

**Special Educator Belonging, Efficacy, and Shared Responsibility: A Case Study on  
Inclusive Settings and Collegial Relationships**

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## **Abstract**

The problem addressed in this study was that although special educators are essential members of a public school faculty, their feelings of belonging, efficacy, and perceptions of shared responsibility are not well supported by the conditions in the school setting. This qualitative descriptive case study aimed to provide a deeper understanding of special educators' perspectives on how inclusion practices influenced their professional experiences, using a conceptual framework that combined social learning theory and sensemaking theory. The study used a multiple case study design with a sample of 10 secondary level special educators in Massachusetts who had at least one year of experience in inclusive classroom settings. Data were collected through a combination of open-ended questionnaires, semi-structured interviews, and reflective journaling. Purposive and snowball sampling methods were used to recruit participants. Data coding and analysis involved hand coding and used reflexive thematic analysis to identify patterns and identified six themes within the data. The key findings demonstrated that special educators' professional experiences were shaped by the unique interplay between workplace environments, personal beliefs about their effectiveness, and role interpretation. The research reinforced that relying on isolated efforts to support special educators' sense of efficacy and belonging is insufficient. The study's implications for practice suggest that fostering intentional collaboration, clarifying roles, and strategically reallocating resources are necessary to create a shared understanding of collective roles. This study makes a significant contribution to the body of research and literature on special education and provides actionable guidance for administrators and policymakers.

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I am particularly grateful to the ten special educators who participated in this study. Your willingness to share your experiences with honesty and vulnerability made this research possible. Your dedication to your students, despite the systemic challenges you face daily, serves as a constant reminder of why this work matters. I hope this research honors your voices and contributes to the changes you so clearly articulated as necessary.

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The field of special education exists because of individuals who refused to accept that some students were unteachable, who challenged systems that failed to serve all learners, and who insisted that every child deserves access to meaningful education. This dissertation is a small contribution to ongoing efforts to provide spaces and experiences that support the dedicated special educators that embrace the uniqueness of their students’ experiences and allow all children to learn with joy and find success in the classroom.

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## **Section 1: Foundation**

The chronic shortage of highly invested special education teachers in public education continues to be a concern in the United States (Day et al., 2024; Johnson & Jones, 2021; Peyton et al., 2021). The lack of fully qualified special educators directly impacts the ability of public school districts' abilities to meet the mandates of a Free and Appropriate Public Education as mandated by the Individuals with Disabilities Education Act (IDEA, 2004; Peyton et al., 2021). Recent evidence suggests that the COVID-19 pandemic has exacerbated the challenges facing special educators in the provision of services for students with disabilities (Herman et al., 2023; Scott et al., 2022). Sustaining current educator commitment to the work requires providing environments that are collaborative, supportive, and respectful of their value (Bettini et al., 2020; Rezaee et al., 2018). In general, when teachers are provided with supportive environments and encouraged to collaborate with peers, both job satisfaction and commitment increase (Kachchhap & Wilson, 2021; Soini et al., 2019). For special educators, positive working conditions, including social resources and collaboration, are increasingly important to their sense of connection both to their colleagues and feelings of efficacy in their work with students with disabilities (Johnson & Jones, 2021; Mofield, 2020).

Teacher preparation programs are meant to prepare general and special education teachers to provide instructional support and services for all students yet fail to adequately prepare teachers to collaborate with other professionals (Zagona et al., 2017) to support students with disabilities. Special educators often feel disconnected from general education colleagues, lacking a sense of belonging and shared responsibility for students with disabilities (Hargreaves, 2019). Instead of connection through frequent, informal, and student-centered opportunities, forced collaboration activities like professional learning communities further deepen this

disconnect (Hargreaves, 2019) for special educators. General educators' negative attitudes toward students with severe disabilities impact the relationship between special education teachers and their general education colleagues (Chatzigeorgiou & Barouta, 2021) and can create unfavorable conditions in an inclusive classroom. When the classroom setting services higher numbers of students with significant behavioral or academic needs, the disconnect between special educators and general educators can lead to questions regarding which teacher becomes ultimately responsible for the extent to which students with disabilities are able to access instruction and receive an equitable experience in the classroom (Mason-Williams et al., 2017).

Berry (2021) pointed to positive outcomes when general educators demonstrate shared responsibility for the success of students with disabilities, increasing special education teachers' sense of collective efficacy. Research highlighting the equitable distribution of responsibility between special and general educators (Jain & Ahmad, 2022; Peyton et al., 2021; Robinson et al., 2019) remains limited, regardless of the belief that collaboration between special and general educators supports a sense of belonging for teachers, increases independent and collaborative skills for both teachers, and enhances student learning (Gourvenec et al., 2024; Hanson & Kraft, 2024). Special education and general education teacher roles are not universally defined, allowing for differences in assumptions about teacher responsibilities amongst teachers in a single school. Discrepancies in assuming responsibility for separate roles or aspects of teaching between general and special education teachers further complicate a sense of efficacy and responsibility for both teachers in the instruction of students with disabilities (Alabdallat et al., 2021).

Special educators bear disproportionate responsibility for students with disabilities despite the requirement for collective responsibility in implementing individualized education

plans (IEPs; Yell et al., 2020). Even when special educators are partnered with colleagues in a co-teaching model, the adherence to state and federal regulations around working with students with disabilities has more impact on the role of special educators (Antoniou et al., 2023; Nguyen et al., 2023). This imbalance is a barrier to developing a strong pedagogical culture or sense of professional trust that allows for collaboration and sharing responsibility (Erichsen & Reynolds, 2020) for supporting students with significant needs (Cancino et al., 2013; Gilmour & Wehby, 2020).

From the onset of the interview process, teachers and leaders evaluate the congruence between their beliefs and practices with a school's prevailing culture and climate (Brunsting et al., 2023), and initial alignment may result in the hiring of a teacher. Once in the role, many special educators experience scrutiny from colleagues and the greater school community about their role, having to justify their expertise while facing perceptions that special educators have “lower status” as teachers within their school (Antoniou et al., 2020; Scott et al., 2022). When the number of special educators in a single school is small compared to the number of general educators, special educators may be expected not only to support increasing numbers of students with disabilities, but to provide necessary support to general educators who may lack training in high leverage and evidence-based instructional strategies in the inclusion classroom (Herman et al., 2023; Nichols et al, 2020; Scott et al., 2022).

A crucial aspect warranting further investigation is the significance of the sense of belonging experienced by special educators, particularly in the context of shared responsibility between general educators and special educators for student achievement once the special educator has established themselves in their role with students and among their colleagues. Earlier research investigated mentorship programs and the establishment of cohorts for new

special education teachers to learn and grow collaboratively within the school setting (Kelley, 2004), yet special educator sense of belonging and its connection to self-efficacy remains understudied (Nislin & Pesonen, 2019) for teachers who are more established in their roles and their schools. Special educators fill unique roles in their schools, and yet few studies have focused on how setting conditions specifically impact how special educators experience their role in the context of the whole workplace (Bettini et al., 2020).

Developing programs to support students with disabilities in an inclusive education setting must consider the universal application of specific practices that are effective for all learners (Shlasko & Pacheco, 2024). The implementation of co-teaching has been given more focus in recent years, as it reduces student-teacher ratios and employs two educators in the classroom with distinctive areas of expertise (Friend, 2008; Jones & Winters, 2023; Mofield, 2020). Nations making progress in supporting students with disabilities through inclusion and co-teaching (Canada, Finland, Singapore) make substantial investments in producing a well-prepared teacher, supporting the profession as it must exist today rather than the industrial model of education that has existed for over 100 years (Learning Policy Institute, 2023).

Today's challenge in education is to create strategies that can support individually appropriate teaching to produce high levels of success for diverse learners (Learning Policy Institute, 2023) through the collaboration and equitable responsibilities of special educators and general educators. Identifying specific instructional expectations embedded in the school culture will support special educators in addressing the most specific needs of students with disabilities rather than being seen as behavior support or "assistants" to the general educators in a school (Rosenberg & Anderson, 2021). Promoting shared responsibility and accountability for the success of all students is essential to build a school culture that nurtures special educators' sense

of belonging and wellbeing (Hanson & Kraft, 2024) and can overcome disparities in teacher perceptions about the important roles that both general educators and special educators play in the inclusive classroom (Erichsen & Reynolds, 2020; Friend, 2021; Jain & Ahmad, 2022).

### **Statement of the Problem**

The problem addressed in this study was that although special educators are essential members of a public school faculty, their feelings of belonging, efficacy, and perceptions of shared responsibility for the instruction and learning of students with disabilities are not well supported by the conditions in the school setting (Antoniou et al., 2023; Jones & Winters, 2023). Understanding relationships between a teacher's sense of belonging and the conditions in a school setting are important for special educators (Hanson & Kraft, 2024). Research addresses the importance of community, collaboration, and support to prevent attrition, but significant gaps remain in understanding the nuances in the lived experiences of special educators working in inclusion settings (Brunsting et al., 2023; Shakeel et al., 2022).

Studies of student sense of belonging has increased in recent years (Allen et al., 2021), yet teacher sense of belonging, perspectives of school staff, and cultivating shared responsibility for achievement of students with disabilities between special education and other colleagues received limited attention (Gourvennec et al., 2024). When students with disabilities are perceived as solely the responsibility of special educators, it creates a sense of isolation and disconnect from general educator colleagues. Additional research is needed on setting conditions, opportunities and barriers for collaboration, and specific supportive actions from administrators that promote positive school connections and sense of belonging for special education teachers (Erichsen & Reynolds, 2020; Hanson & Kraft, 2024; Mofield, 2020). This research study will contribute to the understanding of the perspectives of special education

teachers in inclusion settings supporting students with disabilities as it relates to perceptions of shared responsibility with general educator colleagues. The use of qualitative methods allowed the researcher to provide insight into the experiences of special educators in different inclusive settings, and how these experiences have influenced their sense of belonging, efficacy, and shared responsibility for student success.

### **Purpose of the Study**

The purpose of this qualitative case study was to identify strategies that can be leveraged to increase special educators' sense of belonging, efficacy, and shared responsibility in the workplace. A qualitative case study approach supported understanding of the participant's experiences and perspectives through rich descriptions provided during the data collection process (Creswell, 2008). The population for this study was Massachusetts special education teachers who are or have most recently been in a public school and assigned to seventh through 12<sup>th</sup> grade. Participants were recruited through purposive and snowball sampling; purposive sampling is used when researchers intend to select participants with certain characteristics (Creswell, 2008). Prior to conducting the study, copies of permission and consent forms were provided to Northcentral University's Institutional Review Board (IRB) for approval.

In Massachusetts, special education professionals include related services specialists who do not possess a teaching license or certification; this study will include only special educators who have attained certification or licensure provided by the Massachusetts Department of Elementary or Secondary Education (MA DESE). The original sample size chosen from the population of special educators was 15–20 participants. Recruitment was impacted by the receipt of IRB approval during the school year calendar. Expanded recruitment efforts and additional weeks of data collection and interviewing, along with IRB approval for expanding the

geographic region for data collection resulted in data collection from 10 participants. is expected to take approximately two weeks. Flyers, online postings, and scripted emails were created and distributed, and included an explanation of the study, eligibility criteria, and contact information for the researcher. Professional affiliations and organizations gave permission to utilize their email lists for distribution of recruitment materials. Copies of recruitment materials were also provided to special educators through administrators or department heads who were aware of the research study through these professional organizations or from accessing the information on public social media sites.

Data collection took place over 20 weeks. Open-ended questionnaires, virtual meetings to answer questions through individually-scheduled, semi-structured interviews, and post-interview journal responses were the instruments for collecting data and conducting triangulation during data analysis. Consent forms were provided to each participant before participating in each stage of the data collection.

Semi-structured interviews collected data while allowing the researcher to ask additional questions that deepened and expanded the narrative provided by participants, and to allow for clarification to participant's responses as needed (Yin, 2017). Interviews were recorded using Zoom virtual meeting platform, and scripted questions to initiate dialogue were used. Interviews were recorded and digitally transcribed. To protect anonymity, participants were assigned an identification number (pseudonym). Following the interview, participants received a journaling prompt in the form of an online questionnaire, which was returned to the researcher.

Transcription of interviews was completed through the built-in application of the Zoom platform.

Member checking was used to ensure accuracy and trustworthiness criteria are met, by providing

each participant with a copy of the transcription (Thomas, 2017). Edits resulting from the participants' review of the transcripts were completed prior to analysis.

Thematic analysis involves systematically organizing and interpreting patterns or themes within the data (Braun & Clarke, 2021). Inductive coding was conducted based on the data itself, using Braun and Clarke's (2021) reflexive thematic analysis. Codes and themes were generated after multiple reviews of the data, leading to establishing and reviewing the presence of codes and themes. Coding schemes were developed with each review of the transcripts, and the coded data were refined in each review for recurring themes, including both positive and negative perspectives and experiences (Elliot, 2018).

Review of the data took place only after establishing data saturation, when no new information or insights from participant responses from the collection instruments emerge or are identified (Bloomberg & Volpe, 2019). Hennink and Kaiser (2021) noted that saturation of data for qualitative studies becomes evident within a range of nine to 17 interviews. The sample size of 10 for this study was sufficient to reach saturation. Qualitative analysis of survey and interview data involves a more interpretive and in-depth examination of the content, context, and meaning within the data, and emphasizes the subjective interpretation of data, aiming to provide rich descriptions and nuanced insights into individuals' perspectives and experiences (Bloomberg, 2023; Elliot, 2018). Through this inquiry, a deeper understanding of the challenges and opportunities within inclusion classrooms can be gained, informing strategies to support special education teachers in their vital roles.

Understanding the perspectives of special educators about the setting conditions, responsibilities as educators and advocates for students with disabilities, and their views about their efficacy in the school setting (Shakeel et al., 2022) is necessary to be able to consider

improvements to conditions that impact the work of special educators. The study's significance will shape education. Deeper knowledge of the experiences and challenges faced by special educators may encourage administrative change in policies, support, and classroom dynamics that disproportionately impact them compared to their general educator colleagues (Antoniou et al., 2023; Robinson et al., 2019).

### **Research Questions**

This study sought to understand the experiences and perspectives of special educators working in public secondary schools. Specifically, this qualitative descriptive case study explored how Massachusetts special educators in secondary schools (Grades 7–12) describe the influence of different inclusion classroom settings and teaching conditions, and their interactions with colleagues on their sense of belonging and shapes their perceptions of efficacy and shared responsibility. Following are the questions that drove this study.

#### ***RQ1***

How do special education teachers describe the influence of different inclusion classroom settings and teaching conditions on their sense of belonging, efficacy, and perceptions of shared responsibility with general educators for the learning of students with disabilities?

#### ***RQ2***

How do special education teachers perceive the influence of interactions with general education colleagues on their sense of belonging?

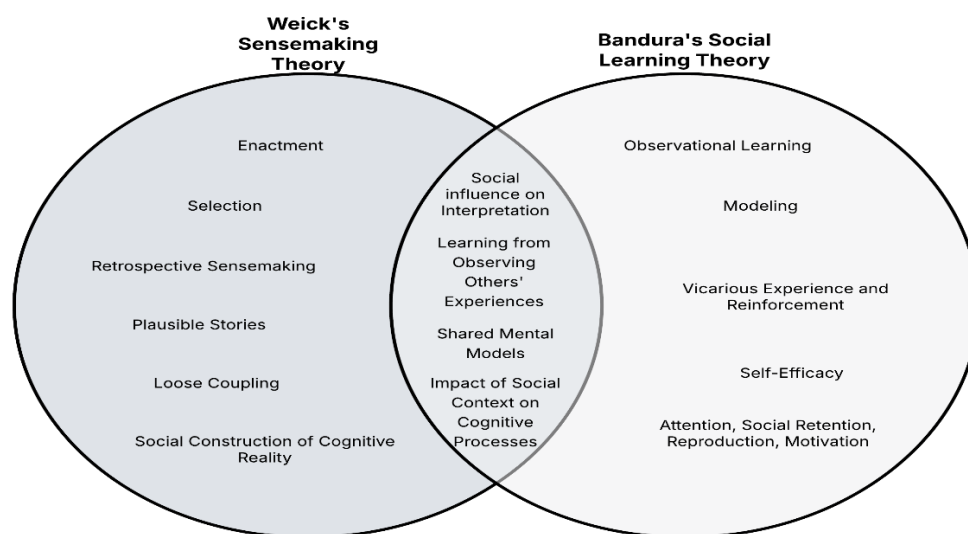
#### ***RQ3***

What strategies can be leveraged to increase special educators' sense of belonging, efficacy, and shared responsibility in the workplace?

## Theoretical Framework

Social learning theory (SLT; Bandura, 1977) and Weick's (1995) sensemaking theory provided a framework for this study. These theories allowed the researcher to develop data collection tools that captured the experiences of special education teachers related to feelings of belonging, self-efficacy, and shared responsibility with general educators for the support and achievement of students with disabilities. Bandura (1977, 1986) developed and refined SLT and posited that one's self-efficacy is developed as they are guided by personal beliefs of their own capabilities and based on what each person thinks and behaves (Bandura, 1986). Social learning theory emphasizes the importance of observational learning, social experience, and reciprocal determinism in shaping human behavior and motivation. It could be used to examine how teachers' sense of self-efficacy and perceived shared responsibility within an inclusive setting influence their commitment to teaching in such environments (Sharma & Pace, 2019).

**Figure 1**  
*Theoretical Framework*



Research supports the idea that teachers' self-efficacy impacts their ability to implement effective inclusion strategies, which positively impact students in special education (Sharma et

al., 2012; Vostal et al., 2022). SLT can be used to examine the setting conditions in public schools, and the perceptions and beliefs participants have because of people's behaviors or interactions in classrooms and other environments throughout a teacher's school experience (Bandura, 1986). Bandura's SLT provided a useful framework for understanding the disparities in self-efficacy between special education and general education teachers in inclusive settings.

Weick's (1995) sensemaking theory offered a filter for understanding how special educators perceive their shared responsibility with general educators for student achievement, particularly within the contextual setting conditions they operate. Incorporating Bandura's (1977) concept of self-efficacy, sensemaking theory provided a broader framework for how individuals interpret experiences through an ongoing process of action, selection, and interpretation to develop plausible explanations that motivate further action (Turner et al., 2023). Sensemaking theory provides a lens to consider how special educators make sense of their roles and responsibilities based on past experiences, interactions with general educators, and the historical context of inclusion efforts (Weick, 1995). Further, the combined consideration of self-efficacy may provide insight to how special educators shape their professional identities and subjective views of shared responsibility for ensuring student success based on both setting conditions and personal perceptions (Bandura, 1977; Turner et al., 2023; Weick, 1995).

## **Definitions of Key Terms**

### ***Administrative Support***

Administrative personnel provide support at the building or district level (principals, directors, superintendents, and others) in the form of resources, guidance, and assistance to facilitate the effective functioning of an organization, institution, or specific initiatives (Bozonelos, 2008).

### ***Co-Teaching***

Co-teaching is an instructional approach where two or more educators with complementary skills collaborate to plan, instruct, and assess students in a single classroom (Friend & Cook, 2013).

### ***Collaboration***

Collaboration is the process of working together to achieve a common goal. In education, it involves teachers, specialists, and families working together to support student learning (National Center for Collaboration, 2023).

### ***General Educator***

A general educator is a professional teacher trained to provide instruction and support to students in various subjects and abilities. General educators typically work with students with or without specific disabilities and are responsible for delivering inclusive and differentiated instruction (Chatzigeorgiadou & Barouta, 2021; Pellegrino et al., 2015).

### ***Highly Qualified Teacher (HQT)***

In Massachusetts, a highly qualified teacher (HQT) is a teacher who possesses a bachelor's degree, possesses a Massachusetts teaching license at any level, and has demonstrated subject matter competency in each of the core subjects they teach using specific options outlined in the federal legislation (Driscoll, 2006).

### ***Inclusive Settings***

Inclusive settings are educational or social environments that embrace and accommodate diversity, active participation, engagement, and belonging of individuals from various backgrounds, abilities, and characteristics. Promotes equitable opportunities for all (Coleman et al., 2023; Chatzigeorgiadou & Barouta, 2021).

***Individualized Education Plan (IEP)***

An IEP is a legal document that outlines the specific needs of a student with a disability and the services they will receive to ensure they can access the general education curriculum (IDEA, 2004).

***Pull-Out or Small Group Support***

Pull-out or small group support is a service delivery model where students with disabilities are removed from the general education classroom for targeted instruction in a separate setting with a specialist (Understood.org, 2023).

***Push-In Support***

Push-in support is a service delivery model where a specialist (e.g., special education teacher, reading specialist) supports students with disabilities within the general education classroom (Understood.org, 2023).

***Self-Efficacy***

Self-efficacy is an individual's belief in their ability to successfully perform specific tasks or achieve goals (Viel-Ruma et al., 2010), and confidence in one's skills, knowledge, and capabilities to overcome challenges (Shakeel et al., 2022).

***Sense of Belonging***

Sense of belonging is the feeling or perception of being connected to the school community and supported by colleagues and administrators (Hanson & Kraft, 2024); being accepted, valued, and connected to a particular group, community, or environment (Jones et al., 2019).

***Setting Conditions***

Setting conditions are district, school, and classroom environments that foster specific outcomes, behaviors, or experiences. Includes physical, social, or instructional conditions in each setting. Also known as working conditions (Brunsting et al., 2023; Stefanidis et al., 2019).

### ***Shared Responsibility***

Shared responsibility is the collaborative and equitable distribution of tasks, duties, and obligations among individuals or groups (Walker et al., 2021) within a community, organization, or team.

### ***Special Educator***

A special educator is a trained professional who specializes in providing educational support and services to students with disabilities addresses the unique learning needs of students with diverse abilities and creates individualized plans to facilitate their academic and social development (Chatzigeorgiadou & Barouta, 2021; Pellegrino et al., 2015).

### ***Student Advocacy***

Student advocacy is the active and intentional support, promotion, and defense of students' rights, needs, and well-being. It involves actions taken by individuals or groups to ensure that students receive fair treatment, equal opportunities, and a supportive educational environment (Murawski & Hughes, 2021).

### ***Students With Disabilities (SWD)***

Students with disabilities (SWD) are individuals who have physical, cognitive, sensory, emotional, or developmental impairments that may impact their ability to fully participate in traditional educational activities without additional support or accommodations (IDEA, 2004).

## Review of the Literature

The purpose of this qualitative study is to understand how public school special education teachers in secondary (7-12<sup>th</sup> grades) schools in Central Massachusetts describe the influence of public school-based settings and teaching conditions on their sense of belonging, shapes their perceptions of efficacy and contributes to a feeling of shared responsibility with their general education colleagues and school and district administrators. Brunsting (et al., 2023). extensively examined factors impacting teachers' career decisions, with special educators facing unique challenges due to misaligned expectations and philosophy affecting retention. Understanding the importance of setting conditions and collegial interactions on special educators' sense of belonging and efficacy remains to be seen. This research seeks to provide insights that can inform targeted interventions and improvements, understand the factors that facilitate or hinder shared responsibility, and enhance the inclusive educational experience for students with diverse learning needs.

The development of this literature review involved the use of several search engines and databases. Key terms, phrases, and concepts were part of the search to identify applicable information. Use of academic databases and search engines included EBSCOhost, ERIC, Academic Search, ProQuest, and NavigatorSearch. For information on Massachusetts laws and regulations, a search of the Massachusetts Department of Elementary and Secondary Education (MA DESE) and the State of Massachusetts government (mass.gov) was accessed. The following key terms were used to identify and access and obtain information: *special educator, co-teaching, co-teaching practices, sense of belonging, administrative support, inclusive education, inclusive settings, students with disabilities, self-efficacy, shared responsibility, parity, IDEA, professional development (PD), universal practices, parity, and general educator knowledge.*

Each applicable resource has contributed to the descriptions and concerns outlined in the literature review.

