenario. 2. Groups will write their plan on chart paper and hang on wall when done. 3. Groups will have a chance to walk around and see how others responded to the scenario.

	4. Participants will have an opportunity to share which response stood out to them.
9:40-9:50	Break
9:50-12:15	<p>Planning & Work Session</p> <ol style="list-style-type: none"> 1. Participants will be reminded of the importance of collaboration amongst the grade level, UDL, and Bloom's Taxonomy. 2. The facilitator will review the expectations for the planning and work sessions using information from the presentation slides. 3. Participants will have an opportunity to work with other participants on their same grade level to create lesson plans (for Unit 1 Math/Reading) that tailor instruction and activities to meet the needs of ALL students.
12:15-1:15	Lunch
1:15-3:00	<p>Planning & Work Session Continued</p> <ol style="list-style-type: none"> 1. Participants will continue with the planning process for the upcoming school year. 2. Lesson plans links will be entered into a google doc to be shared amongst all participants as a resource.
3:00-3:30	<p>Wrap Up & Day 3 Twice-Exceptional Learner Training Survey</p> <ol style="list-style-type: none"> 1. The facilitator will answer any of the participants' questions. 2. The participants will be provided with QR code to complete Day 3 survey. 3. The facilitator will thank participants for engaging in the 3-day PD.

Day 3 Twice-Exceptional Learner Training Post-Survey

Directions: Rate your level of degree to which you agree with each statement.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
This PD has increased my knowledge and/or awareness of twice exceptional learners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The information and resources provided in this PD support the implementation of evidence-based practices with twice-exceptional learners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This PD will change my instructional practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The collaboration sessions in this PD allowed me to test my skills and share my experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The meeting room and facilities were adequate and comfortable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This PD was worth my time to attend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

TWICE EXCEPTIONAL LEARNER (Day 1)

WELCOME

Don't Forget to Sign In

Meet Our Facilitator



Dr. Walden

Purpose

The purpose of the 3-day training is to increase teacher knowledge and awareness of 2E learners and provide educators with evidence-based practices to consistently implement with 2E learners.

Learning Outcomes

At the end of the PD, educators will have increased their understanding and capacity to consistently support 2E learners in the classroom.

Logistics

- Chargers
- Restrooms
- Vending Machines
- Restaurants

Norms

- Actively Participate
- Collaborate and Appreciate
- Take care of you
- Take care of your neighbor
- Learn and have fun!


Agenda

Session	Topic	Facilitator
1:00 - 1:15	Check-in & Sign In	Dr. Walden
1:15 - 1:30	Welcome & Overview	Dr. Walden
1:30 - 1:45	Break	
1:45 - 2:00	Session 1: Introduction to 2E	Dr. Walden
2:00 - 2:15	Session 2: Identification of 2E	Dr. Walden
2:15 - 2:30	Session 3: Instructional Strategies	Dr. Walden
2:30 - 2:45	Session 4: Social Skills	Dr. Walden
2:45 - 3:00	Session 5: Self-Advocacy	Dr. Walden
3:00 - 3:15	Session 6: Transition Planning	Dr. Walden
3:15 - 3:30	Session 7: Wrap-up & Reflection	Dr. Walden

Getting to Know You Bingo!

Characteristics of 2E Learners	Characteristics of 2E Learners	Characteristics of 2E Learners	Characteristics of 2E Learners	Characteristics of 2E Learners
High ability in one or more areas	High ability in one or more areas	High ability in one or more areas	High ability in one or more areas	High ability in one or more areas
High ability in one or more areas	High ability in one or more areas	High ability in one or more areas	High ability in one or more areas	High ability in one or more areas
High ability in one or more areas	High ability in one or more areas	High ability in one or more areas	High ability in one or more areas	High ability in one or more areas
High ability in one or more areas	High ability in one or more areas	High ability in one or more areas	High ability in one or more areas	High ability in one or more areas
High ability in one or more areas	High ability in one or more areas	High ability in one or more areas	High ability in one or more areas	High ability in one or more areas


- Have you taught 2E learners?
- How do you define 2E learners?