In 2021–2022, the number of students ages 3–21 who received special education and/or related services under IDEA was 15% of all public-school students, equaling 7.3 million students (National Center for Education 21 Statistics, 2023). Inclusive settings have been mandated in public schools for almost 50 years, since the signing of Education for All Handicapped Children Act (E.H.C.A.) in 1975, and more defined and promoted through the comprehensive details of IDEA enacted in 1990 and revised in 2004 (USDOE, 2024). Since then, schools' inclusive practices have evolved, allowing for equal access to school experiences and increased accommodation for students with and without disabilities. Collaboration between educators is essential to promoting inclusive settings in public schools, and supporting students in an inclusive classroom requires focusing on general and special educators' role in creating environments that allow students with disabilities to learn alongside non-disabled peers (Alabdallat et al., 2021; Lyons, 2016). However, professional development offerings rarely include a sense of urgency around changing the professional practice of teachers and other educators to promote a shared vision supported by educators and administrators within the school and the school district (Friend, 2007; Hansen et al., 2020).

It is known that the collaboration of numerous educators with different skills and strengths is crucial to a shared vision for inclusive settings (Friend, 2007), and research by Brunsting (et al., 2023) found that special education teachers with access to planning time with colleagues felt higher levels of personal and collective accomplishment. Planning time that sufficiently mediates workload responsibilities is critical in lowering burnout for special education teachers. Chatzigeorgiadou and Barouta (2021) revealed that special education

teachers reported their limited access to time with colleagues, which resulted in feelings of diminished importance and ability to be included in the development of materials or access to resources essential for the instruction of students with disabilities. Across multiple studies, prior research has pointed to a lack of sufficient and productive planning time, individually or with colleagues, as potentially having the most significant impact on burnout and decisions to leave the role (Johnson & Jones, 2021; Jones & Winters, 2023; O'Brien et al., 2019).

The high attrition rates among special education teachers are a cause for concern, as they can negatively impact the quality of education provided to students with disabilities (Rosenberg & Anderson, 2021). The loss of highly qualified special educators at the secondary level hinders not only the success of students with disabilities but may impact the accepting attitudes of peers and general educators towards those students in an inclusive classroom (Yuwono & Okech, 2021). To address, and reverse, the number of special educator vacancies due to teacher attrition or lower numbers of new teachers in the field, it is crucial to understand that prior to experiencing burnout, special educators are exposed to many underlying factors that can impact their feelings of belonging and well-being (Brunsting et al., 2023). These underlying factors, or setting conditions, are common to all schools yet specific to schools in the same district and from one neighboring district to another (Hanson & Kraft, 2024). The unique combination of factors contributes to an individual teacher's sense of belonging and efficacy.

Studies highlight the significant predictive power of shared responsibility for student success (Gourvenec et al., 2024; Mofield, 2020) in co-teaching partnerships, though most of the research has focused on the pairings of general educators with other general educators or with teachers of gifted and talented students. Gourvenec et al. (2024) determined that limited role definition and unequal distribution of responsibility between collaborating teachers impacted

instructional planning and task perception; however, this study focused on the pairing of two general education teachers and overlooked the constraints facing special education teachers whose position may have significantly predefined roles. Mofield's (2020) research on collaboration between gifted education teachers and general educators identified benefits of dedicated time for planning and developing instructional strategies, including growth in teacher competencies and in student learning.

### ***Evolution of United States Special Education Policy***

The history of inclusive practices for students with disabilities in public schools has grown from the early 20th century to the present day, and reflects shifts in educational philosophy, legislation, and practice. Educational exclusion of students with disabilities from public education can be traced back to the late 1800's when, in 1893, the Massachusetts Supreme Court upheld the expulsion of a student solely based on poor academic performance, setting a precedent for the exclusion of those deemed unfit for traditional education (Smith, 2004; Yell et al., 1998). As evidenced by a 1919 Wisconsin Supreme Court ruling that denied education to a child with cerebral palsy, citing the negative impact of his presence on others (Smith, 2004), this practice was widespread.

The *Brown v. Board of Education* (1954) decision reshaped educational access. Although it addressed racial segregation, its implications extended to students with disabilities by establishing the principle that segregation in education is inherently unequal. The outcome of this case later empowered advocates for students with disabilities to argue for their right to a public education (Esteves & Rao, 2008). The Civil Rights Movement of the 1960's furthered change efforts. The Elementary and Secondary Education Act (ESEA) of 1965 began federal funding for public education, which was expanded in 1966 to include provisions for students with disabilities

(National Center for Education Statistics, 2017). However, it was the E.H.C.A. (1975; Public Law 94-142) that mandated free appropriate public education (FAPE) for all children with disabilities, marking a significant shift towards inclusion in educational settings (Pulliam & Van Patten, 2006). The E.H.C.A. was later reauthorized as IDEA, which reinforced the requirement for educating students with disabilities in the least restrictive environment (U.S. Department of Education, 2020). The 1997 reauthorization emphasized inclusion, encouraging collaboration between general and special education teachers (Full Inclusion for Catholic Schools, 2024). The Americans with Disabilities Act (ADA) of 1990 further solidified these rights, ensuring equal access to education and public spaces for individuals with disabilities (GIVE Guide, 2021).

In Massachusetts, state regulations were the model for federal legislation (IDEA, 2004), emphasizing the right of students with disabilities to receive an education alongside their peers (Griffin, 2020). The state's commitment to inclusive practices has been reinforced through various initiatives aimed at improving educational outcomes for all students, regardless of their abilities (Massachusetts DESE, 2022). Massachusetts has made comprehensive enhancements over the last 30 years that often expand federal mandates, including the Education Reform Act of 1993, the Achievement Gap Act of 2010, and the 2019 Student Opportunity Act (Griffin, 2020). These pieces of legislation have contributed to the state being ranked first in education across in the United States (Ellin, 2023). Despite these advancements, educators often grapple with balancing the needs of diverse learners within inclusive settings, and persistent stereotypes about disabilities impact implementation of inclusive practices (Duncan, 2015).

### ***Foundation and Purpose of Inclusive Education***

The primary goal of inclusive education is to create equitable learning environments that foster the academic, social, and emotional development of all students (Booth & Ainscow, 2011).

Florian and Wanless (2020) noted that this pedagogical approach requires a systemic willingness to embrace culture, curriculum, and instruction that promotes a sense of support, value and belonging for all students. Research emphasizes its role in enhancing the educational outcomes of students with disabilities (Scruggs & Mastropieri, 2019), promoting social inclusion and reducing stigma (Avramidis & Bayliss, 2019), and cultivating positive attitudes towards diversity (Florian, 2021). Moreover, inclusive education prepares students to become active and engaged citizens in a diverse society (UNESCO, 2017).

IDEA mandates that students with disabilities receive a Free and Appropriate Public Education (FAPE) in the Least Restrictive Environment (U.S. Department of Education, 2020). IDEA emphasizes the importance of educating students with disabilities alongside their peers to the maximum extent possible, but current legislation stops short of requiring or mandating a fully inclusive model of instruction for students with disabilities. The Rehabilitation Act of 1973, a civil rights law that includes Section 504, prohibits discrimination against individuals with disabilities in programs receiving federal funding, including schools (U.S. Department of Education, 2021).

Challenges and inconsistencies persist in the field of inclusive education. Research continues to grapple with defining and measuring the core components of inclusive education (Florian & Wanless, 2020). Ferri and Connor (2021) posit there remains a need for more rigorous studies examining the long-term outcomes of inclusive education. While the importance of teacher preparation is widely acknowledged, there is limited research on how to build the capacity of educators to implement inclusive practices (Darling-Hammond, Wei, & Sykes, 2019).

### ***Massachusetts As a Leader in Education***

Massachusetts, the location in which the study will be conducted, has been identified as "first in the nation" for student performance and success (Ellin, 2023) and consistently in the top five states, overall, when comparing educational systems, programs, and educator preparation. Prior research in Massachusetts indicated that students with disabilities who participate in inclusive environments were more likely to graduate on time and to gain employment compared to disabled students learning in other classroom settings (National Center for Learning Disabilities - NCLD, 2020). This research did not specify the methodology of instruction, nor did it note the presence of special educators providing support in those settings, even when it is known that special education teachers play a crucial role in fostering inclusive learning environments (Bettini et al, 2016, Coleman et al., 2023).

The merits of inclusive educational practices are no longer a major debate in public education, though roadblocks and differences in perception regarding the practical application and implementation of inclusive practices persist (Kart & Kart, 2021). The evolution of inclusive classroom practices in Massachusetts public schools is significantly influenced by a complex interplay of federal and state laws, along with educational and instructional developments (Jones & Winters, 2023). Federal legislation, such as IDEA, has served as a cornerstone for mandating free and appropriate public education (FAPE) for all students with disabilities, including the principle of least restrictive environment (LRE) (IDEA, 2004). Interpretation and implementation of IDEA have varied across states, and Massachusetts has enacted its own regulations and policies to further specify requirements for inclusive education, such as Chapter 71B (Massachusetts General Laws, 2022). Though legal frameworks promote inclusive education, challenges such as resource allocation, teacher preparation, and teacher motivation and skills continue to hinder full implementation (Dignath et al., 2022; Mofield, 2020).

Research in the past five years has highlighted the importance of Universal Design for Learning (UDL) as a framework for creating inclusive classrooms (Hall et al., 2012; Meyer et al., 2019). UDL focuses on designing curriculum and instruction to meet the needs of all learners, including those with disabilities. The role of teacher preparation and professional development has emerged as a critical factor in successful inclusion. Studies have shown that teachers who possess adequate knowledge and skills in inclusive practices are more likely to create supportive learning environments (Darling-Hammond et al., 2021; Rasmitadila et al., 2023).

Instructional practices that promote inclusion gained prominence in Massachusetts (Jones & Winters, 2023) including use of universally designed instruction and co-teaching. Factors such as class size, limited resources, and standardized testing pressures have been identified as obstacles to effective inclusion (Dignath et al., 2022; Rasmitadila et al., 2023). Integration of co-teaching strategies continues to be a consideration for fostering inclusive education in Massachusetts schools (Jones & Winters, 2023) and teachers in public schools must determine how to meet state and federal mandates related to the educational practices that support students with disabilities (Rasmitadila et al., 2023).

Almost 20% of students enrolled in Massachusetts schools are receiving special education services (Schaeffer, 2020). The conditions and opportunities within public school settings for Massachusetts special educators may significantly influence their sense of belonging and commitment to the profession. The decreasing number of available special education teachers in public schools is a complex problem influenced by numerous factors, including job satisfaction, workload, administrative support, student needs, and individual experiences (Brunsting et al., 2023). The comparison of data between the national average and the average

for Massachusetts provides valuable insight into many of the concerns related to this study. The availability of state data related to special educators and students with disabilities plays a crucial role in understanding, assessing, and improving conditions that impact special educators in Massachusetts schools.

### ***COVID-19 Pandemic Impacts on Special Education Delivery and Special Educators***

The COVID-19 pandemic, which initiated school closures in March 2020, has had lasting impacts in the years that followed students returning to schools, presenting significant challenges for students with disabilities compared to their non-disabled peers (Sims et al., 2023). Potential overreliance on the eligibility determination process for special education persisted during the pandemic, and use of remote learning increased challenges for providing appropriate support for students with disabilities (Mendoza et al., 2022). School districts, still obligated to perform evaluations and provide special education and related services (Jameson et al., 2020), provided services to varying degrees and success through virtual learning (Parmigiani et al., 2021; Yakut, 2021).

Special education teachers and related service providers had to shift to remote or hybrid learning models for students with little guidance or support (Womack & Monteiro, 2023) without sufficient guidance from state agencies and limited support from administration at the local level (Gordon et al., 2020). Herman's (et al., 2023) research presented evidence that special educators experienced limited support from colleagues and administrators and felt greater loss in accomplishments. Womack and Monteiro (2023) found a negative association between remote learning and special educator's feelings of support and connection with other colleagues and personnel, and a negative belief in their ability to be successful in working with students with disabilities. Though special educators reported that virtual meetings with stakeholders for IEP

meetings and consultation were effective and, in some cases, preferred (Steed et al., 2021), Jenkins and Walker (2021) posited that school psychologists and special educators found the administration of assessments to be a challenge compared to face-to-face testing and limiting in terms of their choice of assessment tools. As noted by Petrie (2020), the conditions faced by special educators in their work with students with disabilities during the COVID-19 pandemic likely had negative impacts on their well-being and feelings of efficacy.

### ***Lack of Understanding from General Educators and Administrators***

Studies highlight the challenges faced by special educators in inclusive classrooms and the lack of understanding from general educators and administrators. Johnson and Jones (2021) noted that special educators across the United States experience stress, including feelings of powerlessness, not reported by general education teachers. Robinson et al. (2019) found that when special educators do not experience administrative support or perceive that an administrator does not understand their role, they experience a sense of depersonalization that impacts feelings of burnout. Administrators may have limited understanding of special educator roles and how to support them (Mason-Williams et al., 2020) when directing or creating practices or school-wide structures.

Both Bettini (et al., 2020; Billingsley & Bettini, 2019) and Herman (et al., 2023) note the importance of administrative support for special educators increases when collegial support is weak, and the extent to which an administrator addresses perceptions of fairness, equitable procedures and practices, and provides for collaboration and planning time influences special educator sense of belonging and promotes strong professional growth. The presence of knowledgeable school administrators, who are visible and actively engaged with special

educators, promotes both efficacy and a desire for teachers to remain in the role (Ryan, M., & Stites, 2020).

Contrary to non-practitioner beliefs, teachers do not report day-to-day-occupational stress as a leading indicator of job dissatisfaction (Jain & Ahmad, 2022). Instead, depersonalization, lack of support, or lack of perceived accomplishment (Kirk et al., 2021; Robinson et al., 2019) are among the conditions most often reported by special educators when addressing a lack of connection with their colleagues or their work (Hanson & Kraft, 2024). Access to supportive relationships with colleagues and administrators, understanding of the workload and responsibilities specific to special education teacher positions, and opportunities (or lack thereof) for professional growth and advancement all influence decisions special education teachers make about staying or leaving a position in a school (Bozonelos, 2008; Kirk et al., 2021).

Special educators are more directly seen as responsible for maintaining compliance with state and federal regulations, leading to what other researchers have referred to as the “paperwork paradox” that diminishes special educator sense of connection to students and disproportionately diverts time away from instruction of students and toward completing compliance tasks (Williams et al., 2023). Ruppert (et al., 2024) noted a link between workload and special educator perception of efficacy. Moreover, special education teachers experience school day-to-day work differently than their general education colleagues (O'Brien et al., 2019) and the challenges in fostering an inclusive environment to support the diverse needs of students with disabilities is often assigned to or perceived solely as the responsibility of the special educator (Antoniou et al., 2023; Mofield, 2020; O'Brien et al., 2019).

Special education teachers also play an essential role in building inclusive experiences for students with disabilities (Willard, 2019), and the ability to share the responsibility and

accountability for the inclusion of students with disabilities with general educator colleagues is not always met with collaboration or support (Hanson & Kraft, 2024). Insufficient support from general educators in classroom settings especially managing increased (negative) student behavior, combined with expectations that special educators maintain primary responsibility for instruction of students with disabilities, as reported by Soini (et al., 2019) increases the disconnect between colleagues and limits the ability to establish a collaborative relationship between educators working in the same classroom.

### ***Co-Teaching and Push-In/Pull-Out Inclusion Settings***

Several studies have explored co-teaching and push-in/pull-out inclusion settings. Antoniou et al. (2023) highlighted that in many areas of Europe, students with special needs are increasingly placed in special schools or homeschooled, in opposition to European Union guidelines for mainstreaming students with disabilities. Jones and Winters (2023) found that the inclusive classroom, a general education classroom where students with disabilities learn alongside non-disabled peers, is encouraged by the Massachusetts Department of Elementary and Secondary Education (MA DESE), but there is no statewide initiative. Schools typically offer a combination of co-taught and single teacher taught classrooms, with co-taught classrooms having multiple teachers assigned to a single class in the same year (Battaglia & Brooks, 2019; Jones & Winters, 2023). Gourvennec et al. (2024) noted that while the importance of parity/shared responsibility in co-teaching is more supported by theory than practice, research is limited on the degree of shared responsibility between two teachers and its impact on student achievement. Research seems to indicate that co-teaching may utilize the special educator in a diminished or devalued role (Chatzigeorgiadou & Barouta, 2021), even though it is considered a highly

effective evidence-based practice for supporting students with disabilities in an inclusion setting (Berry, 2021; King-Sears et al., 2021).

Co-teaching is employed in one of six models, based on the relationship between the educators and the needs of the students (Chitiyo, 2017). The co-teaching approach has six commonly recognizable models of instruction: one teach/one assist, station teaching, parallel teaching, alternative teaching, one teach/one observe, and team teaching (Friend et al., 2010). In the one teach/one observe approach, while one teacher delivers instruction, the other observes student performance and gathers data on specific learning goals, particularly for students with disabilities as outlined in their Individualized Education Programs (IEPs, Friend & Bursuck, 2011). In the station teaching model, both teachers take on instructional roles at different stations. One station might focus on core content delivery, another on differentiated instruction for students with disabilities based on their IEP goals, and the third could be an independent practice station (Friend & Cook, 2013). In parallel teaching, the class is divided, and both teachers present the same content simultaneously (Friend & Bursuck, 2011). The special educator might present the material in a way that caters to the specific needs of students with disabilities, while the general educator delivers the content to the rest of the class (Friend et al., 2010). Alternative teaching involves one teacher leading large-group instruction, while the other provides targeted support or enrichment activities in smaller groups. This allows the special educator to directly address the IEP goals of students with disabilities in a more focused setting, while the general educator continues the lesson for the whole class (Friend & Cook, 2013). Team teaching encourages teacher collaboration on lesson delivery, presenting information, offering different perspectives, or demonstrating various problem-solving approaches (Friend & Cook, 2013; Friend et al., 2010). In the one teach/one assist model, one teacher delivers instruction,

while the other circulates around the classroom, providing individual or small group support to students who need it (Friend & Cook, 2013).

The concern around fidelity of implementation of co-teaching in secondary academic courses stems from several factors (Johnson et al., 2022). Firstly, co-teaching research has primarily focused on elementary settings, leaving a gap in understanding its implementation at the secondary level (Johnson et al., 2022; Woodcock & Woolfson, 2019). Secondly, secondary teachers are content specialists, which can create challenges in sharing pedagogical responsibilities and developing a true co-teaching partnership (Johnson et al., 2022). Secondary schools are organized by departments, which can hinder collaboration and planning time for co-teachers compared to partnerships at the elementary level (Willard, 2019).

Effective co-teaching requires extensive training, administrative support, and ongoing professional development, which are often lacking in secondary schools (Shoulders & Krei, 2016). Lack of fidelity, coupled with pre-existing perceptions among some general education teachers that special educators are not equal partners in co-teaching, can lead to a dynamic where the general education teacher takes the lead while the special education teacher provides support (Willard, 2019). This reinforces a perception of an unequal partnership and impacts the potential positive outcomes of co-teaching (Chatzigeorgiadou & Barouta, 2021). Collaborative strategies and equal partnerships are crucial for providing effective instruction and successful experiences in a co-taught classroom (Sileo, 2021).

### ***Insufficient/Inadequate Professional Development and Collaboration Time***

Multiple studies highlighted the issue of insufficient or inadequate professional development and collaboration for special educators, and generally, there is limited support and resources to implement highly effective practices, including co-teaching (Chitiyo, 2017,

Woodcock & Woolfson, 2019). Johnson and Jones (2021) found that some malleability exists for self-efficacy when teachers participate in professional development and preparation programs. Antoniou et al. (2023) noted that special education teachers feel deprived of necessary psycho-emotional resources to manage behavior problems of students. Robinson et al. (2019) stated that job satisfaction increases when the school or district provides targeted and meaningful professional development related to special education, including legal topics, evidence-based practices, and technology.

Research by Brunsting et al. (2023) found that special education teachers with access to planning time with colleagues felt higher levels of personal and collective accomplishment and that planning time that sufficiently mediates workload responsibilities is a critical factor in lowering burnout for special education teachers, Chatzigeorgiadou and Barouta, (2021) revealed special education teachers reported their limited access to time with colleagues resulted in feelings of diminished importance and ability to be included in the development of materials or access to resources essential for instruction of students with disabilities.

Across multiple studies, prior research has pointed to a lack of sufficient and productive planning time, individually or with colleagues, as potentially having the most significant impact (Brunsting et al., 2023; Chatzigeorgiadou & Barouta, 2021) on special educator feelings of belonging. School and district leaders who recognize the importance of collaboration and relationship building in building capacity for instruction for all students can use knowledge of factors related to skills, age, and personality to determine more beneficial teaching teams and guide practices that include more student advocacy in scheduling courses and services with the help of a special educator (Stefanidis et al., 2019).

O'Brien et al. (2019) emphasized the importance of professional development opportunities that allow for instructionally focused work with colleagues, which improves overall teacher effectiveness and increases a sense of efficacy. Leko (et al., 2020) found that collaborative structures, such as professional learning communities (PLCs) are essential for building educator self-efficacy. Opportunities for professional development (PD) training with general educators on practices to support students with disabilities are crucial for developing and maintaining a sense of equity and equal footing for special education teachers and their general education colleagues. Professional development opportunities that allow for instructional-focused work with colleagues improve overall teacher effectiveness and increase the sense of efficacy (O'Brien et al., 2019) for both special educators and general educators. Research into providing classroom autonomy for special education teachers in substantially separate special education settings does not guarantee a sense of collaboration or shared decision-making (Brunsting et al., 2023), but little research exists to compare this to experiences of special educators in inclusive settings.

### ***Knowledge Gap About Supporting Students with Disabilities***

Studies discussed the knowledge gap about supporting students with disabilities. O'Brien et al. (2019) found that many general education teachers are not able to state or provide evidence of understanding what special education teachers do or what the role provides or mandates. General education teachers often need help to provide evidence of understanding of what special education teachers do (what the role provides or mandates) (O'Brien et al., 2019; Shoulders & Krei, 2016). Understanding the legal and professional obligations for educating students with disabilities is vital not only for special education teachers, but for the entire school community, because all teachers are held accountable for the mandates outlined in state and federal

regulations (Obviator et al., 2012). While special education teachers may be the primary responsible party for compliance, all educators are responsible for student success.

Murawski and Hughes (2021) noted that any support, co-teaching or otherwise, that involves a special education teacher brings a variety of essential skills that general educators and all students benefit from to the relationship. Because students will sense and respond to power or responsibility differences between teachers, a collaborative teaching relationship is essential to eliminate any perception that one teacher's role is "less than" another teacher within the classroom (Battaglia & Brooks, 2019; Stefanidis et al., 2019). The advocacy role of special education teachers deserves greater exploration, as most of the research has addressed the negative perception of inclusion-setting effectiveness by general educators (Chatzigeorgiadou & Barouta, 2021) but not the outcomes related to special education teacher advocacy and outcomes in an inclusion setting.

Griffith (et al., 2019) highlights several challenges that disproportionately impact special educators in co-teaching environments. These include general education teachers feeling territorial about instruction in a mainstream classroom, and the lack of knowledge over legal requirements for including students with disabilities. Griffith's study identifies a lack of qualified inclusion staff, placing extra pressure on special educators, including how insufficient training for successful co-teaching creates an additional burden for special educators who may need to take the lead in developing these collaborative skills.

Current findings indicate that general educators are more concerned with inclusive practices for students with low-to-moderate learning disabilities but have a negative attitude about inclusion for students with emotional or behavioral disabilities (O'Brien et al., 2019). DeMik's (2008) early research found that when special education teachers perceive that, a

general educator does not demonstrate shared understanding and responsibility for the success of students with disabilities in the general education classroom, special educators find themselves serving as both a tutor for students with disabilities and an advocate for more effective opportunities for inclusion where students felt both accepted and comfortable. Fink Chorzempa (et al., 2019) emphasizes the magnified role of special educators in co-teaching settings that extends beyond collecting data in the classroom.

Special educators shoulder the responsibility of designing curriculum adaptations, interventions, and individualized instruction for students with disabilities (Accardo & Finnegan, 2019), ensuring alignment with each student's education plans and strict adherence to legal mandates. Differences in expectations for special educators, both from colleagues and administrators, influence special educator well-being, leading to lower feelings of efficacy and accomplishment (Herman et al., 2023), while fairness and equity in working conditions for special educators with their colleagues promotes a stronger support network and a safer and more effective teaching and learning environment for all students (Bettini et al., 2020; Herman et al., 2023; Scott et al., 2022).

### ***Efficacy, Shared Responsibility, Sense of Belonging***

Several studies explored the themes of efficacy, shared responsibility, and a sense of belonging for special educators. Johnson and Jones (2021) noted that a lack of shared values between teachers and the school is negatively associated with self-efficacy, and self-efficacy is impacted by school climate. Hanson and Kraft (2024) highlighted that a school culture that nurtures a teacher's sense of belonging and wellbeing can help overcome barriers, and the one-teacher per classroom model puts special educators at risk for isolation by limiting interactions between colleagues. Gourvenec (et al., 2024) found that an unequal distribution of

responsibilities between teachers is connected to low performance in classrooms. Shakeel (et al., 2022) linked a teacher's self-efficacy to their sense of belonging and how it is impacted by their perception of opportunities and weaknesses within the school culture. Ritcher and Theoharis (2021) noted that general education teachers' understanding of inclusion practices can either support or hinder collaboration efforts with their colleagues. A teacher's self-efficacy is connected to how they feel this sense of belonging and is impacted by their perception of the opportunities and weaknesses that exist for them within the school culture (Shakeel et al., 2022).

Chatzingeorgiadou and Barouta (2021) indicated that general educators' negative attitudes toward students with severe disabilities impact the relationship between special education teachers and their general education colleagues and create unfavorable conditions in an inclusive classroom. Other research points to positive outcomes when general educators demonstrate shared responsibility for the success of students with disabilities, increasing special education teachers' sense of collective efficacy (Viel-Ruma et al., 2010). General educators often demonstrate conflicting attitudes about inclusion practices and create a challenging social and professional culture for special educator colleagues (Berry et al., 2020). Additionally, Brunsting (et al., 2023) found that the efficacy of special education teachers is linked to the availability to collaborate with paraprofessionals who support students with disabilities in academic settings, and the collaboration between colleagues is essential to a sense of belonging.

### **Ethical Assurances**

This study received approval from the University's Institutional Review Board (I.R.B.) prior to data collection and received approval from professional organizations to distribute recruitment flyers to their membership. Four key principles guided ethical research conduct: informed consent, assent, confidentiality, and anonymity (Bloomberg & Volpe, 2019). Informed

consent involved providing participants with comprehensive information about the study and obtaining their voluntary agreement to participate. Assent was necessary for participants who did not have the legal capacity to provide full consent, such as minors or individuals with cognitive impairments, and was accompanied by informed consent from a legal guardian. Because this study's participants were adult educators, assent was not a factor.

Confidentiality ensured participants' identities and data remained protected, which was particularly crucial in qualitative research where sensitive information was shared (Mertler, 2019). Confidentiality measures were taken during interviews and when reviewing journal entries. Anonymity involved keeping participants' identities untraceable, minimizing potential risks such as reputational harm or loss of privacy (Bloomberg, 2022; Mertler, 2019). Anonymity protections were applied to the initial data gathered through open-ended questionnaires. Given the location and interaction of participants outside of the study (due to workplace or home proximity to each other), anonymity and confidentiality were especially important. These principles ensured the ethical treatment of research participants and maintained the integrity of the research and applicability of the findings.

Ethical guidelines for researchers were based, in large part, on the statements in The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research (1978). The study kept ethical risks to a minimum because it did not implement or engage in experimental manipulations or interventions during data collection (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1978). Prior notice was provided to participants, outlining the nature and purpose of the study.

### ***Maintaining Ethical Integrity***

Providing clear, consistent, and frequent communication regarding the study and its purpose was one method to maintain integrity around the ethical considerations for participants (Mertler, 2019). This included providing detailed, jargon-free information in consent documents and in the verbal or written description or information provided (Berg, 1996; Mertler, 2019). Allowing time for questions from participants and clarifying the study when they indicated a need for more understanding was essential for ensuring the conditions of informed consent were met. Research documents and instructions also emphasized the voluntary nature of participation and included notice that participants could withdraw from the study at any time without penalty. Participant privacy and confidentiality were protected by:

- Eliminating names, schools, or employer identifying information from the final report/written record,
- Providing participants an opportunity to check and verify information that was collected during the study, and
- Following transcription, notes, recordings, or other physical records of participant data, which were saved for 3 years in a password-protected format, in accordance with I.R.B. requirements.

Disclosures regarding voluntary participation were provided to each participant at each point of contact or communication (Mertler, 2019), including:

- All aspects of participation were voluntary,
- Participants could withdraw at any point of the study without penalty, and
- Separate written permission was obtained for data collection using audio recording.

The researcher's key role was to gather the data and interpret the results. The researcher demonstrated reflexivity by including experiences with the research and experiences in the field

of special education and keeping an audit trail. Member checking was used to limit ambiguity or bias in the interpretation of data. All results were disclosed to promote honesty and prevent bias. Throughout the research process, a labeling or coding system was implemented to de-identify participants and their responses. Clear explanations of how participant data would be managed, stored, and used, including any potential risks of a breach of confidentiality, took place both at the beginning and end of participation (Bloomberg, 2023; Mertler, 2019), and explicit consent was obtained from participants regarding the use and dissemination of their data. Participants understood how their information would be used for research purposes and whether any identifying information would be disclosed. Maintaining participant confidentiality and anonymity and communicating around the areas of consent built trust, strengthened the rapport between participants and researchers, and increased the study's overall integrity (Bloomberg, 2022).

### **Summary**

Section 1 outlined the qualitative descriptive case study that was explored. It outlined the problem of decreasing numbers of special educators in public schools in the United States and underscored the persistent challenge of retaining qualified special education teachers within the public education system. The section presented research emphasizing the importance of sustaining current educators' commitment while also cultivating new practitioners. Special education teachers faced a balancing act between legal mandates and setting conducive classroom conditions, promoting the inclusion of students with disabilities while fostering shared responsibility among educators.

A significant challenge in public education today is retaining special educators, particularly within inclusive settings (Brunsting et al., 2023). While collaboration and supportive

school environments were known to be crucial factors (Rezaee et al., 2018), there is a critical need for deeper understanding of the perspectives of special educators that had developed from their work in these settings. This qualitative descriptive case study aimed to address this gap by exploring how inclusion practices influenced special educators' sense of belonging, self-efficacy, and perceived shared responsibility for student success (Mofield, 2020). Research indicated that positive working conditions, including collaboration and support, correlated with increased job satisfaction and retention among special educators. Disconnects between special education and general education colleagues, exacerbated by forced collaboration activities, hindered inclusive practices (Chatzigeorgiadou and Barouta, 2021).

Studies highlighted the significance of shared responsibility and collaboration in fostering a sense of belonging among special educators, particularly when working with paraprofessionals (Brunsting et al., 2023; Chatzigeorgiadou & Barouta, 2021; O'Brien et al., 2019). The disproportionate responsibility shouldered by special educators, coupled with insufficient planning time and resources, contributed to attrition rates and shortages in inclusive settings, necessitating equitable distribution of responsibilities and supportive induction programs (Brunsting et al., 2023; Cancino et al., 2013; DeMik, 2008; Gilmour & Wehby, 2020; McLeskey & Billingsley, 2008; Stefanidis et al., 2019). Existing research promoted the importance of fostering a sense of belonging for educators, which impacted both job satisfaction and commitment (Kachchhap & Wilson, 2021).

For special educators in inclusive classrooms, this sense of belonging could be challenged by feelings of isolation and a lack of shared responsibility with general education colleagues (Hargreaves, 2019). While collaboration was crucial for successful inclusion (Berry, 2021; Brunsting et al., 2023; O'Brien et al., 2019), current practices often failed to address the

unique challenges faced by special educators, such as limited role definition and unequal distribution of responsibilities (Gourvenec et al., 2024). This imbalance could further diminish special educators' sense of self-efficacy and ultimately contribute to attrition (Yell et al., 2020).

This qualitative descriptive case study aimed to explore how public school settings and teaching conditions influenced special educators' sense of belonging and commitment to their profession. It sought to address the gap in understanding the influence of collegial interactions and setting conditions on special educators' efficacy and shared responsibility. This study employed qualitative methods, including semi-structured interviews, questionnaires, and reflective journaling exercises, to gather data from special educators in public secondary schools (Creswell & Miller, 2000).

The data was analyzed using a combination of SLT (Bandura, 1977) and Weick's sensemaking theory (1995). SLT allowed examining the influence of self-efficacy and perceived shared responsibility on commitment to inclusive environments (Sharma & Pace, 2019). Weick's sensemaking theory provided a framework for understanding how special educators interpreted their roles and responsibilities based on their experiences and interactions with colleagues within the school setting (Turner et al., 2023). This combined approach offers valuable insight into special educators' experiences and informed strategies to cultivate a stronger sense of belonging, shared responsibility, and ultimately, support teacher retention in inclusive classrooms. Section 2 focuses on qualitative research for this topic, which expands and strengthens the body of research that exists about the impact of setting conditions in public schools on special educator's perceptions and beliefs about their self-efficacy and shared responsibility with general education colleagues related to students with disabilities, and how the interplay between these factors influence special educator experiences and feelings about their role in the workplace.

## **Section 2: Methodology and Design**

The chronic shortage of highly invested special education teachers in public education remains a critical issue in the United States (Day et al., 2024; Johnson & Jones, 2021; Peyton et al., 2021). This shortage significantly hampers the ability of public school districts to fulfill the mandates of a Free and Appropriate Public Education (FAPE) as stipulated by the Individuals with Disabilities Education Act (IDEA, 2004; Peyton et al., 2021). Recent findings indicate that the COVID-19 pandemic has exacerbated the challenges faced by special educators in delivering services to students with disabilities (Herman et al., 2023; Scott et al., 2022). This context is crucial, as it supports greater understanding of how systemic issues impact special educators' professional experiences in the workplace.

Special educators often experience a lack of adequate support in their school environments. Even when special educators are partnered with colleagues in a co-teaching model, the adherence to state and federal regulations around working with students with disabilities has more impact on the role of special educators (Antoniou et al., 2023; Nguyen et al., 2023). Regulatory pressures can diminish special educators' sense of efficacy and belonging, and they may feel overwhelmed by compliance demands rather than elevated by collaborative practices with colleagues. This imbalance is a barrier to developing a strong pedagogical culture or sense of professional trust that allows for collaboration and sharing responsibility (Erichsen & Reynolds, 2020) for supporting students with significant needs (Cancino et al., 2013; Gilmour & Wehby,).

The ongoing shortage of dedicated special education teachers, combined with the unique challenges posed by the pandemic, contributes to a detrimental work atmosphere for these professionals. Understanding this atmosphere is important for exploring how it affects special

educators' perceptions of their role within the school community. In addition to existing literature, it is crucial to examine the broader context surrounding special education teacher retention and job satisfaction. Factors such as workload, support services, and administrative leadership play significant roles in shaping educators' feelings of belonging and efficacy (Darling-Hammond, 2010; Goos & Gallagher, 2016). Recent studies have highlighted how the pandemic has intensified issues related to mental health and job stress among special educators (Cousik, 2022; Kauffman & Badar, 2023). In turn, these issues inform how special educators perceive their sense of responsibility towards students and colleagues. To investigate the factors and conditions influencing Massachusetts special educators' sense of belonging, efficacy, and shared responsibility within their workplaces, this qualitative study employed a descriptive case study approach.

The problem addressed in this study was that although special educators are essential members of a public school faculty, their feelings of belonging, efficacy, and perceptions of shared responsibility for the instruction and learning of students with disabilities are not well supported by the conditions in the school setting (Antoniou et al., 2023; Jones & Winters, 2023). The purpose of this qualitative study was to explore the factors and conditions that affect Massachusetts special educators' sense of belonging, efficacy, and shared responsibility in the workplace. By utilizing open-ended questionnaires, semi-structured interviews, and reflective journal prompts from participants, this research aimed to gain comprehensive insights into the experiences and perspectives of special education teachers in Massachusetts.

### **Design and Method**

This study employed a qualitative research methodology, specifically a multiple case study design, to investigate teachers' perceptions of inclusion and its impact on academic

outcomes for students with disabilities. Qualitative research involves systematic collection, organization, and interpretation of textual data to explore the meanings individuals ascribe to social phenomena within their natural contexts (Yin, 2017). As noted by Astroth and Chung (2018), qualitative research necessitates a deep understanding of research designs, a respect for participants' perspectives, and a clear methodological framework.

Qualitative research is particularly suited to exploring complex phenomena, such as the interplay of setting conditions and relationships between school professionals, as it allows for an in-depth examination of participants' experiences and perspectives (MacLeod, 2019; Yin, 2017). Qualitative research generates rich, descriptive data that provide insights into the complex and unique aspects of human behavior (Merriam & Tisdale, 2015), unlike quantitative research, which relies on numerical data and statistical analysis. By focusing on the day-to-day experiences of special educators, this study aimed to reveal the complexities of setting conditions, and the influence different settings have on the perceptions and beliefs of special educators.

A case study design was selected for this research because it supports an in-depth exploration of a bound system within a real-world setting (Creswell, 2002; Yin, 2017). By examining multiple cases—special educators from multiple schools and classroom settings—this study sought to increase the transferability of findings (Gustafsson, 2017). A descriptive case study approach was preferred over single-case, phenomenological, or narrative designs. While phenomenology focuses on lived experiences and narrative on storytelling, this approach focuses on the lived experiences of participants in order to interpret the meaning of the phenomenon itself (Moustakas, 1994), while this study was intended to provide a descriptive account of several factors and conditions that influence special educator feelings of belonging, efficacy and

shared responsibility in the workplace. This study did not assume that all participants experience the same phenomenon, therefore a phenomenological design was not chosen. Narrative studies can provide valuable insight into an individual's experience. This approach often involves a single participant or a small number of participants, and its focus is on chronological storytelling (Pavlenko, 2002). A case study approach was a stronger choice when considering multiple data sources and a larger number of participants, as it goes beyond understanding the experience of an individual in order to develop a deep and rich understanding of a complex interplay of factors or conditions as provided through multiple perspectives. Having participants from multiple schools rather than a single site allowed for greater representation of the population of special educators and stronger generalization of findings of the study (Yin, 2014).

Data for this study were collected through open-ended questionnaires, semi-structured interviews with secondary level special education teachers who had at least one year of experience in inclusive classroom settings, and a journal prompt submitted by participants following the interview. Interviews were a preferred method for data collection, and were conducted to elicit rich, detailed information about teachers' experiences, beliefs, and perceptions. Data analysis involved thematic coding to identify patterns and themes within the data (Patton, 2015). By adopting a descriptive case study approach, this research sought to provide a comprehensive understanding of the complexities of the interplay of setting conditions and relationships from the perspectives of those directly involved in its implementation: secondary level special educators.

Researcher positionality was a critical consideration in qualitative research. The researcher's own experiences, beliefs, and values can influence the research process and findings (Holmes, 2020; Pilcher & Cortazzi, 2024). To minimize the impact of bias, the researcher was

mindful of their own positionality and actively sought to maintain reflexivity throughout the study. This involved reflecting on one's own assumptions, biases, and how they might shape the research. Two types of reflexive practices were used to limit the impact of the researcher's personal beliefs and assumptions, member checking and creating an audit trail. Member checking involved sharing preliminary findings with participants to obtain their feedback and ensure that the data accurately represented their perspectives (Creswell & Miller, 2000). By seeking participants' input, the researcher could identify any misinterpretations or biases that may have been included in the analysis (Creswell & Miller, 2000; LaCroix, 2022). Creating an audit trail resulted in a detailed record of the research process, including all key stages, decisions about methodology, theoretical approach, and data analysis, as well as documenting how researcher thinking evolved throughout the study (Carcary, 2009). The audit trail served as a means of checking the accuracy and reliability of the data and provided a transparent record of the research process that could be examined by other researchers or reviewers (Bingham, 2023).

This chapter includes an explanation of the research methodology and chosen design that was used, and the rationale for these choices. Explanations and a description of the target population along with the reasons for the selection of study participants and the use of sampling procedures, both purposive and snowball sampling, were included. Choices made regarding materials and instrumentation, study procedures, and data collection and analysis followed, as well as an explanation of how participants' information was protected during and after the study was concluded. Assumptions including selection criteria and the motivation for participation in the study were reported. Limitations such as potentially eligible participants and the geographical location (Massachusetts), and delimitations such as points about reliability and generalizability, were presented. Specific steps concerning ethical assurances were included, and the approval of

the Northcentral (National) University Institutional Review Board prior to data collection is discussed. Security of data collected, anonymity of participants, and ethical reporting methods were also addressed.

### **Population and Sample**

This study used purposive sampling to identify and recruit participants. Purposive sampling is a method to select participants for a study that allows for the greatest likelihood of collecting useful and appropriate information (Campbell et al., 2020). This sampling method is convenience sampling, which takes advantage of recruiting participants from a known source available to a researcher (Ghaljaie et al., 2017). Recruitment occurred via social media sites for special education teachers, directly to special education teachers who belonged to an employee union, or in collaboration with professional associations or employment services for teachers. Stratified purposive sampling, criterion, and network sampling methods (Bloomberg & Volpe, 2019) were used. Snowball sampling, involving the suggestions of other possible participants from those already involved in the study, further expanded recruitment efforts and was utilized to address low participation from direct recruitment through the initial invitations or network sampling efforts (Ghaljaie et al., 2017).

The research used a combination of purposive, network, and snowball sampling, with intent to recruit a sample of 12–15 special education teachers who taught in inclusive classroom settings and instructed students with disabilities (Maxwell, 2018). Initial recruitment efforts indicated evidence of saturation at eight participants, and two additional participants were added until data saturation occurred (the point at which no new information was gained or themes identified), and data collection ended (Saunders et al., 2018). Data saturation occurred when data collection efforts yielded no new insights, themes, or information relevant to the research study

questions. Fusch and Ness (2015) posited that data saturation is essential to determining validity in qualitative research, as it not only makes further coding unfeasible but ensures that the findings of the study are comprehensive. Data saturation contributed to robust analysis, having sufficient evidence to support each identified theme, and ensured trustworthiness of the findings of the study (Aldiabat & le Navenec, 2018; Ando et al., 2014).

Initial contacts with special education teachers came from social media networks or professional affiliations or groups whose memberships were special education teachers and district administrators. Organizations such as Massachusetts Administrators of Special Education, Massachusetts Association of School Superintendents, the Blackstone Valley Collaborative Special Education Administrators group, and the Southern Worcester County Educational Collaborative Administrators group were primary resources for participant recruitment. These organizations and professional contacts were contacted ahead of recruitment for the study, and their approval to distribute information was gained to support the recruiting of special education teachers who were willing to participate in this study. Online teacher recruitment tools, such as Schoolspring.com and Handshake.com, were accessed for additional participants that had expressed interest in applying for positions in local districts. An online recruitment flyer or notice was shared via email and online social media connections after the National University (NU) Institutional Review Board (IRB) granted permission to conduct the study.

Research data consisted of transcribed responses from emailed questionnaires, responses from participation in semi-structured interviews, and the submission of a participant journal response. Semi-structured interviews enabled the researcher to follow up on the teachers' answers with questions for a rich description of their experiences, and the journal prompt

provided teachers' reflections on their participation and allowed for a more personal and individualized sharing of information (providing some autonomy for participants to determine what additional information they wanted to contribute), in the form of a narrative that allowed for personal voice and perspective free from prepared questions presented by the researcher (Breheny et al., 2022; Mtisi, 2022). The data collection methods allowed for triangulation, and data were then reviewed, pre-coded into categories, and reviewed again for emergent themes.

Triangulation is a qualitative research strategy that enhances the credibility and robustness of findings by utilizing multiple data sources or methods (Carter et al., 2014; Farquhar et al., 2020; Yin, 2017). Method triangulation was used in this study. Method triangulation involves using multiple data collection methods to gather information about the same phenomenon (Arias Valencia, 2022). By combining these methods, the researcher could increase the credibility and trustworthiness of the findings (Pilcher & Cortazzi, 2024). Method triangulation involved the use of open-ended questionnaires, semi-structured interviews, and participant journaling. Each of these instruments contributed data, allowing for a rich exploration of the topic (Yin, 2017). Open-ended questionnaires provided detailed participant expression, while semi-structured interviews allowed for deeper investigation of specific themes. Participant journaling captured ongoing reflections and provided perspective on the phenomena under investigation and allowed for more contextual data to be gathered from participants (Mtisi, 2022).

To effectively triangulate the data, each source was analyzed using thematic analysis to identify patterns (Yin, 2014). Following this, cross-verification was conducted to compare insights from the different methods, highlighting areas of convergence or dissonance (Farmer et al., 2006), ultimately enhancing the validity of the conclusions. Finally, the findings were

synthesized into a cohesive narrative that illustrated how these diverse methods complemented one another, while also addressing any potential biases (Farquhar et al., 2020; Yin, 2017). This structured approach to triangulation significantly enhanced the rigor and depth of the study, ensuring that the findings were well-supported and credible, and that there was completeness in the data (Farmer et al., 2006; Farquhar et al., 2020).

Member checking promoted validity in the results by allowing for participants to confirm or question the interpretation of their responses by the researcher (Creswell & Miller, 2000; LaCroix, 2022). Member checking was also used to limit ambiguity or bias in the interpretation of data, as it involved sharing preliminary findings with participants to obtain their feedback and ensure that the data accurately represented their perspectives (Rashid et al., 2019). Participants were provided with transcripts of their interviews, along with the video, to ensure that the transcription and the data to be analyzed was accurate and not misrepresenting the participant's narrative (Candela, 2019). In reviewing the transcripts, participants were able to increase the credibility of the outcomes by confirming that the accounts provided by the researcher's transcription were accurate (Creswell & Miller, 2000).

### ***Target Population and Sample Size***

The target population of this study was special education teachers. Their perspectives on personal experience were invaluable to the findings of this study. This study sought participants from the population of special educators who met the inclusion criteria from public schools in the Central Massachusetts/Worcester County region. The sample size for the study was 10 participants.

An initial number of participants who met primary inclusion characteristics were identified, starting with the criterion for inclusion. These criteria were identified to ensure that

the sample would provide rich data that would relate to the topic and questions of the research study and allow for the study's findings to have application existing conditions (Kalu, 2019). The participant pool was expanded by taking referrals from the initial participants based on their connections with others who had similar school experiences and circumstances; this use of snowball sampling methods was necessary when access to participants was limited, allowing already identified participants to assist in recruiting future participants by referring acquaintances who met inclusion criteria (Ghaljaie et al., 2017).

Eligibility criteria were provided so that all potential participants in this study were able to determine their ability to participate. These criteria were:

- Research participants were 22 years or older.
- Participants were or had recently been employed in the role of a special education teacher and held Massachusetts licensure as a teacher for students with disabilities (or equivalent and approved out-of-state license pending state reciprocity determination).
- Participants were or had recently been employed by a secondary school (in grades 7-12) in a public school district located in Massachusetts as a special educator in an inclusive classroom setting.