TALK ABOUT IT, MATE!

Defining 2E

Twice-exceptional students are identified as having high aptitude and a disability as classified by their state of residence.



Break TIME

2E Knowledge, Characteristics & Awareness

Strengths

- creative
- superior vocabulary
- curious
- imaginative
- questioning
- sense of humor
- problem-solving
- range of interest



Challenges

- embarrassed
- opinionated
- social interactions
- organization/study skills
- criticism
- written expression
- early frustration
- manipulative

Characteristics of 2E Learners	Characteristics of 2E Learners	Characteristics of 2E Learners
High ability in one or more areas	High ability in one or more areas	High ability in one or more areas
High ability in one or more areas	High ability in one or more areas	High ability in one or more areas
High ability in one or more areas	High ability in one or more areas	High ability in one or more areas
High ability in one or more areas	High ability in one or more areas	High ability in one or more areas
High ability in one or more areas	High ability in one or more areas	High ability in one or more areas



TALK ABOUT IT, MATE!



Gifted Education in GA

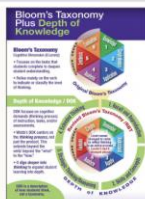
- Funded by state
- Gifted student defined as one who:
 - demonstrates a high degree of intellectual/creative abilities
 - high degree of motivation
 - exceeds academic fields
- needs special instruction or services
- Gifted education decisions and procedures are at the discretion of local school

Webb's Depth of Knowledge

Level	Knowledge	Skills	Examples
1	Simple recall of facts	Recall	What is the capital of Georgia?
2	Basic understanding of facts	Understanding	Why is the capital of Georgia Atlanta?
3	Complex understanding of facts	Complex Understanding	How does the location of Atlanta affect its role as the capital?
4	Application of knowledge	Application	How would you design a city to be the capital of Georgia?
5	Analysis and evaluation of knowledge	Analysis and Evaluation	How would you design a city to be the capital of Georgia, and why?
6	Synthesis and creation of knowledge	Synthesis and Creation	How would you design a city to be the capital of Georgia, and how would you make it a better place to live than Atlanta?

Webb's Depth of Knowledge vs. Bloom's Taxonomy

https://www.youtube.com/watch?v=_YDxwBZ7Q



Matching with Blooms Taxonomy



TALK ABOUT IT, MATE

Understanding Disability Areas



1. How many years have you co-taught? resource teacher?
2. What are some of the disability areas of students you have taught?

TALK ABOUT IT, MATE

Special Education in GA

- A child must have a disability and must need special education services/related services.
- If a child has a disability but does not need special education services, the child is not eligible for special education under IDEA but may be eligible for protections under Section 504 of the Rehabilitation Act.



<https://www.youtube.com/watch?v=Cpg2ub10E>



Understanding Disability Areas

directions in student's preferred mode of communication: spoken language, tactile information, sign language.

interactive notebook

step by step, simple-to-follow verbal directions

focus on concepts rather than memory

games on how to take turns, wait your turn, win and lose graciously

Key language, positional language, weight and measurement words, comparative

categorize or chunk information

mnemonics & fact charts

use devices, post-it notes, calendars, assignment books



Day 1 Survey



See you tomorrow!

TWICE EXCEPTIONAL LEARNER (Day 2)

WELCOME

Don't Forget to Sign In

Norms

- Actively Participate
- Collaborate and Appreciate
- Take care of you
- Take care of your neighbor
- Learn and have fun!



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Appendix B: Research Request Application Approval

[Redacted] Board Chair
[Redacted] Vice Chair

[Redacted] Superintendent

[Redacted]

June 3, 2022

[Redacted]

Reference: Twice-Exceptional: A Qualitative Study of Serving 2E Students with Evidence-Based Practices [Redacted]

Dear Ms. Muhammad:

This letter is to inform you that your research proposal has been approved by the Department [Redacted] implementation in the [Redacted] School District [Redacted]. When you begin your research you must secure the approval of the principal/chief site administrator(s) for all schools named in the proposal. You should provide the application with all required attachments and this district approval letter to the principal(s) to inform their decision. Please remember the principal/chief site administrator has the final right of approval or denial of the research proposal at that site. In addition, note that teachers and others may elect not to participate in your research study, even though the district has granted permission.

Please be reminded there is no data collection in schools between April 1, 2022, and June 3, 2022. The deadline is to protect instructional time during the assessment season and end of the year activities scheduled at individual schools. Also, meeting with teachers during their planning time is not acceptable and interviews need to be held during non-school hours. This approval is valid for one year from the date on this approval letter. Should there be any changes, addenda, design changes, or adverse events to the approved protocol, a request for these changes must also be submitted in writing/email to the [Redacted] Department of [Redacted] during this one-year approval period. Changes should not be initiated until written approval is received. Further, should there be a need to extend the time requested for the project; the researcher must submit a written request for approval at least one month prior to the anniversary date of the most recent approval. If the time for which approval is given expires, it will be necessary to resubmit the proposal for another review by the [Redacted] Research Review Board.

Completed results are required to be submitted to the Office of [Redacted]. Feel free to call [Redacted] or [Redacted] if you have any questions.

Sincerely, [Redacted]

[Redacted] Associate Superintendent

[Redacted] Dr. [Redacted] Director

[Redacted]

[Redacted]

Appendix C: Interview Questions

Participant Code (i.e. Teacher 1): _____ Position: _____

Date: _____ Time Started: _____ Time Ended: _____ Total Time: _____

School Site: _____

Before Questioning: Introduction of researcher and a review of the study, purpose, voluntary participation, etc. The front matter part is closed by asking participants if they have questions before the interview begins.

1. How many years have you been a classroom teacher?
2. What has been your highest degree earned?
3. What are your perceptions of twice-exceptional students?
4. How do you define EBPs?
5. What specific EBPs have you consistently used with 2E learners that have been most effective?
6. How has the use of EBPs positively impacted the learning environment and or student performance?
7. What sources of knowledge and tools do you use or draw upon to engage in informed instructional practices and decision-making when using EBPs?
8. What makes it challenging to consistently implement EBPs for 2E students?
9. Are you currently receiving the kind of support you think you need?
10. What support if any is needed to consistently implement EBPs for 2E students?
11. What do you believe teachers need to know, and be able to do in order to consistently implement EBPs with diverse students?

Appendix D: Email Correspondences

Initial Email

Hello,

I hope all is well. My name is Khadijah Muhammad, and I am a fellow educator in our district. I am conducting a qualitative project study through Walden University in order to earn my EdD in Special Education. I am conducting research in regard to teacher implementation of evidence-based practices with twice-exceptional students. The participants for this study are elementary school teachers who have implemented evidence-based practices with twice-exceptional students within the local school district. Specifically, I am collecting data from teachers that will explain their challenges and support needed with consistently implementing evidence-based practices for twice-exceptional students. Sharing how you have implemented evidence-based practices with twice-exceptional students is greatly appreciated and makes this research possible. Please read the attached consent form. If you feel you understand and are willing to participate in this research, please indicate your consent by replying to this email with the words “I consent” and your personal email address on or before 07/20/2022. Your personal email address is requested in order to protect your privacy. Please do not hesitate to contact me with any questions or concerns.

Thank you so much for your consideration,

Khadijah Muhammad

Khadijah Muhammad

Reminder Email

Hello,

This is a reminder email to please read the attached consent form and indicate your consent by replying to this email with the words “I consent” and your personal email address by 07/20/2022 if you are willing to participate in the research study. Please do not hesitate to contact me with any questions or concerns.

Thank you so much for your consideration,

Khadijah Muhammad

Khadijah Muhammad