### ***Participant Identification Criteria***

Aligning with the focus of the study, participants were selected based on the following criteria:

- employment in a central Massachusetts public school,
- current or prior employment as a special educator,
- earning or maintaining HQT status (Driscoll, 2006), and
- maintained an "initial" or "professional" level of licensure in an area of special education,

- earned at least a bachelor's degree in a relevant education field,
- at least 25% of the work expectations was teaching or providing instruction in an inclusive classroom setting, in at least one of these inclusive settings:
  - co-teaching: serving as a member of a teaching team for a diverse group of students in the same classroom (Friend & Cook, 2013).
  - push-in/pull-out models of instruction.

Additional demographic data, including identified gender, years of service in the field, and school type were collected for each participant.

### **Materials/Instrumentation**

Data collection for this study was possible after establishing participant consent (see Appendix A) and relied on three primary instruments: a questionnaire (see Appendix B), semi-structured interview protocol (see Appendix C), and a reflective journal prompt (see Appendix D). These instruments were used to gather data that informed the research questions. Prior to collecting data, the researcher received approval from the IRB at NU. To collect data, questionnaires, interviews, and journal protocols were utilized. The interview protocol served as an instrument of inquiry and asked questions specific to the study (Patton, 2015).

The questionnaire was administered online through Google Forms. Participants who indicated interest and met the criteria for participation were invited to participate in a 1:1 interview. The semi-structured interview protocol was used to conduct in-depth interviews with selected participants. Interviews were conducted virtually over the Zoom platform. All interviews were recorded and transcribed for analysis. The interview protocol focused on participants' perceptions, experiences, and understanding of the research topic. Both the questionnaire and interview questions were developed by the researcher and aligned with the

specific research questions. They were designed to engage participants in inquiry-based conversations, with various scripted questions and clarifiers to elicit detailed and insightful responses.

The questions for each of the instruments were field-tested and refined as appropriate. The questions were reviewed by three colleagues of the researcher from school districts of comparable size in Massachusetts. Feedback was provided by these individuals and was incorporated into the final versions. The questionnaire was field tested by distributing the link to teachers who met the inclusion criteria. Two mock interviews were conducted with teachers who met the qualifications of the future participants but were not recruited for the study.

Field testing was conducted with identified participants who met the inclusion criteria but were not part of the full research study. Two participants completed the questionnaire online and were asked to provide feedback on clarity, relevance, and ease of use. Two different participants completed the interview, following the protocol as originally written. The results indicated that while most questions were understood, questions related to special educator feelings of efficacy in both the interview, and the questionnaire required rephrasing to enhance clarity. Participants spent the least amount of time answering efficacy-related questions, and in one of the questionnaires the participant elected not to answer two of these questions. When debriefing with this participant, the participant indicated that their "sense of efficacy" remained constant regardless of and in spite of the workplace conditions. Both interview participants suggested including definitions for terms used in the interview to help responders answer the question better. Based on these findings, the questionnaire and interview questions were revised to incorporate the suggested changes. Initially, Kaltura was identified as the video software that would be used to conduct and record the interviews. Unfortunately, during a practice session

with a peer prior to the first mock interview, accessing Kaltura on the device being used was not successful. The field tests were conducted using the Zoom platform, and both recordings and transcripts were saved in two separate locations (in the Zoom Cloud and on an external drive).

Reviewing the interviews and the exchanges between the participants and the researcher showed that for several questions, both participants requested that the questions be rephrased. The phrasing changes were incorporated into the interview questions to support participant responses. The field test interviews were also conducted with the researcher using a single screen for viewing and a printed copy of the questions. Looking away from the participant to read the questions made some of the exchanges between participant and researcher feel and look disconnected; adding a second monitor to view the questions at eye level was implemented to limit this impact. The interviews varied in terms of length of time, with one interview being significantly longer than the other. Additional practice on timing the questions and responses and providing time checks to participants addressed this discrepancy.

The researcher implemented member checking to enhance the reliability and validity of the findings. Each participant was invited to review the transcriptions of their interviews, allowing them to provide feedback on the accuracy and interpretation of the data collected. Member checking involved soliciting participant feedback regarding the data or interpretations presented by the researcher (Birt et al., 2016; Lincoln & Guba, 1985; Motulsky, 2021). Member checking was recognized as a critical component of qualitative research, serving as a validity check essential for establishing credibility of study findings (Motulsky, 2021). By actively involving participants in the verification of their narratives, the researcher aimed to produce findings that were authentic and reflective of the participants' true experiences, ultimately contributing to the rigor of qualitative research methodologies (Birt et al., 2016).

To bolster the validity of this study, the researcher specifically sought feedback on potential biases and addressed impartiality throughout the research process. Supervisor feedback, reflexive journaling immediately following interviews, and member checking were implemented following data collection activities to limit or mitigate the potential impact of researcher bias (Creswell & Creswell, 2017). The questionnaire and interview questions were field tested with practitioners that met inclusion criteria for future participants.

The researcher utilized a neutral demeanor during interviews. The researcher acknowledged the inherent biases that may arise from their background as a special education administrator in a public school district. Dissertation panel members were consulted to support an objective method for data analysis.

### **Data Collection and Analysis**

The data for this study were collected from the following sources: open-ended questionnaire responses from participants recruited through purposive and snowball sampling methods; semi-structured interview transcripts from a subset of questionnaire participants; and a reflective journal prompt from participants who completed the questionnaire and interviews. The open-ended questionnaire was administered to participants via an online survey platform. The questionnaire consisted of a series of broad, open-ended questions designed to elicit detailed responses from participants about their experiences and perspectives related to the research topic (Knott et al., 2022; Ruslin et al., 2022). Participants were recruited through purposive sampling methods, such as email invitations to relevant professional organizations and social media posts. The questionnaire was open for a period of three weeks, with reminder emails sent to participants at the two-week mark and just before the close of the third week to encourage participation.

Semi-structured interviews were conducted with a subset of questionnaire participants who indicated their willingness to participate in a follow-up interview. Interviews were conducted via video conferencing software and lasted approximately 60 minutes each. An interview guide was developed based on the research questions and the findings from the open-ended questionnaire (Knott et al., 2022; Ruslin et al., 2022). The guide included a series of broad, open-ended questions and probes to elicit in-depth responses from participants (DeJonckheere & Vaughn, 2019; Knott et al., 2022). Interviews were scheduled at the convenience of the participants and were audio-recorded with their consent. Transcripts of the interviews were generated using software available on the recording platform or through an online application. Participants who completed the open-ended questionnaire and semi-structured interviews were invited to complete a reflective journal prompt, submitted within 2 weeks of their participation in the 1:1 interview. Participants were provided with a prompt designed to encourage reflection on their experiences and perspectives related to the research topic. Journal entries were submitted via a secure online platform.

Data collection took place over a period of 16 weeks, with the open-ended questionnaire open for 3 weeks, semi-structured interviews conducted over a 10 week period, and reflective journaling taking place over a 3 week period. All data collected for this study were stored securely on a password-protected server accessible only to the research team. Questionnaire responses and journal entries were stored on a secure online platform, while interview transcripts were stored in a password-protected file on the server. Clear explanations of how participant data would be managed, stored, and used, including any potential risks of breach of confidentiality, took place both at the beginning and end of participation (Bloomberg, 2023; Mertler, 2019), and explicit consent from participants was obtained regarding the use and dissemination of their data.

Participants were assigned unique identifiers to protect their anonymity, and any identifying information was removed from the data. Data were backed up regularly to ensure its integrity and were retained for a period of 3 years following the completion of the study, as per institutional guidelines. Following this time period, all data will be destroyed in line with institutional guidelines.

A participant recruitment letter outlining the purpose of the study was shared. The letter explained the purpose of the study and invited volunteers to participate in an open-ended questionnaire. The questionnaire asked participants if they were interested in participating in a 1:1 interview and providing their personal email addresses. Consent was obtained and documented via the questionnaire. An additional email was sent to the selected participants explaining how they met the study criteria and scheduling an interview.

Approximately two to three days prior to each interview, the researcher contacted the selected participants via telephone to make brief introductions and answer any questions. Open-ended, semi-structured questions were used in the interview protocol, focusing on the perceptions and experiences of the participants. Interviews occurred via a video conferencing platform or in person, based on the participant's preference. The interviews were audio and video recorded, with closed captioning turned on for video conferences. In-person interviews were audio recorded using an available video conferencing platform, such as Zoom or Kaltura.

Before the interviews began, the researcher introduced herself, reiterated the study's purpose, and asked if there were any questions. The researcher also reinforced assurances of confidentiality for participants. The researcher gained permission to both video and audio record the interview session to ensure accuracy. Participants were informed that the sessions would be automatically transcribed by either closed captioning or via an available transcription platform.

A copy of the interview protocol is available in Appendix C. Each interview consisted of general demographic questions followed by open-ended, semi-structured questions listed in the study's interview protocol. Adding to or adjusting the interview questions was allowed if necessary or if the participant wished to elaborate. Approximately one to two days following the interview, a reflective journal prompt was sent to each interview participant. Return of the journal response was requested via email or submission through an online tool such as a Google Form.

Specific procedures were followed before data collection and analysis. An IRB application was submitted to Northcentral University's IRB for approval. After approval, potential participants were recruited through purposive sampling. Purposive sampling was used to recruit teachers with current teacher licensure in a relevant special education area, teaching in inclusive settings in Worcester County, Massachusetts. Teachers with at least one year of experience providing instruction in inclusive classrooms in grades 7-12 were sought. The sample included 10 participants.

Interested teachers were contacted by the researcher to confirm their eligibility. A consent form and Zoom interview details were emailed to selected participants. Before interviews, participants provided verbal consent. Semi-structured interviews were conducted using Zoom, audio recorded and focused on factors influencing special educator perceptions. Probing questions were used for further detail. After interviews, audio and video recordings were uploaded for transcription. Transcriptions were analyzed using inductive coding and thematic analysis to identify common themes (Braun & Clarke, 2021). NVivo was initially considered, then abandoned for use during data analysis, and the researcher utilized hand-coding of transcript data and demographic data of participants. Member checking was used to ensure transcript accuracy. Data were coded iteratively using reflexive thematic analysis (Braun & Clarke, 2021).

Dependability was achieved through detailed descriptions of the data collection and analysis process.

Thematic analysis (TA) is a widely used qualitative research analysis method that involves identifying and interpreting patterns or themes within qualitative data (Braun & Clarke, 2021; Byrne, 2022). This analysis is particularly valuable in understanding complex phenomena, such as the experiences of special education teachers in inclusion classrooms. The approach taken in this study followed Braun and Clarke's reflexive thematic analysis (RTA), which emphasizes the researcher's active role in the interpretation of data and the iterative nature of the analysis process. Braun and Clarke's (2021) framework is structured around six phases: familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. This iterative process allowed for continuous refinement of themes as the researcher engages with the data multiple times. The emphasis on reflexivity means that researchers must critically consider the impact of positionality and reflect on their own biases and assumptions during the analysis process (Byrne, 2022; Forbes, 2022). Reflexivity was crucial for ensuring that the themes generated were both representative of the data and informed by the researcher's insights and interpretations.

Inductive coding for this study was guided by the data itself, allowing themes to emerge naturally rather than being imposed by preconceived notions (Braun & Clarke, 2020). This approach aligned with Braun and Clarke's (2021) assertion that TA should be flexible and adaptable to the specific research context, which was particularly pertinent when exploring the nuanced experiences of special educators in inclusive settings. The analysis continued until data saturation was reached, defined as the point at which no new themes or insights emerged from the data (Bloomberg & Volpe, 2019). This concept was essential in qualitative research, as it

ensured that the analysis captured a comprehensive understanding of the participants' experiences (Byrne, 2022; Elliot, 2018). As themes were developed, the coding scheme was refined through repeated reviews of the transcripts, allowing for the identification of both positive and negative perspectives regarding inclusion practices (Elliot, 2018). This dual focus was crucial for providing a balanced view of the challenges and opportunities faced by special education teachers.

### ***Phase 1: Familiarization with the Data***

The process of TA in this study was shaped by Braun and Clarke's (2021) reflexive approach, with each phase enacted purposefully to surface meaningful insights into the conditions that traverse special educators' feelings of belonging, efficacy, and shared responsibility in inclusive classrooms. The application of TA began with familiarization with the data from each participant. Immersion in the data was essential to this stage. The researcher listened to/viewed each interview recording several times and completed multiple close readings of the transcripts. Familiarization is an active and repeated process, so that the researcher can become connected with every aspect of the data. In this phase, the researcher documented unique phrases in participant data, noting responses that fell outside of the majority of participant responses. This note-taking, also referred to as memo-writing, assisted the researcher in tracking early repetition of data and unexpected responses to include in the initial coding process (Braun & Clarke, 2021; Tucket, 2005).

This step enabled initial impressions to surface as the researcher noted recurring language and emotional undertones. For example, patterns related to Sense of Belonging emerged as participants described their "feelings of connectedness, acceptance in their school or amongst colleagues." Similarly, expressions related to Professional Efficacy highlighted the importance of

"special educators' belief in their own capabilities." The researcher used different colors to hand code the transcripts of each participant's interview. Hand coding would continue throughout the analysis process as a preferred method over use of digital or online tools. Repetition of reading participant transcripts and use of hand coding supported reflexivity of the researcher in this first phase.

### ***Phase 2: Generating Initial Codes***

Generating initial codes followed, with inductive coding guided solely by participant voice through their choice of words, phrases, and terminology. During this phase, the researcher systematically coded the data, attending to both explicit statements and more latent content embedded within personal narratives. Codes such as "Feeling Valued," and "General Educator Ownership" emerged early, and additional codes were combined to create a single code, such as "Workload." The process of hand-coding qualitative data from participant transcripts was a multi-step process. Each manuscript was reviewed multiple times, a process that let the data present the perspective of each participant and to uncover all potential ideas or thoughts that might be relevant. Coding at this phase has the greatest impact when it avoids applying or attempting to derive themes (Braun & Clarke, 2021). Some initial coding notes included phrases or lines of participant data to ensure that deep meaning was preserved for later steps in analysis (Braun & Clarke, 2021; Terry & Hayfield, 2021). After the initial inductive pass, the second review included assigning a color designation to specific pieces of data within each transcript. This step was essential for beginning to sort the initial, broad codes into more specific, manageable groups. For instance, all underlined text related to "co-teaching" might have been colored green, while text about "collaboration" was colored blue. This visual method helped me to quickly see patterns and relationships across the data and allowed me to transition from simply

identifying codes to organizing them into a more structured hierarchy. This grouping process enabled the researcher to refine the initial 112 codes into a smaller number of more precise categories, preparing the data for deeper analysis and thematic development. Through a secondary and tertiary review, the original 112 codes were reduced to 20, and then ultimately to 12 final codes by the fourth and final review, which were more specific and aligned with the emerging themes in the data. This iterative process of refinement and grouping prepared the data for deeper analysis and thematic development. The coding schemes of the secondary and final coding processes are provided in Appendix G.

### ***Phase 3: Searching for Themes***

With a preliminary coding scheme established, the researcher entered the phase of searching for themes. Here, codes were combined and compared to one another, supporting the identification of overarching patterns in the data. Codes in this step were initially broad to allow for variance in terminology and descriptions and refined with each review of the rich data from participants. "Co-teaching," for example, included the structure, implementation, and interpersonal dynamics of co-teaching. "Collaboration" addressed type, quality and scheduled opportunities for collaboration with general education teachers. Alignment included the level of alignment of teaching philosophy between general education and special education teachers. These codes later created the foundation for themes related to shared responsibility. Codes emphasizing individual challenges, such as "Teaching Conditions" and "Administrators" connected to later themes of special educator sense of efficacy. During this phase, narrow coding processes shifted to looking for alignment of the codes and data to the research questions of the study. This shift to theme searching allowed the researcher to identify patterns or shared meaning in the data between participants (Braun & Clarke, 2021).

#### ***Phase 4: Reviewing Themes***

Reviewing themes involved careful consideration of both how well the individual codes and data from participants grouped under a particular theme fit together and relate to one another in a meaningful, logical way. This step also required the researcher to find the clear distinctions between themes. Using a reflexive process while reviewing transcripts, the researcher refined themes for clarity and inclusivity, combining some codes and eliminating others (Braun & Clarke, 2021). The secondary coding scheme revealed how initial codes were consolidated: "Collaboration and Shared Responsibility" evolved to encompass how special educators and general educators perceive which educator is responsible for different tasks or students in an inclusive teaching setting, partnership and mutual accountability between special educators and their general education colleagues. Similarly, "Professional Relationships" was refined to capture the influence of interactions and relationships with general education colleagues, administration, and other special education staff, how school culture and systemic factors contribute to or detract from sense of belonging or professional identity.

#### ***Phase 5: Defining and Naming Themes***

The process of defining and naming themes involved careful articulation of the scope and content of each theme. The researcher made comparisons between participant data and operational definitions. "Inclusive Classrooms and Service Delivery Models" was defined as settings for delivery of inclusive instruction, models of special education support provided and included co-teaching. "Engagement and Ownership" referred to general educator engagement and ownership, and special educator perceptions accountability for student learning and success and the division of labor for supporting students with disabilities. "Impacts and Barriers" articulated special educator data related to factors within their work environment that they

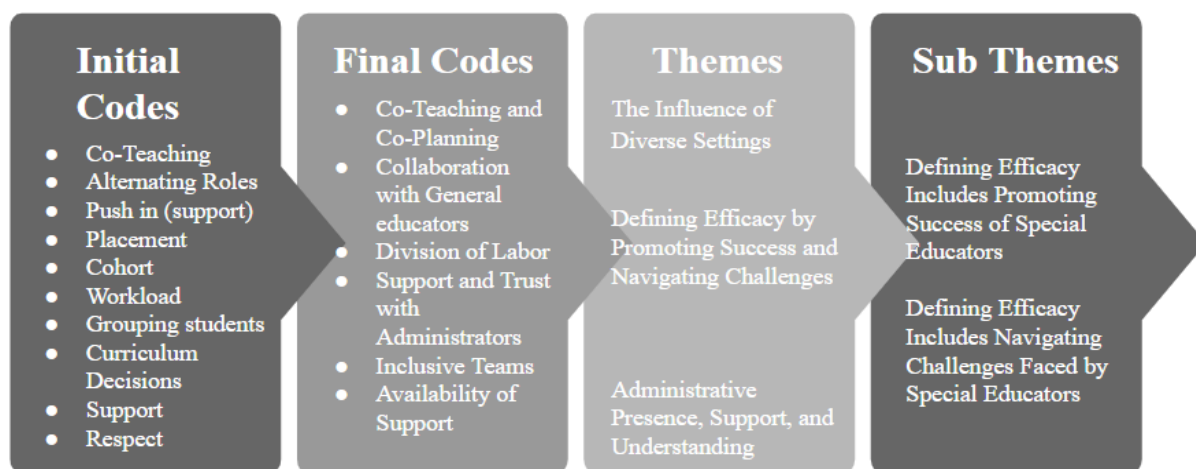
perceive as enhancing or diminishing this sense of efficacy and their ability to make a difference.

Figure 3 provides an illustration of the iterative process that connected initial codes to final codes, and then to emerging themes and subthemes for RQ1.

## Figure 2

### *Thematic Analysis: From Codes to Themes*

**RQ1: How do special education teachers describe the influence of different inclusion classroom settings and teaching conditions on their sense of belonging, efficacy, and perceptions of shared responsibility with general educators for the learning of students with disabilities?**



### **Phase 6: Producing the Report**

Braun and Clarke (2021) emphasized that the writing the final report is a crucial step incorporating reflexivity of the researcher and an interpretive approach to the data. In this phase, reviewing the audit trail, engaging with participant response from member checking, and reviewing the notes from earlier phases contribute to the transparency and authenticity of the findings of the study (Brady, 2015; Tucket, 2005). The researcher synthesized findings, grounding each theme in the operational definitions through the coding process. The written report of final themes and data excerpts from participant interviews is found in Appendix H.

Throughout each phase, reflexivity was exercised. Reflexive journaling enabled the researcher to document analytic decisions and examine potential biases throughout the coding

process. Journal entries captured instances where personal experiences as an educator influenced interpretation, prompting careful reconsideration of codes and themes. For example, when initial coding revealed potential over-emphasis on administrative challenges, the researcher returned to transcripts to ensure participant voices, rather than personal assumptions, guided the analysis. The researcher's journaling activities included note-taking as an audit trail as well as communication and notes shared between researcher and university advisor/chair. Member checking involved returning preliminary themes to select participants for validation and refinement. Participants confirmed the prevalence of themes, indicating perspectives that enriched understanding. One participant's feedback led to separating peer support and administrative support, contributing to the separation of relationship-focused codes in a later coding scheme.

Throughout the steps of TA, researcher subjectivity and reflexivity were critical considerations. The researcher, as the primary instrument of both data collection and interpretation, must consider personal perspectives and experiences, and determine how to minimize any potential impact to the analysis (Bloomberg & Volpe, 2019). To account for this, the researcher reviewed notes in the audit trail and journal to review documented thoughts noted during interviews and address potential biases that might influence the interpretation of the data. This helped to ensure the trustworthiness and transparency of the findings (Finlay, 2002). The comparison of participant data with established operational definitions also served as a form of "auditing" the themes, ensuring they accurately reflected the participants' voices rather than the researcher's preconceived notions (Bloomberg & Volpe, 2019). Using a combination of inductive coding and reflexive analysis strengthens the credibility of the final themes.

## **Assumptions**

Assumptions underpinned this qualitative case study by establishing foundational beliefs that guided the research process (Stadtlander, 2018). This study operated under the assumption that participants would voluntarily engage in the research and provide truthful responses, recognizing the potential influence of social desirability bias. Additionally, it was assumed that participants meeting the established inclusion criteria would be purposefully selected to provide in-depth insights into the case, acknowledging that findings might not be generalizable to a broader population.

The researcher's biases and perspectives, which are inherently part of a qualitative inquiry, were addressed through ongoing reflexivity and critical self-reflection (Cresswell & Miller, 2000; Pilcher & Cortazzi, 2024). Data security and confidentiality were upheld to protect participant privacy and foster trust (Bloomberg & Volpe, 2019). The study was context-bound, recognizing that findings were situated within specific social, cultural, and temporal factors (Yin, 2017). Finally, an inductive approach was employed to allow themes and patterns to emerge from the data, aligning with the structure of qualitative research. By acknowledging these assumptions, this study aimed to enhance the credibility and trustworthiness of its findings (Creswell & Miller, 2000; LaCroix, 2022) while maintaining ethical standards (Bloomberg & Volpe, 2019).

## **Limitations**

Limitations included collecting primary data with or through partnership agreements with specific schools and school districts, recruiting initial participants through a screening process of open-ended questions via an online questionnaire, determining the accuracy of data collection, addressing personal biases throughout the data collection process, and limiting the impact of the

researcher as instrument during interactions with participants. The access to participants was impacted by the time of the school year when IRB approval was initially received; the first few weeks of the data collection period coincided with the December-January break that occurs during the holidays in late December. Because the study included special education teachers who were active in the profession, honoring the time necessary for participation was crucial. Online questionnaires provided flexibility, limited costs, and provided greater convenience for teachers to answer the questions appropriately at their own pace (Hawkins, 2018), while at the same time providing sufficient data for the researcher to determine which participants who met inclusion criteria to participate in the interview process were interested in continuing with their participation. Teachers involved were voluntary participants, potentially limiting representation of the entire special education teaching community.

Researcher bias was mitigated by engaging in reflexivity and critical self-reflection; complete elimination could not be guaranteed. Analysis of qualitative data, while allowing for rich interpretation, was subjective and dependent on the researcher's interpretive framework. Finally, ethical considerations, such as protecting participant anonymity and maintaining confidentiality, required careful attention and assurances throughout the study.

### **Delimitations**

The study was focused on public secondary schools (grades 7-12) in Massachusetts, allowing for an in-depth exploration of the unique challenges faced by special educators in this specific context. This geographical focus was critical, as it provided insights that were directly applicable to the local educational landscape, particularly in relation to Massachusetts-specific regulations governing special education, such as Individualized Education Programs (IEPs), Least Restrictive Environment (LRE), and differentiated instruction (Massachusetts DESE,

2022). By concentrating on these regulations, the study aimed to give context to experiences of special education teachers within the framework of state policies, enhancing the relevance of the findings to local educational practices (Antoniou et al., 2023; Jones & Winters, 2023).

Participants were required to meet specific criteria: they had to be at least 22 years old, hold or have recently held a Massachusetts licensure for teaching students with disabilities and have teaching experience in inclusive classroom settings. This ensured that participants could provide valuable insights based on their qualifications and experiences. The study aimed to recruit an initial sample of 15-20 participants, expanding the participation through snowball sampling if necessary (Creswell, 2008), however due to limitations related to the time of year that the data collection was initiated and access to participants, the study yielded 10 participants from whom data was collected. This approach was designed to capture a diverse range of perspectives while maintaining a manageable scope for qualitative analysis. By delimiting the study to this specific population and context, the research offered a focused examination of the factors influencing special educators' sense of belonging, efficacy, and shared responsibility in their roles, contributing to a deeper understanding of teaching and educational practices in Massachusetts (Kalu, 2019; Ghaljaie et al., 2017).

To reduce the impact of limitations and use the results of the study as evidence of broader trends in special education or public school practices, the researcher considered how triangulation and comparative analysis assisted in generalizing the findings of the study. Triangulation is a critical strategy in qualitative research used to enhance the credibility and trustworthiness of findings, and it holds particular value in a case study design by providing a multi-faceted and in-depth understanding of a single phenomenon (Yin, 2017). By triangulating data from questionnaires, interviews, and journaling prompts, the study significantly enhances

the trustworthiness and credibility of its findings. This method involves using multiple data sources to investigate the same phenomenon, providing a more comprehensive and robust understanding than would be possible with a single source (Nowell et al., 2017). For example, a theme of "feeling valued" might emerge from interviews where participants repeatedly discuss their sense of being appreciated by colleagues. This finding is then strengthened when the questionnaires reveal that many participants rated their "feelings of connectedness" highly. The trustworthiness of this theme was further solidified by connecting journaling prompts that contained narratives or specific examples, such as a participant's reflection on a time when a general education teacher praised their work; this provided a concrete, personal account that supported the coded data. This process of cross-checking coded data, such as "workload" and "administrative support," across multiple data sources allowed the researcher to corroborate findings and ensure that the themes were truly representative of the participants' experiences. The overlap of these diverse data points also reduced the risk of bias or oversimplification of the findings from a single data source and provided a richer and more detailed understanding of the research topic (Carter et al., 2014; Nowell et al., 2017). Triangulation allowed the researcher to combine the data from questionnaires, interviews, and journaling to provide a more comprehensive understanding of the issues (Breheny et al., 2022; Mtisi, 2022), allowing for cross-validation for increased credibility (Yin, 2017). Comparative analysis of the study's findings with regional and national data sources could identify commonalities and differences in experiences of special educators, instructional practices within schools, and policies that direct the practices of school districts in different regions across the United States. Comparing prior research and current regulations could provide context for this study's results and bring forward areas for considering changes to policies and educational practice.

## Summary

This chapter outlined the research methodology and design for a qualitative study exploring the factors and conditions that affected Massachusetts special educators' sense of belonging, efficacy, and shared responsibility in the workplace. The study employed a multiple case study design using a combination of open-ended questionnaires, semi-structured interviews, and reflective journaling. Data were collected from 10 secondary level special education teachers in Massachusetts. All participants held active teaching licensure, with at least 1 year of experience in inclusive classroom settings.

The study used a qualitative research methodology, specifically a multiple case study design, to investigate teachers' perceptions of inclusion and its impact on academic outcomes for students with disabilities. A descriptive case study approach was chosen to provide a comprehensive understanding of the complexities of the interplay of setting conditions and relationships from the perspectives of secondary level special educators. Data were collected through open-ended questionnaires, semi-structured interviews, and participant journaling. Interviews were conducted to elicit rich, detailed information about teachers' experiences, beliefs, and perceptions. Data analysis involved thematic coding to identify patterns and themes within the data. To minimize the impact of researcher bias, the study employed member checking and created an audit trail. Member checking involved sharing preliminary findings with participants to obtain their feedback and ensure the data accurately represented their perspectives. An audit trail provided a detailed record of the research process, including key stages, decisions, and the evolution of researcher thinking.

The study used purposive, network, and snowball sampling to recruit a sample of 10 special education teachers who taught in inclusive classroom settings and instructed students

with disabilities. Eligibility criteria for participants included being 22 years of age or older, current or recent employment as a Massachusetts special educator with appropriate (and current) licensure as a teacher for students with disabilities. Participants held a position that included at least 25% of teaching responsibilities in an inclusive classroom setting.

Data collection relied on three primary instruments: a questionnaire, semi-structured interview protocol, and a reflective journal prompt. The questionnaire served as a self-screening tool for participants to determine initial eligibility for participation and gather basic demographic information. The semi-structured interview protocol was used to conduct in-depth interviews with selected participants. Participants provided a reflective journal prompt following the interview. Method triangulation was used to enhance the credibility and trustworthiness of the findings. By combining multiple data collection methods, the researcher increased the validity of the conclusions. TA, following Braun & Clarke's (2021) reflexive thematic analysis method, was used to identify patterns and themes within the data, and cross-verification was conducted to compare insights from the different data collection instruments. Member checking was used to promote validity in the results by allowing participants to confirm or question the interpretation of their responses. Participants were provided with transcripts of their interviews to ensure the accuracy of the data.

### **Section 3: Findings, Implications, and Recommendations**

The problem addressed in this study was that although special educators are essential members of a public school faculty, their feelings of belonging, efficacy, and perceptions of shared responsibility for the instruction and learning of students with disabilities are not well supported by the conditions in the school setting (Antoniou et al., 2023; Jones & Winters, 2023). The purpose of this qualitative study was to explore the factors and conditions that affect Massachusetts special educators' sense of belonging, efficacy, and shared responsibility in the workplace. The researcher initiated this research to understand special educators' perceptions of their role and relationships as teachers in Massachusetts public schools. Semi-structured interviews were conducted to inquire into teachers' perceptions. In addition to semi-structured interviews, participants were expected to complete both an open-ended questionnaire and a short journaling activity related to the research questions posed in the study.

The population for this qualitative case study consisted of special education teachers in Massachusetts who were employed by a public school district and assigned to teach Grades 7–12. Purposive sampling was used because the researcher intentionally selected participants based on their specific characteristics, experiences, or knowledge relevant to the study's research question. The goal was to gain an in-depth understanding of each participant's experience. To do this, the researcher needed information-rich feedback that randomized sampling would be less likely to provide (Campbell et al., 2020). The researcher anticipated a sample size of 12-15 participants but yielded 10. An immediate limitation of the study was recruiting the target number of participants to participate in the study. Limited participation was likely related to the time in the school year when the recruitment period began. IRB approval was gained in December, at the time when Massachusetts public schools were about to enter a two-week winter

vacation. Recruitment may also have been hindered initially by the narrow geographic area of the study. Following additional approval from IRB to expand the focus area of the study, the researcher was able to engage other participants, through both purposive and snowball sampling. This yielded a sample size of 10 special education teachers, which was high enough to meet the threshold for saturation (Tight, 2023; Yin, 2017).

The participation criteria for this study were

- employment in a central Massachusetts Public School,
- current or prior employment as a special educator,
- earning or maintaining HQT status (Driscoll, 2006), AND
- maintaining an "initial" or "professional" level of licensure in an area of special education,
- earning/holding at least a bachelor's degree in a relevant education field,
- at least 25% of the work expectation was teaching or providing instruction in an inclusive classroom setting.

The research study employed purposive, network, and snowball sampling, to determine the optimal sample size that best served the objectives of the study. This approach ensured that the selected participants were best suited to provide rich data for the study (Creswell, 2008; Schoch, 2020). Purposive sampling supports researcher efforts in selecting an appropriate sample size and when data reaches the point of saturation.

The study's research questions provided a framework for investigating special educators' perceptions of their role within the school community. Further, the questions were developed to gain insight to the lived experiences of individual participants while determining the

commonalities that may be present for special educators regardless of the type of school or setting in which they teach. The findings of this research addressed the following questions:

RQ1. How do special education teachers describe the influence of different inclusion classroom settings and teaching conditions on their sense of belonging, efficacy, and perceptions of shared responsibility with general educators for the learning of students with disabilities?

RQ2. How do special education teachers perceive the influence of interactions with general education colleagues on their sense of belonging?

RQ3. What strategies can be leveraged to increase special educators' sense of belonging, efficacy, and shared responsibility in the workplace?

Data from 10 teachers that participated in the semi-structured interviews were included in the data analysis for this study. In this section, trustworthiness and credibility will be discussed. The results and an evaluation of the findings of the study will also be shared.

## **Findings**

Special education teachers currently employed in a Massachusetts public school with inclusive teaching assignments in grades 7-12 during the 2023-2024 and/or 2024-2025 school year participated in this study. Participants represented a cross section of public school settings, including middle school, high school, and vocational high school settings. The data of 10 participants from across the state who participated in the semi-structured interview were used for analysis.

### ***Trustworthiness of Data***

Lincoln and Guba (1985) established four criteria for determining trustworthiness in qualitative research. Trustworthiness is a measure through which the researcher demonstrates

that the findings of a study are worthy of notice (Nowell et al., 2017). Data saturation is one aspect of establishing trustworthiness (Fusch & Ness, 2015; Saunders et al., 2018). The final sample size of 10 was appropriate for a qualitative case study, and data saturation was achieved to reflect the target population. For this study, data saturation was evident by the 10<sup>th</sup> participant, when sufficient data has been collected to draw conclusions, and yielded no additional data (Yin, 2017).

Qualitative researchers depend upon four criteria to establish trustworthiness: credibility, transferability, dependability, and confirmability (Stahl & King, 2020). These criteria demonstrate the quality, rigor, and overall merit of a study's finding and support researcher confidence in the reported outcomes (Bloomberg & Volpe, 2019; Stahl & King, 2020). Researchers rely on these criteria in the evaluation of a study's accuracy, credibility, and overall merit. The following descriptions illustrate how each criterion was met.

**Credibility.** Credibility relates to the accuracy of research findings, and through credibility, the researcher establishes the findings believability and accuracy (Stahl & King, 2020). This qualitative case study established credibility through the rich data collection that resulted from the 10 semi-structured interviews with participants. Following each interview, participants were provided with the transcripts of the interview and given the opportunity to identify and correct any errors in transcription or intent. This process is referred to as member checking and allowed each participant to verify the accuracy of the data and ensure that their thoughts and perspectives were accurately noted and free from researcher bias or miscommunication (Lal, 2024; Nowell et al., 2017). In this step, participants engaged in the research process and contributed to the researcher's ability to validate participant experiences in the findings.

**Transferability.** Transferability refers to the extent to which a research study's findings can be connected, applied or relevant to other contexts or settings (Bloomberg & Volpe, 2019). In this study, transferability was established by recruiting participants with diversity in teaching experiences and assignments. The 10 participants that were interviewed during the data collection process reported experiences across several inclusive settings in differently configured public schools in Massachusetts. Further, participant teaching experience (years of service) ranged from 8–30 years of service as a special education teacher in a public school. Including participants with varied experience and providing detail regarding the diversity of participant demographics will allow future researchers to determine alignment or possible “fit” between the study's findings and other situations (Stahl & King, 2020). Providing rich descriptions of participant data also allows others to determine if the study's findings are applicable to similar educational contexts outside of the study's geographic area, further contributing to transferability (Chakma & Li, 2025).

**Dependability.** Dependability is crucial in qualitative research, as represents the ability to replicate the study with consistent outcomes over time, making the research process reliable over time (Stahl & King, 2020). The researcher should ensure dependability by engaging in a well-documented, systematic and sequential process for conducting research (Bloomberg & Volpe, 2019). Dependability was achieved through participant recruitment and an audit trail.

Clear documentation of the recruitment strategies for participation, including purposive , network, and snowball sampling, was provided in Section 2: Methodology and Design. The participant recruitment flyer (Appendix F) outlined inclusion criteria for participants, and the outreach to specific organizations that assisted in distributing the flyer to possible participants enhanced the establishment of dependability of the data collection process and the findings. The

audit trail served as documentation of the path from recruitment to data collection, through drawing conclusions, providing a chronological record of decisions activities and the process of data analysis (McLeod, n.d.; Nowell et al., 2017). It assisted the researcher in the ongoing conversations regarding next steps and maintaining a reflexive relationship with participant data while recognizing potential bias during the research process.

**Confirmability.** Confirmability is established when the researcher can show that conclusions are supported by the evidence provided in the raw data from participants (Bloomberg & Volpe, 2019; McLeod, n.d.). Research study procedures were documented in Section 2: Methodology and Design to establish confirmability. These procedures were followed to ensure quality of data and consistency that would allow future researchers to replicate the study.

This qualitative case study was designed with specific criteria for selecting participants. The primary method of data collection was conducted through a semi-structured interviews involving open-ended questions. Both the recruitment procedures and the use of a semi-structured interview protocol contribute to ensuring credibility (Stahl & King, 2020). The researcher's data collection process included triangulation strategies to further demonstrate credibility of the findings. Stahl and King (2020) noted the value of triangulation in establishing patterns in data across various points, and Chakma and Li (2025) discussed the value of triangulation in addressing and mitigating possible bias that may arise if considering only a single source of data. For this study, triangulation involved an initial, anonymous open-ended questionnaire, the semi-structured interviews with 10 participants, and a final open-ended journaling prompt that was provided after the interviews. The use of triangulation provided the

researcher with the ability for cross-verification as well as evidence of saturation during the data collection process.

This study used a qualitative case study design. Approval for conducting the research and recruitment of participants was obtained from the National University IRB. Additionally, approval from two professional affiliations, The Southern Worcester County Educational Collaborative, and the Blackstone Valley Consortium, was obtained to further support recruitment activities. After obtaining approval, recruitment was initiated through distribution of the recruitment flyer through special education administrators in Massachusetts who provided agreement to disseminate the flyer to their special education teachers. The email that accompanied the flyer provided explicit details about the research and its purpose and a link to the initial participant questionnaire.

Participants completed the initial questionnaire, then indicated their interest in continuing their participation for a virtual interview. The questionnaire provided instructions for participants to contact the researcher to schedule an interview. Twelve potential participants responded to the questionnaire, and 10 of these indicated interest in participating in a 1:1 interview with the researcher. An email was sent to each interview participant outlining additional information about the process, the interview platform, a minimum of two interview dates for consideration, and assurances related to confidentiality.

Interview schedules and login information for the Zoom virtual meetings were provided to the participants at least two days prior to the interview. Before each interview, participants were provided time to review the consent form and provide verbal consent to participate in the interviews. This consent included an acknowledgement that the semi-structured interviews were

conducted using a video conference platform (Zoom) and would be digitally recorded. The interviews were transcribed using the Zoom platform's cloud-based transcription feature.

Following the interviews, participants received a copy of the transcription and were invited to make corrections or amendments to ensure accuracy and that the record represented their perspectives effectively. Participants returned the transcripts, with any feedback and changes, to the researcher. Participants received a journal activity upon returning the transcripts. Of the 10 interview participants, six returned journal responses.

Upon receiving and reviewing the transcripts, the data were hand coded. Hand coding and notation was preferred to use of qualitative data analysis software, such as NVivo, as the researcher found the uploading of data less intuitive and time consuming. Hand coding also required longer periods of time to review and become familiar with the data in each participant's transcripts, which allowed the researcher to be more flexible with theme identification and to adapt to subtle yet important differences in the use of language and terminology from one participant to the next (Braun & Clark, 2021; Pilcher & Cortazzi, 2024). To ensure confidentiality and protect participants from being identifiable, participants were referred to by a pseudonym (Participant 1, Participant 2, etc.). All participants were identified by the demographics that qualified them as participants for the study.

### ***Demographic Data***

This qualitative case study included 10 participants who were special education teachers working in Massachusetts public schools. Demographic participant data is presented in Table 1. The study participants completed a questionnaire and participated in a virtual 1:1 interview with the researcher for data collection. Interviews were recorded and transcribed. Participants were

provided with voluntary consent forms prior to their participation, to ensure each was comfortable with the conditions and use of their data in the study.

**Table 1**  
*Participant Data*

<b>Participant</b>	<b>Gender</b>	<b>Teaching Experience</b>	<b>Race</b>	<b>Assigned Grade</b>	<b>Current Caseload</b>	<b>Primary Inclusive Setting</b>
<b>P1</b>	F	18	Caucasian	7th	11	Push-In/Pull-Out (subject varies)
<b>P2</b>	F	3	Caucasian	9th-11th	12	Co-Taught ELA
<b>P3</b>	F	16	Caucasian	7th-8th	8	Push-in ELA and Social Studies, Resource
<b>P4</b>	M	11	Caucasian	9th-10th	28	Co-Taught Math, resource
<b>P5</b>	F	16	Caucasian	7th-8th	16	Push-in ELA, SG math
<b>P6</b>	F	8	Caucasian	9th	15	Push-In (subject varies), Resource
<b>P7</b>	F	30	Multi-Race	9th-10th	24	Push-in (subject varies), Resource
<b>P8</b>	M	22	Black	7th-8th	15	Co-Taught Math, Resource
<b>P9</b>	F	20	Caucasian	10th, 12th	30	Integrated ELA
<b>P10</b>	F	8	Caucasian	8th-9th	17	Co-Taught English

Of the 10 participants, eight of 10 (80%) identified as female and two of 10 (20%) identified as male. One participant (10%) had been teaching for less than five years, three of 10 (30%) participants had between 6-15 years of teaching experience, and the remaining six participants (60%) had between 16-30 years of teaching experience. Comparing grade level assignments and school types, four participants taught grades assigned in a public middle school, while the remaining six participants taught in a public high school. Two of the six participants (Participant 4 and Participant 9) at the high school level taught in a public vocational school, and one participant (Participant 10) taught at a high school that included grades 8-12. When comparing primary inclusive instructional settings, four of 10 participants reported co-teaching

as the primary model for instruction, while five of 10 reported a combination of push-in support and pull-out or small group instruction. One participant reported a unique model of inclusive instruction, where they served as both the special educator and content teacher. This model involves a dual-certified teacher who provides an integrated classroom for students with and without disabilities.

### *Thematic Analysis*

The use of TA allowed the researcher to build familiarity with the data provided in participant interviews, and through an iterative process organize and identify patterns in the data. TA began by reviewing each transcript to become familiar with the data and get an overall impression of each participant's perception and experience. Important words and phrases were identified, then initially assigned to code categories by assigning a color to the text. Data was sorted into 29 initial codes based on the research questions during the first review of the data. Next, a second read of transcripts was conducted, with attention paid to the codes originally assigned in order to consider the emergence of themes in the data. During this review, codes were combined when similarities were noted or recurrence was recognized, which resulted in identifying 20 common codes across the transcripts.

In the next review of the data, codes were placed into categories and aligned with at least one of the research questions. During this step, the researcher looked at each research question to determine if all components of the research question had been addressed or if additional information was needed. During this review, the researcher's notes were reviewed when one category of codes revealed data that was not anticipated by the researcher. This check of researcher's notes following one of the participant interviews was crucial in connecting the emerging theme with the most appropriate research question and demonstrates the reflexive

actions of the researcher and represents the use of RTA in the acknowledgement of the researcher's recognition of prior assumptions and use of interpretive skills in constructing themes through the interaction with participants and the data gained from interviews (Braun & Clarke, 2019).

**Table 2**  
*Research/Interview Questions and Emerging Themes*

Research Question	Interview Questions	Common Themes
RQ1. How do special education teachers describe the influence of different inclusion classroom settings and teaching conditions on their sense of belonging, efficacy, and perceptions of shared responsibility with general educators for the learning of students with disabilities?	I3, I4, 1-4, 5, 8	<ul style="list-style-type: none"> <li>• Co-Teaching</li> <li>• Service Delivery Models</li> <li>• Least Restrictive Environment</li> <li>• Student Placement</li> <li>• Teaching Conditions and Workload</li> </ul>
RQ2. How do special education teachers perceive the influence of interactions with general education colleagues on their sense of belonging?	1-3, 5-6	<ul style="list-style-type: none"> <li>• Respectful Collaboration</li> <li>• Interactions and Relationships</li> <li>• Shared Ownership</li> <li>• General educator mindset</li> <li>• Accessibility to general educator colleagues</li> <li>• Administrative understanding and support</li> </ul>
RQ3. What strategies can be leveraged to increase special educators' sense of belonging, efficacy, and shared responsibility in the workplace?	5, 7-11	<ul style="list-style-type: none"> <li>• Structured co-planning time</li> <li>• Collaborative processes</li> <li>• Mutual understanding and respect</li> <li>• Special educator as "expert"</li> <li>• Collective Ownership</li> <li>• Professional Development</li> </ul>

After this step, themes from the coding process were refined, including a final transcript check to confirm all research questions were addressed. The researcher assessed the relevance of

each theme, ensuring that the complexity and richness of the data was represented for each of the research questions. This process resulted in the identification of five themes, which are presented in Appendix G. Finally, TA involved the development of a report that documented findings and presented each theme with the supporting evidence from participant data. The researcher interpreted the implications of each theme, made connections with relevant and current literature, and identified the significance of the findings for increasing understanding in the field of study and providing possible connections to future research. The use of RTA supported a reflective method of analysis that led to a comprehensive interpretation of participant experiences that include rich and detailed narratives and details (Braun & Clarke, 2019).

### ***Research Question 1***

The first research question was “How do special education teachers describe the influence of different inclusion classroom settings and teaching conditions on their sense of belonging, efficacy, and perceptions of shared responsibility with general educators for the learning of students with disabilities?” The first research question was utilized to reflect teachers’ perceptions of the classroom settings and teaching conditions in their current roles as special educators and how these play a part in their experiences with colleagues in supporting students with disabilities. Within the research scope and the lived experiences of the participants, the conditions of their workplace was a main component and factor of the research. The first research question was utilized to reflect participants’ responses and developed three themes that related how special educators perceive the role the inclusive settings and conditions in their workplace have on their sense of belonging, efficacy, and shared responsibility for working with students with disabilities.

Participants communicated a variety of inclusion models, ranging from highly integrated co-teaching to splitting time between push-in support models, and even unique dual role positions. These varied settings and professional role assignments influence the participants' daily professional lives and experiences, shaping their sense of belonging efficacy, and perceptions of shared responsibility. For Research Question 1, themes were developed after analyzing participant responses. Themes emerged through a multi-step process yielding common codes aligned to the research question, aligned with specific interview questions, allowing for more evidence to support this research question.

**Theme 1: The Influence of Diverse Settings.** The environments in which special educators work are defined by specific classroom settings and service delivery models, such as co-teaching in inclusion classrooms, providing a combination of push-in (being a support to students without direct instruction responsibilities in an inclusion classroom) and pull-out support (often referred to as “resource room” or “academic support”), or providing a combination of push-in support and time teaching in sub-separate (also referred to as “small group”) classrooms. Some participants responded that they work in unique arrangements that place significant demands on them, such as being the sole special educator responsible for both modifying curriculum and providing supports for a large number of students without additional staff or having a caseload of students for which they also serve as a “team chair” that runs meetings and coordinates services provided by other professionals.

The diverse conditions and models of special education are a critical factor in understanding the professional experiences and overall well-being of educators. The specific inclusion model in which a special educator works influences their perceptions of belonging in the workplace. Participant 9 stated that being assigned as the primary teacher for an inclusion

classroom provides autonomy in lesson planning and determining how accommodations and modifications are aligned to instruction but is isolating because no other special educator teaches a class without a general education partner:

It is frustrating. I question how I am supposed to provide all of the standards for the curriculum, and then if a student needs something more but I have no help, I cannot provide that. Being the only teacher, both teaching the content and providing the accommodations. It's not best for students.

Three participants reported highly integrated co-teaching relationships, with Participant 4 indicating that the relationship with a group of content teachers has been important to feeling “as included” as any other teacher. Two participants referred to situations of general education teachers’ resistance to implementing suggested accommodations for students in an inclusive classroom that is not considered a co-taught setting. Participant 3 stated,

There is a lot of support from the paraprofessionals. The ABA techs are my “angels,” but they often get pushback from the general education teachers. There isn't common planning time for working with general education teachers who don't co-teach with me, so I have to rely on my long-standing relationships with those teachers to get them to implement the accommodations those students need.

Other participants’ experience a more distributed support system for working with students with disabilities, working closely with instructional assistants, general educators, or other support professionals to provide both push-in and pull-out services. Participant 6 stated that the role they play is to provide oversight of accommodations for students in an inclusion classroom, while writing plans to support reteaching of content or remediating skills for students in smaller groups. The instructional groups vary depending on the grade level, and part of the

participant's work is to provide lesson plans and instructional directions to two paraprofessionals that work to support a caseload of 15 students. Participant 6 shared,

I am responsible for all of the content areas, even those that are not part of a small group. I am able to connect with one of the general education teachers, but there are 6 different teachers that support my students in the inclusion classes. I have to take their plans, and offer suggestions, but there are times when I don't have the information I need in time to give support.

Participant 5 mentioned,

I have 16 students on my caseload, with 11 who participate in full inclusion classes. The other 5 have small group math with me, while being included in another teacher's co-taught English class. I am able to plan with the other special educator, but I don't have any common time with any of the general educators.

Some participants reported varying experiences with co-teaching models, with different levels of collaboration and shared teaching and support responsibilities. These co-teaching roles can be combined with other responsibilities, such as leading separate tutorial classes for pre-teaching or providing pull-out support. Participant 1 co-teaches a math class and an English class, as provides small group instruction for students who require reading support. Participant 1 states that being part of a grade level team allows access to the same teachers that they co-teach with throughout the work day. Participant 4 stated co-teaching in high school classes requires flexibility, but that close relationship building with the math department allows for conversation about common practices and lessons, which is different from the relationship they have with the teacher of the co-taught biology class they are responsible for. Participant 2 shared their

assignment is part of an eighth grade team, and this assignment includes both co-teaching and push in support with the same four teachers throughout the year.

Special education teachers' sense of belonging, efficacy, and shared responsibility with general educators is heavily influenced by the specific inclusion models and teaching conditions they experience. The degree of integration into the general school structure directly impacts their sense of belonging. For example, a co-teaching model, even when not perfectly balanced, fosters a feeling of being "very equal" and respected, leading to a stronger sense of integration. In contrast, serving as a dual-role teacher without in-class support or common planning time can lead to a profound feeling of "swimming alone," highlighting a deep sense of isolation.

Participant data demonstrate that special education teachers' sense of belonging, efficacy, and shared responsibility with general educators is influenced by the inclusion models and teaching conditions they experience. The degree of integration into the general school structure can contribute to or diminish their sense of belonging. A co-teaching model, as reported by Participant 2 to be "very equal" in work roles, and by Participants 1, 4 and 10 as a highly respectful environment leading to a stronger sense of integration, even when those partnerships are not perfectly balanced. In contrast, serving as a dual-role teacher without in-class support or common planning time can lead to a profound feeling of "swimming alone," as reported by Participant 9.

The size and complexity of a caseload, especially without adequate resources, may diminish a special educator's efficacy. A teacher with a large caseload of students finds it "impossible" to individualize instruction, leading to less perceived effectiveness despite being a "seasoned teacher," as stated by Participant 9. While autonomy in curriculum can lead to significant growth in a student's skill development or achievement, this individual success can

come at a severe personal cost, as Participant 3 admits, "I don't know, psychologically and physically, how much longer I can do this." As shared by Participant 4, the role of a special educator often requires them to be a "chameleon" to fit into general education classrooms. While this adaptability can build rapport, it may also lead to a feeling that their "particular skills were not being utilized," as presented by Participant 8, potentially influencing their professional identity and sense of efficacy.

### **Theme 2: Defining Efficacy Includes Promoting Success of Special Educators.**

Several factors contribute to special educators' sense of efficacy. Experience and expertise are paramount but not always recognized by colleagues. Participant 9 commented, "I have multiple years' experience in special education leadership. After returning to the classroom, this experience provides little benefit compared to less experienced teachers in our school. But I cannot use that experience to assist newer teachers when my caseload is not manageable on a daily basis."

Participant 6 noted that as they gained experience, they shifted from looking at standardized metrics to finding growth measures for student confidence and skill development as a measure of effectiveness. Participant 3 points to decreases in student maladaptive behavior or increased self-advocacy as successes, though notes that administrators do not celebrate this type of progress. This is echoed by the comments from Participant 5,

Helping students to advocate for themselves, to ask for help, or to try something that they want to avoid are as important to some of my students as any score on a standardized test. But when the focus is just on test scores, it hurts my ability to feel like I am really making changes that help my students.

Participants report autonomy and flexibility in their roles supports feelings of efficacy. The perception of resistance and a lack of buy-in from general education colleagues contributes to questioning special educator beliefs of their own professional efficacy in the workplace. Participant 4 shared that it's "hard to get to every teacher" that works with a particular student and worries that

Without stronger buy-in from all teachers students are impacted. Students cannot just rely on me for their support in the classroom. What if I am out? I even need to be out some of the time. I view my role as a safety net, not a hammock. I work with a few teachers that rely too much on what I provide for students rather than ask to be shown how to do the work themselves.

Participant 10 recognized that as their years of experience increased, resistance of colleagues and negative interactions are less bothersome. Participant 7 noted that building student confidence is more important than any score on a test, and that special educators see student achievement differently than general education colleagues and administrators. Participant 1 stated feelings of efficacy are higher when

Working with students, I just keep trying different things until they work. I make it a personal goal to have relationships with my students, know what they want their goals to be, and work with any teacher that will try new ideas. Some general education teachers are just comfortable, and they don't want to try. They aren't doing a lot.

**Theme 3: Defining Efficacy Includes Navigating Challenges Faced by Special Educators.** This theme was established through the repetition of codes in participant data about their ability to feel effective when having to balance instructional time in classrooms and the diverse needs of students with other factors, such as teacher workload, administrative burdens,

and the perception of the need to respond to questions or concerns of the broader school community. The analysis revealed a common sense of overload of paperwork and administrative burden, particularly related to documentation and report writing, directly contributes to a special educator's sense of efficacy. While compliance with state and federal laws and regulations is essential, all participants reported that the increasingly disproportionate workload limits their ability to engage in direct, impactful student instruction and support.

Nine of the 10 participants referenced unsustainable workload and excessive paperwork as major challenges. Participant 1 reported that they returned to teaching after the amount of paperwork as a special education Team chair became overwhelming and experienced little relief from the number of hours spent tracking data or completing reports related to the student's IEP. Participant 2 stated that on average, 50% of the hours in their school day are spent addressing compliance tasks, tracking data, or drafting reports. Participant 8 shared that with the increases in both requests for evaluation and student eligibility, the workload continues to grow even when caseloads are small. Participant 3 stated, "Because I have one of the smallest caseloads, when our last Team Chair retired, I became responsible for running Team meetings and producing IEPs for students assigned to other special educators in the building. This responsibility is hard to schedule, and the administration will provide coverage for me to leave my classroom to run meetings. This takes me away from the direct instruction of my students at least 3-4 times a week, all year long."

**Theme 4: Administrative Presence, Support, and Understanding Contributes to Special Educator Sense of Belonging, Efficacy, and Shared Responsibility with General Education Colleagues.** The visibility, support, and understanding of school and district administrators profoundly shape special educators' sense of belonging, their professional

efficacy, and the overall perception of shared responsibility within the school community. Participants reported that the level of administrative presence and visibility in special education classrooms varies significantly. From the participant's responses, special education teachers perceive that the quality of administrative support is closely tied to the administrators' understanding of the complexities of special education in general, and more specifically their understanding of the role of each special educator in the workplace.

Many participants mentioned that administrators demonstrate support for their work with students with disabilities, though this support may not be connected to administrator understanding of the diverse role and multiple responsibilities of the special educators in the workplace. For example, Participant 9 shared,

I often feel like I am swimming alone. My principal assumes that because I have years of experience that I know how to be “dual role” teacher. I don't see either of the administrators unless I call with a behavior issue with a student. Compared to my general education teacher colleagues, I am often left to manage situations by myself.

Similar to Participant 9, Participant 6 stated that although the administration supports the work they are doing,

My principal is pretty chill but does not provide a lot of leadership. The Special Education coordinator is very overwhelmed and has not stopped in my room at all this year. Neither of them have seen me teach a lesson.

In contrast, Participant 1 and Participant 2 stated that they experienced greater support from school administrators. Participant 1 stated that their relationship with administrators was strong, and that administrators were frequently present in the classroom. Participant 2 stated that the administrative team (a principal and an assistant principal) were a “phenomenal” team and

were highly visible in the classroom. Other participants reported differences in support based on how much the administration was both present and observing the special educator's work in the classroom. Participant 10 described a relationship with the principal that allowed them to have frequent, informal access throughout the day, and that this type of access allowed them to address issues quickly and return to teaching. Comparatively, Participant 4 stated:

The offices of the principal and the special education director are located in the same hallway. This makes it easy to go from one conversation about students to another, or to quickly have a quick meeting to solve problems. It is much more efficient.

Administrative presence in the classroom is the first of several factors discussed by participants related to administrator influence on sense of belonging and efficacy. Even when participants stated they felt their administrators were present, the responses showed mixed feelings and perceptions of administrator understanding of how special educators' work to meet the needs of students with disabilities is different than general education colleagues. Perceptions of administrator understanding was inconsistent between participants with some participants relating autonomy to make decisions for students as evidence of trust which increased feelings of efficacy, other participants interpreted autonomy as a response because administrators may not know how to provide support for the disproportionate workload special educators experience compared to their general education peers. Participants who reported a supportive relationship with administrators also frequently perceived their administrators as having trust in their expertise as a special educator. Participant 5 stated that this trust allowed them to propose midyear changes to the co-teaching model to better support students, and that the administrator left final decision making up to the co-teaching team. Participant 1 referenced situations when an administrator attended meetings with parents to show support for the special education team's

service plans, providing a sense of trust in their own decision making. Conversely, other participants reported that the autonomy in decision making came from not being able to engage with administrators. Participant 3 stated,

My principal often tells me to “just do you,” and I am able to propose modifications to student work or curriculum connections that work better for my students. The challenge is, I am also responsible for chairing team meetings for a larger number of students than I teach in my classes, which makes the workload more than my colleagues. But, as long as parents are happy and no one is complaining, I have the ability to make changes without having to get permission.

Participant 4 addressed the opposing conditions of the relationship with their administrators:

My principal is never breathing down my neck, never micromanaging. But I don’t think either my principal or assistant principal understand how much more work I have and what I have to do to have an equal role in the co-teaching classes.

Participant 2 also stated that their administrators underestimate the division of work between co-teaching colleagues, stating that the administrators significantly underestimate the amount of preparation time they devote compared to their general education co-teaching partner:

My administrators underestimate how much of the preparation work is done by each of us. I help prepare the lessons with my co-teacher, but I also write the modifications for all of the students who need them. I make sure accommodations are addressed in the lesson plan. The administration only sees the finished plans, not who completes the work.

Multiple participants mentioned that administrator decisions related to scheduling and use of resources influenced their feelings of professional support and shared responsibility.

Participant 7 indicated that when, over the summer, a newly hired administrator changed class

assignments for students without asking for the reasons for those placements, the decision led to a “mess” in providing services for those students and extra hours of work to correct issues after the new school year began. Participant 2, conversely, reported that their administrator prioritizes co-teacher collaboration when developing the school schedule, ensuring that coverage is available for all students on special educator caseloads so that co-teaching partners have time to meet. Participant 5 pointed to a situation where an administrator gave them autonomy in decision making, but with significant limits. Participant 5 stated:

There was a situation when I had a new student come into my classroom. This new student’s IEP meant I needed increased support in the classroom. My principal told me to figure it out, but not to propose hiring another employee. I had to spend time outside of the school day working on re-assigning paraprofessionals without any input from administration.

### ***Research Question 2***

The second research question was “How do special education teachers perceive the influence of interactions with general education colleagues on their sense of belonging?” Interview questions focused on the relationships between the participants and their general education colleagues, and how the interactions within the workplace contributed to special educators’ sense of belonging within the school. Almost all participants shared that they feel generally accepted and recognized by general education colleagues as teachers of students. All participants acknowledged that when colleagues accept the special educator as a teaching partner, whether as a co-teacher or as a teacher with a variety of inclusion and small group classes, there is a stronger sense of belonging within the school community. For Research Question 2, a single theme emerged that combined sense of belonging and shared responsibility

for student achievement as outcomes of the nature and frequency of opportunities for special educators to collaborate with general educator colleagues.

**Theme 5: How Collaboration Supports and Hinders Sense of Belonging and Shared Responsibility.** The nature and frequency of interactions with general education colleagues significantly impact special educators' sense of belonging and their perceptions of shared responsibility for students with disabilities. Collaboration can be a powerful enabler or a significant barrier. Participant experiences varied widely across different school settings and individual teacher relationships, though most participants referenced both formal and informal structures for collaboration being desirable opportunities for working with general education colleagues.

*Nature and Frequency of Collaboration.* Participant 9 noted that formal collaborative structures were not available in the school. “There doesn’t seem to be any common planning time of PLCs for content teachers or special educators here, so it’s definitely something I have to seek out.” Participant 5 stated that their co-teaching model is exclusively a “one-teach, one-support” approach, and while the administration recognizes co-teaching partners need collaboration time, it’s an aspiration rather than a reality. Participants 3 and 6 spoke of opportunities for informal collaboration in their schools; Participant 6 in particular highlighted the varied collaboration experiences with different general education colleagues:

My collaboration with colleagues looks different across every classroom. Some teachers are pro-active and share a complete weekly plan and specific details for me to work from, and I am able to add to those plans through a shared document. Other teachers are less engaged. They will send an email, outlining what they “think” they might do in class, or a set of slides for the lessons for the upcoming week. I don’t have any common time with

the other teachers, so I make an effort to connect with every teacher at least 10 minutes every week.

Three participants focused on the access to common planning time with co-teaching partners and grade level teams. Participant 1 described consistent, structured collaboration with co-teaching partners, meeting regularly with a common period noted in both teacher's schedule. Participants 4 and 10 stated in each of their schools, their administrators were deliberate in scheduling preparation periods. For Participant 4, the scheduling resulted in two periods in each cycle to meet with the math department, and Participant 10 was scheduled to meet with each of the two co-teaching partners on a weekly basis.

***Influence on Sense of Belonging.*** Deliberate opportunities for special educators to collaborate with general educators contributes to a sense of belonging, according to participant responses. Conversely, unintentional omissions from some aspects of collegial interactions can lead a special educator to feel less than full included in the life of the school. Participant 5 recalled a time when the grade level team to which she was assigned did not remember to provide information about activities, both academic and social, that the others on the team were part of:

I wasn't always included in group emails, or when there were meetings to talk about planning field trips or grade level activities. The rest of the team took a graduation day picture on the last day of school but didn't invite me to be in the picture. I asked for a team re-assignment for the next year; I felt so excluded.

Participants also discussed challenges to their sense of belonging, and the steps they had to take to overcome the challenges in the workplace. Participant 1 discussed how a co-worker described the school as a "hostile work environment," for special education teachers. In

response, Participant 1 stated, “I made it my personal goal to connect with every general education teacher in some way in my first year. I made it impossible for them not to include me.”

*Influence on Perceptions of Shared Responsibility.* Shared responsibility is heavily influenced by the nature of collaboration. Participant responses indicated that, regardless of the type of collaboration structures, one of the greatest challenges they face is the perception that students with disabilities are, as stated by Participant 7, “the special education teacher’s kids.” Seven participants indicated that their general education colleagues often don’t “know or understand” how to work with students with disabilities. Participant 2 summarized this concern, stating:

The majority of my colleagues say, “I don’t know what to do for this student, it’s a special education issue.” “Here, you figure it out. They’re your students.” Some general educators don’t know how to read an IEP and are not good about making sure accommodations are in place.

Other participants reported experiences with colleagues that changed over time. Participant 1 stated that it took time for some colleagues to see them as more than a “glorified teaching assistant.” Participant 8 emphasized that “being reliable as a special education teacher” slowly changed the perspective of general education colleagues. Participant 3 had similar perspective, stating:

I was on time, if not early, for every co-teaching period. I was committed to staying after school for extra help sessions. I was present for every phone call made to a parent. It was hard to feel like I had to show I could be trusted, but all that effort was worth it when I was able to see my co-teaching partners take the lead on implementing an accommodation for a student rather than waiting for me.

Eight of the participants emphasized that shared responsibility requires mutual trust and respect between general and special education teachers. Multiple participant responses refer to trust developing over time. When collaboration structures are not available or not seen as inclusive, special educators may be able to use proactive strategies to build relationships and gain buy-in from general education colleagues. When collaboration time is planned for and part of the school culture, participants reported fewer barriers to sharing responsibility for supporting students with disabilities with their general education colleagues.

### ***Research Question 3***

The third research question was “What strategies can be leveraged to increase special educators’ sense of belonging, efficacy, and shared responsibility in the workplace?” Participants frequently suggested or indicated actionable strategies that could enhance special educators’ sense of belonging, professional efficacy, and the effectiveness of shared responsibility. Strategies ranged from systemic changes, resource reallocation, and collaboration structures that are embedded in school practices. Almost all of the participants also mentioned administrative support, district-wide professional development and district policy updates. A single theme emerged from participant responses that focused on the need for systemic changes that can build capacity not just for special educators but all members of the school community.

**Theme 6: Strategies for Building Belonging, Efficacy, and Shared Responsibility.** All participants believe that systemic changes are necessary to build or enhance a workplace environment that genuinely supports special educators’ sense of belonging, enhances their professional efficacy, and strengthens shared responsibility for the learning of students with disabilities. Participant data indicates that the following areas are of greatest importance: professional development, shifts in leadership practices and school culture, and implementing or

expanding upon differentiated programs that support the changing needs of students in the inclusive classroom setting.

***Fostering a Sense of Belonging and Shared Responsibility.*** To increase special educators' sense of belonging and shared responsibility, participants emphasized the need for systemic changes that promote collaboration and integration. Dedicated common planning time was a consistent call, with Participant 2 noting that a lack of common time between educators makes communication feel like "ships moving in the night." Every participant referenced the importance of common planning time with general education colleagues. The lack of embedded collaboration time leads to a sense of isolation and prevents a shared approach to student support. Participant 9 proposed reallocating existing special education teachers from isolated roles into co-teaching positions, saying this would be an efficiency in the professional resources (special education teachers) and lead to more effective student support. Participant 2 echoed this sentiment, stating that co-teaching "all core classes would be a huge move" toward greater shared responsibility.

***Enhancing Efficacy.*** Participants identified a variety of strategies to enhance special educators' efficacy. Participants 2 and 9 promoted increasing co-teaching across all content areas and involving all special education teachers with a dedicated general education teaching partner. Participant 6 called for differentiated program structures that cater to diverse student needs, rather than a one-size-fits-all model. In addition, targeted professional development was seen as crucial. Participant 10 argued for moving away from single-program training and instead providing educators with a "variety of programs" to address varied learning profiles. Participant 1 encouraged meeting with grade level teachers at the beginning of each school year, a proactive approach to "explain about different types of disabilities that our students face." Participants 1

and 8 supported adoption of district-wide instructional practices, with Participant 8 noting Universal Design for Learning (UDL). Multiple participants encouraged special educators to demonstrate their expertise during formal professional development or PLC activities. Four participants suggested shifting focus to include flexibility in assessment, allowing for student growth data in non-standardized areas to be reviewed in the same way as scores on standardized achievement tests. This approach, proposed by Participant 3, focuses on developmental and foundational learning outcomes and empowers special educators to adapt their teaching to better meet student needs.

***Administrative Support and School Culture Shifts.*** Eight of 10 participants included the need for building and district administrators to be present, supportive, and knowledgeable about the complexities of the role of a special educator. Participant 3 elaborated on how administrators can support the work of special education teachers, saying,

Something has to give. I want to just close my door, to teach. My advice? Ask special educators how much time is spent on reports and data collection, and make sure they have time to do that work. Make sure that special education teachers have time to collaborate with each other and with co-teaching partners. Build collaboration time for general education teachers to meet with reading specialists, the speech therapists. Give more space in our day to plan with paraprofessionals and support staff. This will change how the work is shared, and how the work gets done.

Participants 4 and 7 noted the importance of including administrators in the collaboration process, and administrators leading the building of understanding about the laws and regulations around shared responsibility for supporting students with disabilities. Participant 4 pointed out that administrators should be responsible for stating and explaining the role of general educators

in working with students with disabilities, and telling educators, “the laws apply to everyone.” Participant 7 noted that new special education teachers would benefit from developing relationships with administrators, because “you don’t want the first time you talk to someone to be about asking for a favor or for support in a difficult situation.” Participant 1 described the role of administration should include shifting the culture from “special educators should fix the issues,” to one where special educators are seen as collaborative partners with general educators. All participants agreed that a shift is needed to balance the responsibility of supporting diverse students between special education teachers and general education teachers, with Participant 2 emphasizing that special educators should be viewed as more than “problem solvers.”

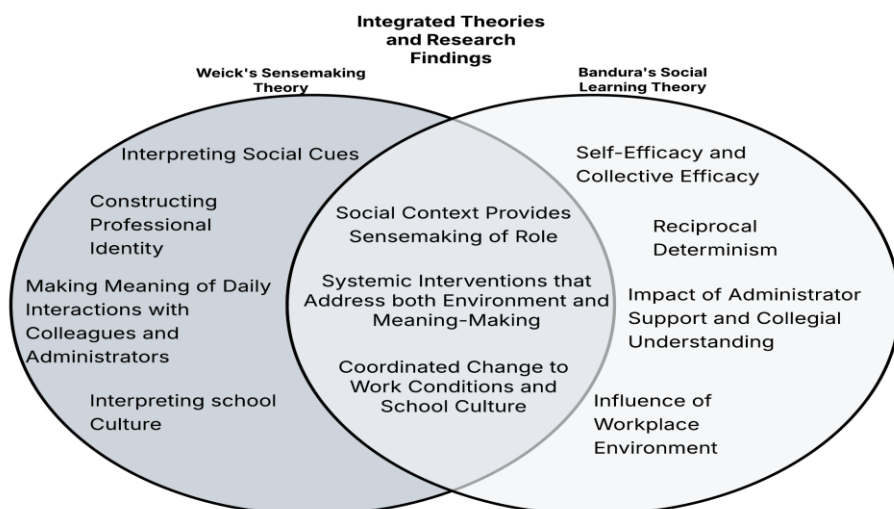
### **Evaluation of the Outcomes**

The purpose of this qualitative study was to explore the factors and conditions that affect Massachusetts special educators' sense of belonging, efficacy, and shared responsibility in the workplace. SLT (SLT; Bandura, 1977) and Weick’s (1995) sensemaking theory provided the framework for this study. Based on this study and its findings, the researcher concluded that these theories are both accurate and applicable. The research provides evidence that both frameworks are crucial for understanding the unique and complex experiences of special educators in public schools. The applicability of both theories individually, as well as the areas of overlap, are presented in Figure 3.

### Figure 3

#### *Application of Theoretical Framework to Findings*

The findings from this research demonstrate that special educators' professional experiences are shaped by the unique interactions between their workplace environments, personal beliefs about their effectiveness, and how they make sense of their roles within inclusive school settings. Bandura's SLT (1977) provides a comprehensive framework for understanding how environmental factors (such as the specific inclusion models in which special educators work or the level of administrative support they receive) directly influence their self-efficacy and sense of collective efficacy with their general education colleagues (Leko et al., 2020; Shaffer et al., 2022). The research shows that when special educators experience positive workplace conditions, such as co-teaching partnerships with common planning time, they have more opportunities for successful experiences with students that build their sense of professional effectiveness and belonging (Sileo, 2021; Williams et al., 2023). However, when special educators face barriers like excessive paperwork or administrative duties and demands, isolation



from general education colleagues, or unclear expectations from administrators or colleagues

about their roles, these conditions undermine their ability to feel effective and connected to their school communities (Ruppar et al., 2024; Williams et al., 2023).

At the same time, Weick's Sensemaking Theory (1995) helps explain how special educators interpret and understand their complex professional roles within inclusive settings. The findings show how special educators continuously work to construct their professional identity by paying attention to and interpreting social cues in their workplace—from being excluded from team emails or pictures to having administrators visit their classrooms or support their decisions with parents (Berry et al., 2020; Ritcher & Theoharis, 2021). Special educators use these experiences to develop an understanding of their value and place within their school community. This process of making sense of their professional experiences is social, happening through daily interactions with colleagues, administrators, and students, and is influenced by the messages and narratives available in their schools about shared responsibility for students with disabilities and the expertise that special educators bring to inclusive education (Berry et al., 2020; Ritcher & Theoharis, 2021; Ryan et al., 2020).

As presented in Figure 3, the blending of these theories relative to the findings reveals that sustainable improvements in special educators' sense of belonging, efficacy, and shared responsibility require systemic interventions that operate simultaneously on multiple levels: environmental redesign that enhances opportunities for positive efficacy experiences, and cultural transformation that provides the interpretive resources necessary for constructing resilient professional identities. The participants' recommendations demonstrate insightful understanding of this dual need, proposing interventions that address both the structural conditions identified by SLT and the meaning-making processes central to sensemaking theory (Leko et al., 2020; Ryan et al., 2020; Sileo, 2021). This acknowledges that special educators'

professional experiences cannot be improved through isolated interventions, instead improvement requires coordinated change that transform both the environmental conditions of their work and the context of and within the school cultural where special educators develop professional meaning (Ruppar et al., 2024; Shaffer et al., 2022).

### **Research Question 1**

The first research question was “How do special education teachers describe the influence of different inclusion classroom settings and teaching conditions on their sense of belonging, efficacy, and perceptions of shared responsibility with general educators for the learning of students with disabilities?” The findings for this question reveal that special educators' sense of belonging, efficacy, and shared responsibility are most significantly shaped by the inclusion models and teaching conditions in which they operate. The data demonstrate that the degree of integration into the general school structure directly impacts their sense of belonging. For example, highly integrated co-teaching partnerships, even when not perfectly balanced, foster a feeling of being "very equal" and respected, leading to a stronger sense of integration. Conversely, serving in a dual-role teacher position without in-class support or common planning time can lead to a profound feeling of "swimming alone," highlighting a deep sense of isolation. Participant 9, for instance, articulated that being a primary teacher for an inclusion classroom provides autonomy but is isolating because no other special educator has a similar role. The various inclusion models provide classroom conditions that either support or hinder a special educator's sense of self-efficacy. When a participant describes a "very equal" co-teaching partnership, this environment fosters positive experiences, enhancing special educator belief in their ability to succeed. Conversely, the feeling of "not having the final say" or being a "chameleon" reference the influence of more restrictive environmental factors, which can create

cognitive dissonance and diminish a sense of personal investment, as the educator's behavior is primarily a response to external conditions rather than a reflection of or opportunity to present their own expertise.

The next most prominent finding is that special educators' sense of efficacy is frequently undermined by an unsustainable workload and excessive paperwork, which were cited as major challenges by nine out of ten participants. This administrative burden restricts their capacity to engage in direct, impactful student instruction and support. For instance, Participant 2 reported that on average, 50% of their school day is spent on compliance tasks, tracking data, or drafting reports. Other factors affecting efficacy include the size and complexity of a caseload, which Participant 9 stated makes it "impossible" to individualize instruction. In addition, a perceived lack of "buy-in" or resistance from general education colleagues to implement accommodations can diminish a special educator's beliefs about their own professional efficacy. Participant 4 worried that "without stronger buy-in from all teachers," students are negatively affected and cannot rely solely on the special educator for support.

Lastly, the findings indicate that administrative presence, support, and understanding also contribute to a special educator's sense of belonging, efficacy, and shared responsibility. Participants reported varied perceptions, with some experiencing robust administrative support, such as having administrators who were frequently present in their classrooms and highly visible. This presence, coupled with perceived trust in their expertise, augmented feelings of efficacy. However, other participants experienced a lack of leadership and reported that administrators did not observe their teaching. Furthermore, some participants interpreted administrative autonomy as a form of benign neglect, with one participant stating their principal told them to "just do you," which led to a disproportionate workload compared to their peers.

The findings align with both Bandura's (1977) SLT and Weick's (1995) sensemaking theory. The influence of varied inclusion models on a special educator's professional experience demonstrates Bandura's concept of reciprocal determinism, where the environment (inclusion model) influences the individual (their professional perceptions), which in turn influences their conduct (collaboration and self-advocacy; Bandura, 1984). When collaboration is a visible and valued component of the professional environment, special educators observe and are able to adopt a shared professional identity with their general education colleagues that influences their self-efficacy within that setting. This connects with Weick's sensemaking theory, as special educators interpret their professional roles based on their daily interactions and the available support structures. The collaborative experience of a highly effective and functioning co-taught classroom provides a clear framework for making sense of shared responsibility (Weick, 1995), while an isolated role necessitates a continuous and often arduous process of re-evaluating one's professional purpose and effectiveness. The convergence of the theories is evident in how the social context (Bandura, 1977) of the school or classroom setting provides professional feedback and information essential for special educators to construct their understanding (Weick, 1995) of their role, which directly impacts their feelings of belonging and efficacy.

### **Research Question 2**

The second research question was “How do special education teachers perceive the influence of interactions with general education colleagues on their sense of belonging?”

The findings for the second research question indicate that interactions with general education colleagues profoundly shape a special educator's sense of belonging and their perception of shared responsibility for students with disabilities. All participants affirmed that when colleagues recognize and accept the special educator as a teaching partner, a stronger sense

of belonging within the school community is fostered. The core theme to emerge was how collaboration, both formal and informal, acts as either a powerful enabler or a significant impediment to these outcomes. The most impactful finding was the significance of access to intentional collaboration time. For example, Participants 1, 4, and 10 noted that their schools' administrators were deliberate in scheduling preparation periods to facilitate meetings with co-teaching partners or grade-level teams. However, a lack of such deliberate structures can lead to unintentional exclusion, as exemplified by Participant 5, who felt "so excluded" after being omitted from group emails, planning meetings, and even a team photo, ultimately leading her to request a team reassignment.

Despite the challenges, a major finding was the ability of special educators to proactively build relationships and gain buy-in from general education colleagues, which in turn reinforces a sense of shared responsibility. One of the most significant challenges noted by participants was the prevailing perception that students with disabilities are solely "the special education teacher's kids." As Participant 2 summarized, many colleagues assert, "I don't know what to do for this student, it's a special education issue," and tell the special educator, "Here, you figure it out. They're your students." However, participants also reported that these attitudes can be changed over time. Eight participants emphasized that mutual trust and respect are essential for shared responsibility. Participant 3's experience demonstrates this well; they were committed to being on time, staying after school, and being present for parent calls to show their co-teaching partners they could be trusted. This effort was deemed worthwhile when they observed their co-teaching partners taking the lead on implementing an accommodation.

Bandura's SLT emphasizes how individuals learn through observation and imitation within a social context. This is reflected in the data when special educators, like Participant 5,

feel excluded by "unintentional omissions" from their grade level team. The lack of inclusion in emails, meetings, and social activities provides a negative model for belonging, compelling the special educator to seek a new environment. Conversely, Participant 1's strategy to "connect with every general education teacher" and make it "impossible for them not to include" them demonstrates an active effort to create a social environment that fosters a sense of belonging. This is where the theories overlap. Weick's sensemaking theory suggests that individuals interpret their roles and their place within an organization based on their social interactions. When collaboration is absent or collegial relationships are strained, special educators must actively construct their own meaning of their professional identity and belonging, a process that can be arduous and lead to feelings of isolation.

### **Research Question 3**

**What strategies can be leveraged to increase special educators' sense of belonging, efficacy, and shared responsibility in the workplace?**

The findings for the third research question, focusing on strategies to enhance special educators' sense of belonging, efficacy, and shared responsibility, indicate a collective belief among participants that systemic changes are essential. All participants noted the importance of dedicated common planning time. The absence of embedded collaboration prevents a shared approach to student support and leads to feelings of isolation. Additionally, participants proposed resource reallocation, such as reassigning special education teachers from isolated roles into co-teaching positions to increase both professional efficiency and effectiveness. Participants promoted the adoption of a more universal co-teaching model as a way for schools to move toward greater shared responsibility.

Participants also identified targeted professional development and shifts in administrative support as critical needs. Eight of 10 participants emphasized the need for administrators to be present, supportive, and knowledgeable about the complexities of the special educator role. Participant 3 offered a clear directive to administrators, stating they should "ask special educators how much time is spent on reports and data collection, and make sure they have time to do that work" and to "build collaboration time" for all staff. Participants 4 and 7 further highlighted the crucial role of administrators in clarifying the legal obligations of all educators. Participant 4 specifically noted that administrators should be responsible for stating that "the laws apply to everyone" to build understanding around shared responsibility.

Data from participants suggests that special educators believe administrative support is necessary to shift school culture so that special educators are seen and valued as collaborative partners. This need to balance responsibility between general and special educators was a universal response from participants, with Participant 2 emphasizing that special educators should be seen as more than "problem solvers." The findings align with Bandura's SLT by demonstrating that when school systems provide the environmental support for collaboration and shared responsibility, they enable special educators to develop a stronger sense of professional efficacy. Similarly, Weick's sensemaking theory connects to the data, as clear communication from leadership and dedicated collaboration time provide the social cues needed for special educators, and all educators, to create a shared understanding of their roles in the workplace.

### **Implications and Recommendations for Practice**

This qualitative case study was developed to explore the factors and conditions that affect Massachusetts special educators' sense of belonging, efficacy, and shared responsibility in the workplace. The research was grounded in the theoretical frameworks SLT (Bandura, 1977)

and Weick's (1995) sensemaking theory. The findings from this research reveal three implications for future practice: fostering deliberate collaboration, clarifying and supporting the role of special educators in public secondary schools, and strategic, intentional professional development and resource allocation. The following implications and recommendations for practice are presented as actionable steps for school and district leaders to foster more supportive and inclusive environments for special educators and, by extension, all students with disabilities in Massachusetts public secondary schools.

### ***Fostering Deliberate Collaboration***

The findings of this study reinforce that deliberate, dedicated collaboration time is a crucial, non-negotiable factor for building trust, shared responsibility, and a stronger sense of professional belonging for special educators. The data consistently highlights that when administrators build collaboration time for staff, it leads to improved outcomes. This aligns with recent research by Smith and Chen (2023), which found that Massachusetts secondary schools that implemented structured common planning time for co-teaching partners saw significant increases in professional efficacy and shared ownership for student outcomes.

To address this implication, school and district administrators must establish structures that prioritize collaboration, such as scheduling common planning periods for co-teaching teams and grade-level teams with special educators. This collaboration time must be “kept sacred,” without concern of having other duties or activities assigned to this time by administrators or for initiatives other than co-teaching. Ensuring special educators are included in all relevant team communications, professional development, and decision-making processes is critical. This approach validates the importance of the partnership between general and special education

colleagues, clarifying their shared responsibilities for students with disabilities, and aligning practices with state-level education regulations (Leko et al., 2020).

### ***Clarifying and Supporting the Role of Special Educators in Public Secondary Schools***

A lack of role clarity and the excessive administrative burdens reported by study participants were shown to profoundly undermine special educators' professional efficacy and sense of belonging. The findings suggest that administrators must actively engage in both clarifying roles and providing active support. Data from this study shows that compliance tasks and report writing can consume a significant portion of a special educator's day. Research from Davis and Lee (2024) on special educator retention in Massachusetts highlights that this burden of administrative responsibilities is both a detractor from providing direct support to students in the classroom but is also a primary driver of burnout and attrition. Administrators should conduct regular check-ins with special educators to understand their workload and make efforts to reduce non-instructional demands.

Administrators hold a primary role in promoting a school-wide culture where special educators are viewed as expert partners, not just "problem solvers." School principals are required through state regulations as responsible for ensuring that all educators and staff follow student education plans and provide accommodations and modifications for all students with disabilities. Administrators must take the lead in reinforcing that the legal obligations of special education "apply to everyone." This commitment to clarity provides administrators with a clear pathway to support staff, ensure compliance with state regulations, and promote district-wide program continuity by standardizing expectations for the special educator's role across all schools.

### ***Strategic, Intentional Professional Development and Resource Allocation***

This study's findings demonstrate that isolated teaching roles diminish the sense of shared responsibility and professional efficacy, while co-teaching models foster a stronger sense of partnership and effectiveness. School districts should consider strategically reallocating resources to support universal inclusive models, such as co-teaching. Research by Rodriguez et al. (2022) in Massachusetts public schools has shown that shifting from isolated, pull-out models to integrated co-teaching significantly improves both academic outcomes for students with disabilities and job satisfaction for special educators. A non-negotiable commitment to prioritizing professional development for both general and special educators on effective co-teaching strategies, shared instructional practices, and the benefits of an inclusive mindset is required to move beyond simply having special educators present to support students with disabilities in classrooms taught by general educators. By moving away from independently functioning roles toward collaborative ones, districts can ensure a consistent approach to inclusion that benefits all students and also empowers general educators alongside their special educator colleagues. Providing general teachers with the tools and knowledge to effectively partner with special educators will foster a greater sense of shared responsibility desired by special educators in the workplace.

The findings of this study illuminate pathways for school and district leaders to enhance the professional experiences of special educators and, by extension, strengthen outcomes for students with disabilities. There are three recommendations for applying the findings to practice. These recommendations represent actionable steps grounded in the experiences of participants and supported by existing research, offering districts concrete mechanisms to foster shared responsibility, professional efficacy, and sense of belonging among special educators.

The first recommendation is fostering intentional collaboration through sustained investment in evidence-based co-teaching models and professional development. Districts must invest deliberately in collaborative frameworks, including station teaching and parallel teaching, while providing the professional development necessary for effective implementation. Research by Jones and Williams (2021) demonstrates that formal training on these collaborative models significantly enhances both the effectiveness and perceived value of shared instructional time for special and general educators alike. This recommendation addresses the fundamental need for structured approaches to collaboration that emerged consistently across participant narratives.

Another recommendation is clarifying and supporting the special educator role through comprehensive mentorship and liaison systems. Districts should establish formal mentorship programs that pair novice special educators with experienced colleagues and designate special education liaisons within each school building. As Patel's (2020) comprehensive review reveals, such structured support mechanisms substantially increase teacher self-efficacy and job satisfaction, particularly within roles characterized by complex administrative demands. This systematic approach to professional support directly addresses the isolation and role ambiguity that participants identified as barriers to their effectiveness.

The final recommendation is strategic resource reallocation through the development of comprehensive, district-wide Multi-Tiered Systems of Support (MTSS) that position special education services as integral components of student support. This systemic integration requires sustained commitment to proactive, rather than reactive, approaches to student intervention and support. Chen and Baker's (2019) research substantiates that when special education is embedded as a foundational element within well-implemented MTSS frameworks, schools demonstrate more collaborative approaches to meeting diverse student needs while reducing dependence on

traditional pull-out interventions. Such comprehensive integration not only strengthens the professional efficacy of special educators but cultivates the shared responsibility necessary for meaningful inclusion to flourish across educational settings.

### **Recommendations for Future Research**

Based on the literature, findings, and implications of this study, there are two recommendations for future research as result of this study. Further qualitative studies should be conducted to expand on the foundation for understanding the professional experiences of Massachusetts special educators. The findings of this study suggest that effective co-teaching models are crucial for improving special educators' sense of shared responsibility and efficacy. However, a deeper understanding of the processes and conditions for successful, sustained implementation of these partnerships is needed. Less than half of participants in the study indicated engaging in a co-teaching model of instruction. A future qualitative case study should explore the successful implementation of co-teaching partnerships across a range of content areas (e.g., science, history, math, English) in Massachusetts secondary schools. This research would build on the framework established in the current study and employ a case study design, using in-depth interviews and classroom observations to investigate the non-negotiable steps for initial implementation, including administrator training, common planning time, and professional development on specific co-teaching models. The research would also focus on the conditions required to sustain these practices over a multi-year period, such as ongoing administrative support, teacher-driven professional learning communities, and a school culture that values shared expertise. The findings would directly address the systemic barriers to sustained co-teaching identified in this study and in the literature, such as a lack of formal training and insufficient collaborative time (Jones & Williams, 2021).

The data from this study indicates that the high volume of non-teaching duties, such as compliance tasks and report writing, significantly impacts a special educator's professional efficacy. Findings from this study suggest that special educators have higher numbers of administrative tasks compared to general educator colleagues, and these impact opportunities to work directly with students with disabilities in the classroom. To further explore this issue, a second qualitative study could assess the differences in non-teaching duties and responsibilities of special educators across different grade levels (elementary, middle, and high school) and the influence these have on their perceptions of efficacy in providing direct instruction. Using a phenomenological approach, the study would gather detailed narratives from special educators at each grade level to understand how they make sense of their roles, balance competing demands, and perceive the direct impact of non-teaching tasks on their ability to fulfill their primary instructional duties with students with disabilities. This research would provide valuable insight for administrators and policymakers seeking to create more equitable and sustainable special educator roles across a district, addressing a key finding from this study and aligning with prior research that highlights the link between administrative burden and teacher burnout (Davis & Lee, 2024).

## **Conclusions**

The purpose of this qualitative case study was to explore the factors and conditions that affect Massachusetts special educators' sense of belonging, efficacy, and shared responsibility in the workplace. The researcher initiated this research to understand special educators' perceptions of their role and relationships as teachers in Massachusetts public schools. Semi-structured interviews were conducted to inquire into teachers' perceptions. This study explored, through a framework combining SLT and Sensemaking Theory, the factors and conditions in

Massachusetts public secondary schools that influenced the perceptions of special educators of their role in the workplace. The first research question answered in this study was how do special education teachers describe the influence of different inclusion classroom settings and teaching conditions on their sense of belonging, efficacy, and perceptions of shared responsibility with general educators for the learning of students with disabilities? The second research question answered in this study was how do special education teachers perceive the influence of interactions with general education colleagues on their sense of belonging? The third research question answered in this study what strategies can be leveraged to increase special educators' sense of belonging, efficacy, and shared responsibility in the workplace?

Five themes were identified in this study. The findings from this research demonstrate that special educators' professional experiences are shaped by the unique interactions between their workplace environments, personal beliefs about their effectiveness, and how they make sense of their roles within inclusive school settings. Special educators use these experiences to develop an understanding of their value and place within their school community.

This study makes a significant contribution to the body of literature on special education by providing a nuanced understanding of the complex interactions between workplace environments, professional efficacy, and the sensemaking process for special educators in Massachusetts. While existing research has explored teacher burnout and collaboration, this study provides a unique, in-depth qualitative perspective that illuminates how these factors influence a special educator's sense of belonging and shared responsibility. The research reinforces that relying on isolated efforts is insufficient; instead, school and district leaders must implement systemic interventions that address both the environmental and cultural factors

influencing professional experiences. As supported by both SLT and Sensemaking Theory, these changes are not just operational decisions but are cultural transformations.

Fostering intentional collaboration, clarifying roles, and strategically reallocating resources are commitments to future practice that are necessary for special educators, and all educators, to create a shared understanding of their collective roles. Considering these systematic and deliberate changes would create a pathway for a more collaborative and effective inclusive education system for every student in Massachusetts. Future research should qualitatively explore the successful implementation of co-teaching and the impact of non-teaching duties on special educators' efficacy. These studies would benefit the field by providing actionable guidance for administrators and policymakers to create more supportive and sustainable roles, ultimately improving inclusive education conditions for special educators and learning experiences for students with disabilities.

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## Appendices

## Appendix A

### Consent Form/Letter: Questionnaire, Interview, and Journaling Participation

Hello,

My name is Jennifer Toth, and I am a doctoral student at National University. I am conducting qualitative research study to identify the work-related factors and conditions that influence special educators' sense of belonging, efficacy, and shared responsibility for students with disabilities in the workplace. Study participants will participate in one or more of the activities involved in the data collection process: an open-ended questionnaire, a semi-structured 1:1 interview, and a reflective journal activity.

In order to participate, you/your:

- Currently or have been employed (within the last 18 months) in a central Massachusetts public school,
- Current or prior employment is/was as a special educator,
- Employment history as a special educator has been, or currently is at least three (3) consecutive years in the same role,
- At least 25% of the work expectation for your role as a special educator is/was providing instruction in an inclusive classroom setting for students with disabilities.

The following questionnaire will ask for feedback about:

- Demographics related to yourself: age, personal identity criteria (gender, race, ethnicity)
- Demographics related to your employment: years of service, years as a special educator.
- Demographics related to your workplace: student population, type of school, grade level, content area, type of teaching responsibilities.
- Relationships with other teachers, staff, administrators, students and families
- Professional development and training opportunities
- Setting Conditions (physical spaces, social interactions, and professional circumstances)
- Perspectives on the roles and responsibilities of special educators and non-special educators

It will take 40 minutes of your time to complete the questionnaire. By participating, you will be entered into a drawing to receive a \$25.00 Amazon gift card. The drawing will be conducted after completing all questionnaires, and the winner will be pulled using a randomizer tool.

Your participation in this study is voluntary. If you decide to participate, your responses will be anonymous - that is, recorded without any identifying information linked to you. If you have any questions regarding this questionnaire, please contact me at *J.Sauter7610@o365.ncu.edu*. If you have any questions regarding your rights as a human subject and participant in this study or to report research-related problems, you may email the National University IRB at *irb @ nu.edu*.

*By clicking the following button and completing the questionnaire, you indicate that you have consented to participate in this research. If you do not want to participate, please close the browser.*

## Appendix B

### Participant Questionnaire

My name is Jennifer Toth, and I am a doctoral student at National University. I am conducting qualitative research to identify the work-related factors and conditions that influence special educators' sense of belonging, efficacy, and shared responsibility for students with disabilities in the workplace. Study participants will participate in one or more of the activities involved in the data collection process: an open-ended questionnaire, a semi-structured 1:1 interview, and a reflective journal activity.

This questionnaire includes questions about the conditions that influence special educators' feelings of efficacy, shared responsibility, and sense of belonging in the workplace, and will take approximately 30-40 minutes to complete. Please read the questionnaire instructions carefully before beginning. Respond to all questions as honestly as possible. Your responses will be confidential. You may skip any questions you do not wish to answer.

At the end of this questionnaire, you will be invited to participate in a 1:1 interview with the researcher to further explore your experiences as a special educator in the public schools. Should you choose to participate in this step of the research study, please follow the instructions to contact the researcher and schedule an interview. The purpose of this questionnaire is to understand your experiences as a special educator in an inclusive classroom setting, and how those experiences have affected your sense of belonging, efficacy, and shared responsibility in the workplace. Please read each question below and describe your experiences in your own words in the space provided.

**In section 2, you will provide demographic information, please select the best choice(s) for each question or statement. These questions will assist the researcher in classifying participants by inclusion criteria. In order to participate, you/your/you are:**

- Currently or have been employed (within the last 18 months) in a central Massachusetts public school,
- Current or prior employment is/was as a special educator,
- Employment history as a special educator has been, or currently is at least three (3) consecutive years in the same role,
- At least 25% of the work expectation for your role as a special educator is/was providing instruction in an inclusive classroom setting for students with disabilities.

**The following questionnaire will ask for feedback about:**

- Demographics related to yourself: age, personal identity criteria (gender, race, ethnicity)
- Demographics related to your employment: years of service, years as a special educator.
- Demographics related to your workplace: student population, type of school, grade level, content area, type of teaching responsibilities.
- Relationships with other teachers, staff, administrators, students and families

- Professional development and training opportunities
- Setting Conditions (physical spaces, social interactions, and professional circumstances)
- Perspectives on the roles and responsibilities of special educators and non-special educators

It will take 30-40 minutes of your time to complete the questionnaire. By participating, you will be entered into a drawing to receive a \$25.00 Amazon gift card. The drawing will be conducted after completing all questionnaires, and the winner will be pulled using a randomizer tool. Your participation in this study is voluntary. If you decide to participate, your responses will be anonymous - that is, recorded without any identifying information linked to you. If you have any questions regarding this questionnaire, please contact me at [J.Sauter7610@o365.ncu.edu](mailto:J.Sauter7610@o365.ncu.edu). If you have any questions regarding your rights as a human subject and participant in this study or to report research-related problems, you may email the National University IRB at [irb@nu.edu](mailto:irb@nu.edu).

### **Section 1: Experiences of a Special Educator in the Workplace**

The purpose of these questions is to understand your experiences as a special educator in an inclusive classroom setting, and how those experiences have affected your sense of belonging, efficacy, and shared responsibility in the workplace.

In the following open-ended questions, we'll be using the following terms:

***Self-efficacy:*** This refers to your belief in your own ability to successfully complete tasks and achieve goals and feel confident in your skills and knowledge.

***Sense of belonging:*** This is the feeling of being connected to and supported by your school community. It's about feeling accepted, valued, and part of a group.

***Shared responsibility:*** This means that tasks and obligations are divided among educators in a community or group.

When answering the questions, please provide detailed examples to illustrate how these concepts apply to your experiences. Your insights will help us better understand your perspectives. Please read each question below and describe your experiences in your own words in the space provided. Respond to all questions as honestly as possible. Your responses will be confidential.

You may skip any questions you do not wish to answer.

1. How do you define "shared responsibility" for student success?
2. What specific behaviors or actions demonstrate shared responsibility between special and general education teachers?
3. What challenges do you face in creating and maintaining inclusive classroom environments?
4. What has been the most positive experience you have had collaborating with general education teachers?
5. How does your school's setting conditions (classrooms, work assignments, schedule, school culture, etc) influence your sense of belonging?
6. How is responsibility for the success of students with disabilities shared or delineated between teachers in your school/district?
7. What aspects of a teacher's sense of efficacy is most important for your work with students?
8. How do you measure your own success as a special education teacher?

9. What factors do you consider most important in your role for supporting student success?
10. How has your perception of efficacy and shared responsibility with colleagues changed over time?
11. What professional development opportunities would be most beneficial for you to enhance your collaboration with general education teachers?
12. Describe the different inclusion classroom settings you have experienced during your career,
13. What factors contribute to your sense of efficacy as a special education teacher?
14. How do school policies and administrative support influence your sense of belonging in your workplace?
15. Describe the relationships you have with general education colleagues.
16. What role does communication play in fostering shared responsibility for student support and achievement in the workplace?

### Section 2: Demographic Questions.

Please provide responses for each of the demographic/setting related questions that follow.

You are:

- Between 22-29 years of age  
 Between 30-39 years of age  
 Between 40-49 years of age  
 Between 50-59 years of age  
 60 years of age or older

You have completed \_\_\_\_\_ as a special educator:

- 1-3 years (must have completed at least one year of service as a special educator)  
 4-9 years  
 10-15 years  
 16-20 years  
 21+ years

In your most recent year/current year as a special educator, your work assignment involves teaching students at which grade levels (check all that apply)

- 7th grade  
 8th grade  
 9th grade  
 10th grade  
 11th grade  
 12th grade  
 Post-high school (18-22 yr olds)

How many total years of service do you have as an educator (in any role with the appropriate licensure) in public schools? \_\_\_\_\_

My current primary instructional setting is best described as

- Inclusion classroom: support only

- Inclusion classroom as a co-Teacher  
 Pull-Out Instruction: small group instruction  
 Blended model or Integrated classroom instruction  
 Substantially Separate Classroom  
 Other:

Gender .

- Male  
 Female  
 Non-binary  
 Other  
 Prefer not to answer

If you answered "other" please write in a response that best provides the answer to the above question: \_\_\_\_\_

Please indicate which selection best describes or applies to your race

- American Indian or Alaska Native  
 Asian  
 Black or African American  
 Native Hawaiian or Other Pacific Islander  
 White  
 Prefer not to answer

Please select the response that best applies to your ethnicity

- Hispanic or Latino  
 Not Hispanic or Latino  
 Prefer not to answer

### Section 3: Future Participation

This research study involves participant information from multiple sources and supports your interest in participating in a 1:1 interview with the researcher and completing a reflective journaling activity. The 1:1 interview with the researcher will take place virtually via Zoom. and will be scheduled between \_\_\_\_\_ 2024 and \_\_\_\_\_, 2024. Following the interview, participants will complete a reflective journaling response, which will be provided on \_\_\_\_\_, 2024 and must be returned to the researcher no later than \_\_\_\_\_, 2024.

I am interested in continuing my participation in this study by

- Participating in a 1:1 interview with the researcher ONLY.  
 Participating in a reflective journaling activity ONLY.  
 Participating in both activities.  
 I am not interested in participating beyond this questionnaire.  
 I would like more information before deciding about future participation.

If you have reported interest in continuing your participation in this study, please contact the researcher by email or phone using the information below.

Thank you for participating in this questionnaire, and for the time you took to provide responses to the questions. Following submission, or at any time during the research process, if you have questions, you are welcome to reach out to the researcher,

**Virtual Door Prize:** By participating in this questionnaire, you are able to be entered into a drawing to receive a \$25.00 Amazon gift card. The drawing will be conducted after the study has completed all of its data collection, and the winner will be pulled using a randomizer tool.

To be included in the door prize drawing, please send an email indicating your participation in the questionnaire. No other information is required to be entered in the drawing.

\*Link to the Survey: <https://forms.gle/8YTGWtRfKeM2oAj>

## Appendix C

### Interview Protocol

Hello, and thank you for agreeing to participate in this interview today. My name is Jenn Toth, and I am a doctoral student at Northcentral University conducting my dissertation research. This interview is expected to last 60 minutes. I will be recording our discussion and taking notes to make sure I have complete information. Your responses will be held in confidence.

**Establishing consent:** I would like to review the consent letter with you before we begin the interview.

*Do you agree to participate in the study?*

Participant: Yes \_\_\_\_\_ or No \_\_\_\_\_

**Lead into the Interview:** Thank you. I am interested in hearing about your experiences and the factors and conditions in your school that have shaped your feelings of belonging, efficacy, and shared responsibility as a special educator in a public school. This information will be confidential, and your individual answers will not be shared with anyone. Your perspectives and experiences are important to understanding the factors and conditions that affect Massachusetts special educators' sense of belonging, efficacy, and shared responsibility in the workplace.

The purpose of these questions is to understand your experiences as a special educator in an inclusive classroom setting, and how those experiences have affected your sense of belonging, efficacy, and shared responsibility in the workplace.

During our interview, we'll be using the following terms (provide visual of the terms):

**Self-efficacy:** *This refers to your belief in your own ability to successfully complete tasks and achieve goals and feel confident in your skills and knowledge.*

**Sense of belonging:** *This is the feeling of being connected to and supported by your school community. It's about feeling accepted, valued, and part of a group.*

**Shared responsibility:** *This means that tasks and obligations are divided among educators in a community or group.*

When answering the questions, please provide detailed examples to illustrate how these concepts apply to your experiences. Your insights will help us better understand your perspectives. Please read each question below and describe your experiences in your own words in the space provided. Respond to all questions as honestly as possible. Your responses will be confidential.

Do you have any questions before we get started?

### Initial Questions

1. Briefly describe your professional journey as a special educator.
  - a. How long have you been in your current position at your current school?

2. Describe your most recent classroom or setting where you worked with students.
  - a. How are students assigned to this classroom?
  - b. Other than you as the teacher, how is this classroom supported by other educational staff?
3. What is the primary method of instruction for this classroom?
4. Describe how decisions are made about activities, instruction, and experiences in your classroom.
  - a. Who has input into these decisions?
  - b. How do the conditions in your classroom influence collaboration with general education teachers or other educational staff?
  - c. How would you describe the level of autonomy you have to make decisions in your classroom?

### **RQ Focus Questions**

1. How do you collaborate with general education teachers to develop and address shared goals for students?
2. How does the school's overall culture and leadership support your sense of belonging in your school?
3. Please describe the available time for collaboration with general education colleagues.
4. How do you balance the needs of students with disabilities with the overall classroom dynamics in an inclusive setting?
5. How would you describe the influence of professional development as a contributor to your sense of belonging and efficacy?
6. What level of visibility or presence do school administrators have in your classroom?
  - a. How would you describe the relationship they have with you and the work you do with students?
7. Describe what supports are in place for you as a special educator.
  - a. From whom do you receive this support?
8. How do you define efficacy in your role as a special education teacher?
  - a. How has your sense of efficacy evolved over time?
9. What factors contribute to your perception of shared responsibility for student achievement?
10. What challenges do you face in developing and maintaining a strong sense of efficacy as a special education teacher?
11. How do you measure your own success as a special education teacher?
  - a. What factors contribute to your sense of accomplishment?

**Conclusion:** Thank you for taking the time to meet with me today and to share your perspectives/experiences on factors and conditions in your school that have shaped your feelings of belonging, efficacy, and shared responsibility as a special educator in a public school.

1. Do you have any questions or concerns about the nature of the interview, or the questions asked?
2. Is there anything you would like to add or clarify about your personal experiences related to special educator belonging, efficacy, and shared responsibility?

**Next Steps:** As the next step, I will provide you with a link to a reflective journaling activity. Please complete and submit this within 10 days of today. Additionally, a member checking meeting will be scheduled approximately two weeks from now. During this meeting, we'll review the transcribed interview responses and ensure they accurately reflect your thoughts and experiences. Please note that we'll be reaching out to you to schedule this meeting soon. We appreciate your continued involvement in this research.

**Virtual Door Prize:** By participating in this interview, you will be entered into a drawing to receive a \$25.00 Amazon gift card. The drawing will be conducted after all components of the study are concluded, and the winner will be pulled using a randomizer tool.

## Appendix D

### Journal Prompt

Reflect on your experiences as a special education teacher. During this writing activity, please refer to the application of the following terms:

**Self-efficacy:** *This refers to your belief in your own ability to successfully complete tasks and achieve goals and feel confident in your skills and knowledge.*

**Sense of belonging:** *This is the feeling of being connected to and supported by your school community. It's about feeling accepted, valued, and part of a group.*

**Shared responsibility:** *This means that tasks and obligations are divided among educators in a community or group.*

Consider the factors and conditions that have influenced your sense of:

- **Belonging:** How do you feel about being part of your school community and the broader special education field? What specific factors have contributed to or detracted from your sense of belonging?
- **Efficacy:** How would you describe your confidence in effectively supporting students with disabilities? What factors have influenced your sense of efficacy, both positively and negatively?
- **Shared Responsibility:** How do you perceive the shared responsibility for student success among different stakeholders (e.g., administrators, general education teachers, parents)? What challenges or opportunities related to shared responsibility have you encountered?

Please feel free to explore these topics in whatever way you find most helpful. You may want to consider specific examples or anecdotes, discuss your personal values and beliefs, or explore any other relevant aspects of your experiences.

**Virtual Door Prize:** By participating in this journal reflection activity, you will be entered into a drawing to receive a \$25.00 Amazon gift card. The drawing will be conducted after all components of the study are concluded, and the winner will be pulled using a randomizer tool.

## Appendix E

### Organization Permission: ASE

October 1, 2024

To: NU IRB,

My name is \_\_\_\_\_ and I am the current President of the Massachusetts Association of Special Educators (ASE). Ms. Jennifer Toth is a current member of our organization, and I have reviewed Ms. Toth's study. I understand that she is recruiting participants who meet all of the following criteria:

- Participants are 22 years or older,
- Participants are or have recently been employed in the role of a special education teacher, and hold Massachusetts licensure as a teacher for students with disabilities (or equivalent and approved out-of-state license pending state reciprocity determination),
- Participants are or have recently been employed by a secondary school (in grades 7-12) in a public school district located in Central Massachusetts (also referred to as Worcester County) as a special educator in an inclusive classroom setting.

I grant permission for Ms. Toth to do the following:

- Access contact information for special education leaders and educators from our active online database to enlist assistance in the recruitment of participants from the region of focus in her study,

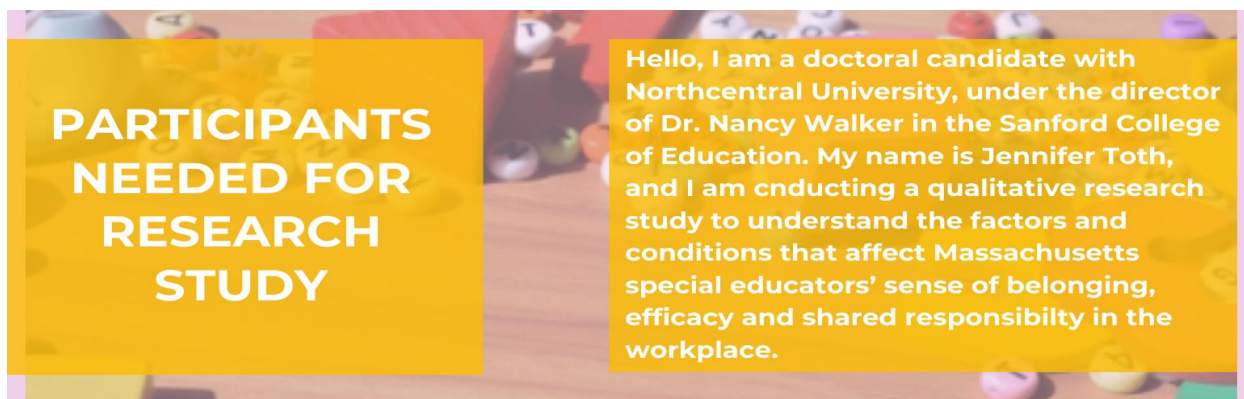
If you have questions and would like to reach me, please do so at \_\_\_\_\_

Thank you for your time,

Name, Role, Organization

## Appendix F

### Social Media Flyer



**INCLUSION:** I am recruiting participants that meet these criteria:

- Age 22 years or older,
- Are or have recently been employed in the role of a special education teacher, AND
- Hold Massachusetts licensure as a teacher for students with disabilities (or equivalent and approved out-of-state license pending state reciprocity determination),
- Are or have recently been employed by a secondary school (in grades 7-12) in a public school district located in Central Massachusetts (also referred to as Worcester County) as a special educator in an inclusive classroom setting.

**EXCLUSION:** You cannot participate in this study if you are:

- Not 22 years of age or older,
- Not currently or recently employed as a special educator in a public school located in Central Massachusetts,
- Your most recent teaching assignment involved less than 25% inclusive instruction,
- You do not hold appropriate licensure (outlined above) as a teacher for students with disabilities

#### Activities in this study will include:

- Read and Sign an informed consent form,
- Complete an open-ended questionnaire, including possibly personal demographic questions related to your years of teaching experience, workplace conditions at your current school related to sense of belonging, efficacy, and shared responsibility, and the relationships with colleagues and administrators, your gender and (30-40 min)
- Participate in a 1:1 virtual interview (60-70 minutes), which will be recorded
- Complete a journal prompt (20 minutes)
- Review transcripts of the 1:1 interview and make corrections if needed (30 minutes)

#### Your participation is voluntary.

If you decide to participate, your responses will be anonymous - that is, recorded without any identifying information linked to you. If you have any questions regarding this questionnaire, please contact me at [J.Sauter7610@o365.ncu.edu](mailto:J.Sauter7610@o365.ncu.edu). If you have any questions regarding your rights as a human subject and participant in this study or to report research-related problems, you may email the National University IRB at [irb@nu.edu](mailto:irb@nu.edu).

By participating, you will be entered into a drawing to receive a \$25.00 Amazon gift card. The drawing will be conducted after completing all questionnaires, and the winner will be pulled using a randomizer tool.

**Link to the Survey:** <https://forms.gle/8YTGWtRfKeM2oAj>

## Appendix G

### Coding Schemes

#### Secondary Coding Scheme

<b>Code</b>	<b>Meaning</b>
Inclusion Setting	contextual settings for delivery of inclusive instruction
Service Type	Models of special education support provided
Teaching Conditions	environment, resources, and supports
Roles	direct instruction and non-teaching duties
Workload	caseload size and the complexity of student needs, the burden of paperwork and other administrative tasks
Co-teaching	structure, implementation, and interpersonal dynamics of co-teaching
Collaboration	Type, quality and frequency of collaboration with general education teachers
Perception of Responsibility	How special educators and general educators perceive which educator is responsible for different tasks or students in an inclusive teaching setting
Alignment	Level of alignment of teaching philosophy between general education and special education teachers
Feeling Valued	Evidence of value within their professional environment
Resources	adequacy of instructional resources, mentoring, PD
Curriculum Impact	New curricula, curricula v. pedagogy
Teacher as Expert	Seeing colleagues as competent
Accountability	Assigned or perceived accountability for student success
General Educator Ownership	willingness and active participation of general education colleagues in supporting students with disabilities
Support	availability, access, and (if there is perceived) effectiveness of various supports for special educators

Administrators	being supported, trusted, and understood by leadership in relation to their role, professional needs, and the challenges special educators face
Experience	Years of experience in role, in field
System Barriers	Systemic, school issues that hinder progress, professional barriers to being seen as equal
Isolation	Disconnected, left out, or “forgotten,” seen as separate from colleagues
Autonomy	Degree of freedom in decision making
Relationships	nature and quality of interpersonal and professional relationships with general education teachers and other special educators
Sense of Belonging	special educators' feelings of connectedness, acceptance in their school or amongst colleagues
Professional Efficacy	special educators' belief in their own capabilities

#### Final Coding Scheme

Code	Meaning
Inclusive Classrooms and Service Delivery Models	contextual settings for delivery of inclusive instruction, Models of special education support provided; includes co-teaching
Teaching Conditions	environment, resources, and supports
Collaboration and Shared Responsibility	how special educators and general educators perceive which educator is responsible for different tasks or students in an inclusive teaching setting, partnership and mutual accountability between special educators and their general education colleagues, effectiveness of collaborative practices, clarity of roles and responsibilities
Engagement and Ownership	general educator engagement and ownership, perceptions of who is ultimately accountable for student learning and success, division of labor for supporting students with disabilities
Workload	caseload size and the complexity of student needs, the burden of paperwork and other administrative tasks
Sense of Belonging	special educators' feelings of connectedness, acceptance in their school or amongst colleagues

Professional Relationships	influence of interactions and relationships with general education colleagues, administration, and other special education staff, how school culture and systemic factors contribute to or detract from sense of belonging or professional identity.
Support	availability, access, and (if there is perceived) effectiveness of various supports for special educators
Administrators	being supported, trusted, and understood by leadership in relation to their role, professional needs, and the challenges special educators face
Relationships	nature and quality of interpersonal and professional relationships with general education teachers and other special educators
Professional Efficacy	special educators' belief in their own capabilities, perform their professional duties and positively impact student outcomes
Impacts and Barriers	factors within their work environment that they perceive as enhancing or diminishing this sense of efficacy and their ability to make a difference

## Appendix H

### Themes and Participant Data Excerpts

RQ1: How do special education teachers describe the influence of different inclusion classroom settings and teaching conditions on their sense of belonging, efficacy, and perceptions of shared responsibility with general educators for the learning of students with disabilities?

Themes	Excerpts
Influence of Diverse Settings	I am not really sure the model for our classroom is best for students, but I don't have the final say.
	My co-teaching partnership feels very equal.
	I have a lot of autonomy in assigning students on my caseload to classes, both co-taught and inclusion.
	I am like a chameleon; I change what I do to fit each of the classes I co-teach.
Defining Efficacy by Promoting Success and Navigating Challenges	To me, being able to see the kids I have in class change, their confidence growing, is more of a success than what their grades might show.
	Success for students is progress on their own curve, comparing themselves to themselves.
	A lot of my life energy is taken doing paperwork, paperwork, paperwork. I am not really able to spend as much time with the kids.
	I just keep trying things until they work. What works for one student doesn't work for all of them.
	It's not just me, it's all of the work of all of the providers, we need to work together.
	When general educators don't buy in to what students need, it hurts my ability to feel like I can change things.
	The workload isn't manageable in a 40 hour work week.
	I try not to look at things as problems, but as situations that need solutions.
Administrative Presence, Support and Understanding	My principal is just like a chill guy, not a lot of leadership.
	My district coordinator is split between two schools; I rarely see her. She

	hasn't seen me teach a lesson all year.
	My principal sneaks in and sits in the back and just watches. Very regularly, like every week.
	This year, the principal and the district special ed director prioritized common planning time and made it non-negotiable.
	Both administrators underestimate how much extra work it takes to co-teach, how much time I need for preparation for each of my co-taught classes because I teach with two different teachers.
	I came back from summer vacation and saw that my student class assignments were a mess. My principal said it couldn't be helped.

RQ2: How do special education teachers perceive the influence of interactions with general education colleagues on their sense of belonging?

Themes	Excerpts
How Collaboration Supports and Hinders Shared Responsibility	There doesn't seem to be any common planning time or PLCs for content or for special educators. So, it's definitely a go seek and find.
	I'm swimming alone quite a bit.
	I have so many pre-established relationships with everybody. I think it's different for me than some of the other special educators.
	I don't often have that same common planning time as the other teachers on the team... So, we check in whenever we need.
	it does, it feels very equal... The kids respect me as much as they respect them.
	My co-teacher called our class a little more like what you'd call a special Ed dumping ground.
	I feel much more a part of that team now, more than I've been in any of the other districts.
	I'm definitely talking to every teacher for at least 10 min every week.
	I'm not always included on the emails... didn't include me in the grade level team picture.
They very much own my caseload as much as I own their regular ed	

	caseload in class.
--	--------------------

RQ3: What strategies can be leveraged to increase special educators' sense of belonging, efficacy, and shared responsibility in the workplace?

Themes	Excerpts
Strategies for Building Belonging, Efficacy, and Shared Responsibility	We need to move away from a Wilson, Wilson, Wilson approach to being trained in a variety of programs.
	When there is training, everyone should go to it.
	There needs to be more consistency in how we write goals and provide services.
	If we don't change how we do things, something will have to give.
	Reallocate all special educators into co-teaching roles, if we say we do it we should all do it.
	Look at how to reduce wasting resources, including staff time and expertise
	We have a lot to offer, but our principals don't ask us to train our colleagues.
	Students should be able to get the same experience in every building. We need training that supports similar practices across the district.
	I believe my role is to be a safety net, not a hammock for students. My colleagues should see me that way.
	I have some strong relationships with general education teachers, but they don't see me as an expert.
Stop accepting teaching partners as informal planners. Special educators need common planning time too.	